

COLLEGE OF APPLIED ARTS

T. Jaime Chahin, Ph.D., Acting Dean

Department Chairs

Aerospace Studies (AFROTC)Colonel L.K. Rever, M.S.
AgricultureHardin Rahe, Ph.D.
Criminal Justice.....John A. McLaren, J.D., Acting
Family and Consumer Sciences.....B. J. Friedman, Ph.D.
Military Science (AROTC)Lt. Col. Ron Deeds, M.S.

Program Director

Occupational Education.....Stephen Springer, Ed.D.

COLLEGE OF APPLIED ARTS

The College of Applied Arts' mission is to prepare undergraduate and graduate students for careers through programs of high quality in academic, professional, and technical areas; to further faculty excellence in teaching supported by quality scholarship; and to enhance our involvement with local, state, national, and international constituencies.

The College of Applied Arts offers four undergraduate degrees: (a) Bachelor of Science in Agriculture; (b) Bachelor of Science in Criminal Justice; (c) Bachelor of Science in Family and Consumer Sciences; and (d) Bachelor of Applied Arts and Sciences. In addition, the Departments of Aerospace Studies and Military Science prepare students for commissioning in the United States Air Force, United States Army, United States Army Reserves, or Army National Guard.

The **College of Applied Arts Academic Advising Center** is located in Room 201 of the Agriculture Building. Its purpose is to provide accurate and timely advice to prospective and current students regarding their progress toward completion of degree programs administered by the college. Services include preparation of degree outlines and summaries, assistance with degree planning, scheduling of classes, counseling for probation and suspension holds, evaluation of transfer work, and application for graduation.

Please contact the Advising Center Staff at (512) 245-1490 to schedule an appointment for advising. Staff are available to meet with students Monday through Friday from 8:00 a.m. to 5:00 p.m. The Academic Advising Center is also available online at www.swt.edu/acad_depts/applied_arts.

Seventeen undergraduate majors (several with specialized options) are offered by three departments and one program within the College:

Agriculture: animal science, general agriculture without teaching certification, general agriculture with teaching certification, agricultural business and management with specializations in agribusiness operations, agricultural systems management, and horticultural business.

Criminal Justice: law enforcement, corrections, criminal justice.

Family and Consumer Sciences: family and consumer sciences (with consumer science option and teacher certification option), family and child development, fashion merchandising, interior design, nutrition and foods.

Occupational Education Program: applied arts and sciences. (Individualized degree program which offers adult opportunities to receive college credit for previous competencies acquired in the workplace as well as select a new career path or supplement skills in current path.)

Programs leading to teacher certification are available in the Departments of Agriculture and Family and Consumer Sciences, and the Occupational Education Program.

Several of the College's programs have internship courses. An internship provides opportunities for students to further their education in an environment external to the university. These courses have minimum entrance requirements including good academic standing at the time of the internship. More specific course requirements are available from the department of your major.

Credit by exam, CLEP, DANTES and other similar proficiency examinations satisfy degree requirements in the same way as credit earned by passing courses except that they do not count as credit earned in residence and cannot be taken within the last 30 hours of study.

No more than six (6) semester credit hours of major courses beyond those that apply toward the major will count for credit toward graduation. Hours of major work beyond the six (6) semester credit hours will be treated as non-credit. These hours, however, will be a part of the cumulative SWT GPA if they have been taken at SWT.

Students who have earned at least 60 semester hours at SWT are eligible to graduate with honors if they have a minimum SWT GPA of 3.40.

For further information, visit the Office of the Dean in Room 300 of the Agriculture Building, or call 512-245-3333, or our website www.swt.edu/acad_depts/applied_arts/index.htm

Department of Aerospace Studies

Air Force Reserve Officer Training Corps

Chair and Professor-Colonel Rever, Assistant Professors-Captain Deeter, Captain Warlick, Captain Langan.

The Air Force ROTC Program at Southwest Texas State University develops skills and attitudes vital to professional Air Force Officers. The purpose of the program is to commission qualified students who wish to serve in the United States Air Force. Two routes are available in Air Force ROTC at SWT. Entering students may either enroll in the four-year program or apply for the two-year program.

For the four-year program, students may register in the same manner as for other college courses. During the freshman and sophomore years of the program, students enroll in the General Military Course (GMC). Membership in the GMC does not confer any military status or commitment upon the cadet. After completion of the GMC, students compete for entry into the Professional Officer Course (POC), which is outlined below and normally is taken during the last two years of college.

The two-year program consists of the Professional Officer Course (POC), the last two years of the four-year program. It is designed to provide greater flexibility to meet the needs of students desiring Air Force opportunities. The basic requirement is that the student has two full-time academic years remaining at either the undergraduate or graduate level or a combination of both. Students interested in the two-year program should begin the application process one year in advance of the fall term in which they plan to enter the program. Students may apply in writing or by a personal visit to the Office of Aerospace Studies.

Selection for the Professional Officer Course (POC) is highly competitive. Criteria used to assess qualifications of applicants are the Air Force Officer Qualification Test (free), cumulative GPA, physical fitness test, and the recommendation of the Professor of Aerospace Studies. Before formal induction into the POC, applicants must complete a summer field training encampment paid for and conducted annually by the Air Force at various Air Force Installations. Students in the four-year program attend a four week encampment, and students in the two-year program attend a five-week encampment. Upon completion of the five-week summer field training, two year cadets may receive credit for Aerospace Studies 1110, 1120, 2110, and 2120.

Both GMC and POC members must attend a weekly two-hour laboratory each semester. The laboratory gives cadets a chance to learn and practice leadership skills. Students who complete at least three semester hours of credit in the junior level of Aerospace Studies Classes will not be required to take Political Science 2320. All cadets must demonstrate proficiency or successfully complete a course in mathematical reasoning before commissioning. Ideally, this course should include a specific skill (e.g., statistics, computer science, calculus.) Failure to satisfactorily complete the course may result in disenrollment from the program.

Students may compete for a variety of scholarships. Qualified students may apply during the fall or spring semester for a scholarship that covers the remaining years in the program. The scholarships provide full tuition, laboratory and incidental fees, and an allowance for books. In addition, scholarship students, regardless of classification, receive \$200 per month tax-free subsistence. Students may obtain complete scholarship information at Department of Aerospace Studies (AFROTC), Hines Academic Center, Room 108, 512-245-2182, or our website www.swt.edu/afrotc

Courses in Aerospace Studies (A S)

1000 Leadership Laboratory. (0-1) This course is an integral and mandatory part of the Aerospace Studies curriculum. It is a progression of practical command and staff experiences designed to develop leadership potential. The laboratory is led primarily by cadets who plan, organize, direct, coordinate, and control all activities of the cadet corps. The lab meets two hours per week and is taken concurrently with all other Aerospace Studies courses.

1110 The Air Force Today (General Military Course I). (1-0) A study of the doctrine, mission, and organization of the United States Air Force; United States strategic offensive and defensive forces, their missions and functions; and employment of nuclear weapons.

1120 The Air Force Today (General Military Course II). (1-0) An introduction to flight, oral and written communication for the Air Force officer, Air Force installations, and the Air Force profession. The course will also cover how the Air Force relates to the U.S. Army, Navy, Marines, and Coast Guard.

2110 The Development of Air Power (General Military Course III). (1-0) This course examines the development and growth of air power from a historical perspective starting before the first powered flights, and continuing through World War I, the inter-war years, and World War II. It traces development of the various concepts for employment of air power and focuses upon factors which have prompted research and technological change.

2120 The Development of Air Power (General Military Course IV). (1-0) A continuation of 2110, beginning with the development of air power from World War II to the present. Various events and trends in the history of air power are examined, especially where these provide significant examples of the impact of air power on strategic thought. Contemporary defense strategy, concepts, and doctrine are emphasized.

3311 Leadership and Management (Professional Officer Course I). (3-0) A seminar course which examines management fundamentals and principles pertaining to group behavior process, human processes, human motivation, and various approaches to leadership styles, with a strong focus on Deming Management Method/Total Quality Management (TQM) as it is used in the Air Force today. It emphasizes communication skills necessary for future junior officers in the United States Air Force.

3312 Leadership and Management (Professional Officer Course II). (3-0) A seminar course pertaining to the development of leadership and managerial responsibilities of the Air Force officer. Includes the decision-making process, tools for problem-solving and career management. Continues the emphasis on communication skills.

4311 National Security Forces in Contemporary American Society (Professional Officer Course III). (3-0) This seminar course begins with an analysis of the various dynamics involved in American defense policy making. The semester concludes with examinations of the world political/military/economic interface. Throughout this course, students will learn and practice communication skills necessary as future junior officers in the United States Air Force.

4312 National Security Forces in Contemporary American Society (Professional Officer Course IV). (3-0) This course begins with an analysis of each Major Air Force Command and its contribution to defense policy implementation. The course concludes with an extensive study of the military justice system. Continues the emphasis on communication skills.

Department of Agriculture

Chair and Professor-Rahe. Professors-Carson, Davis, Rydl, Shell. Associate Professors-Abel, Angirasa. Assistant Professors-Hunnicuttt, Igo.

The Department of Agriculture offers programs reflecting the diversity of choices available and skills required in modern agriculture and its related professions. This dynamic, global industry uses new technologies to improve the production, management, manufacture, and distribution of food and agricultural products.

For more information, call 512/245-2130 or visit the Agriculture Department, Agriculture Building, Room 206, or our website www.swt.edu/acad_depts/agric_dept/index.html

Majors

Undergraduates may earn the Bachelor of Science degree in Agriculture with the following majors: agricultural business and management, animal science, general agriculture with certification to teach or general agriculture without certification.

Agricultural Business and Management reaches far beyond the farm to encompass all the activities involved in bringing food and fiber to consumers. Students may pursue three specializations with this major: Agribusiness operations, Agricultural systems management or Horticultural business.

Agribusiness operations students learn about the acquisition and use of capital, the working of the marketplace, financial institutions, and the effect of government policies on agriculture. Therefore, the agribusiness operations specialization includes courses in agricultural finance, marketing and policies dealing with resource use as well as courses in technical agriculture and general education.

Agricultural systems management integrates and applies engineering technology, agricultural sciences, and business. It prepares graduates for careers in technical fields and engineering such as agricultural machinery and power systems, electrical energy systems including sensors and controls, agricultural structures, surveying, and environmental systems including water utilization and quality. Students are involved with ongoing research, farm power and machinery, and precision farming and global positioning systems. Graduates are expected to assume positions of leadership and responsibility in careers such as product testing and service management, agricultural sales and services, and agricultural production systems.

Horticultural business as a specialization teaches management of commercial establishments and institutions that produce ornamental plants such as greenhouses and nurseries, floral shops and plant therapy businesses. The curriculum also contains specialized courses in horticulture that utilize rooftop greenhouses at the Agriculture Building and the laboratory facilities at the 17-acre Horticulture Center near campus.

Animal Science is the study of all aspects of the livestock and poultry industries including commercial production and management; food processing; and animal feed/animal health including nutrition, biotechnology and veterinary medicine. Involvement of students in ongoing faculty research prepares graduates for careers in reproductive physiology, applied animal genetics and live animal evaluation, as well as other areas of the livestock industry.

General Agriculture (without certification) provides a broad exposure to agriculture. With this curriculum, students may expect to manage a ranch or a farm, or work in any career that requires a general education such as extension, banking or government service.

General Agriculture (with certification to teach) is a comprehensive educational program concerned with the broad field of agriculture. Emphasis in the curriculum is on production techniques, managerial skills and competencies necessary to function as agricultural scientists, educators, or agricultural managers in today's complex agricultural industry. Agricultural science teachers are certified to teach in grades nine through twelve in the public schools of Texas. See an advisor for course requirements.

Minors

Four minors are available in agriculture. A minor in agriculture is ideal for someone majoring in the life sciences, family and consumer sciences, or in any discipline where knowledge of the food and fiber industry would be beneficial. To arrange for an agricultural minor, see the department chair in Room 206, Agriculture Building. Specific course requirements are listed in the Degrees and Programs section of this catalog.

Pre-Professional Program in Pre-Veterinary Science

The department supervises the pre-veterinary science program which provides two years of specialized course work for students planning to enter veterinary school. Specific course requirements and additional information are listed in the Degrees and Programs section of this catalog.

Internship

Students must apply for internships to the departmental internship committee a semester in advance and meet minimum grade point average and course pre-requisite requirements. For specific information about internships, contact the chairman of the internship committee or the department chair.

General Requirements

1. Students cannot enroll in upper level (3000 or 4000) agriculture courses until they have successfully completed MATH 1315 or 1319 and CHEM 1410.
2. ASD 1110, AG 2373, and AG 2390 must have been successfully completed in the first 45 college credit hours.

The Freshman Year

The courses specified below form a common freshman year to be taken by all majors in the department.

| Freshman Year | Hours |
|-------------------------------------------------|--------------|
| Agricultural Service and Development 1110 | 1 |
| Agriculture 1445, 2390 | 7 |
| *Biology 1410 | 4 |
| Chemistry 1410 | 4 |
| Speech Communication 1310 | 3 |
| English 1310, 1320..... | 6 |
| University Seminar 1100..... | 1 |
| History 1310, 1320 | 6 |
| PFW (2 courses)..... | 2 |
| Total | <u>34</u> |

*Systems management students may wish to take Physics 1410 and 1420 to satisfy the general education laboratory science requirement.

Bachelor of Science in Agriculture
Major in Agricultural Business and Management
(Minimum required: 128-131 semester hours)

| Sophomore Year | Hours | Junior Year | Hours |
|-----------------------------------------------------------------------|--------------|------------------------------------|--------------|
| Agriculture 2313 or 2379 | 3 | Agriculture 3426..... | 4 |
| Agriculture 2373, 2383 | 6 | Agribusiness Core | 6 |
| Agribusiness Core..... | 9-10 | Specialization | 9-10 |
| English 3303..... | 3 | Political Science 2310, 2320 | 6 |
| Literature Component..... | 3 | Electives..... | <u>6</u> |
| Mathematics 1315 or 1319..... | 3 | Total | 31-32 |
| Philosophy 1305..... | 3 | | |
| Social Science Component..... | <u>3</u> | | |
| Total | 33-34 | | |
| | | | |
| Senior Year | Hours | | |
| Agribusiness Core | 6 | | |
| Specialization | 14-15 | | |
| Agricultural Service and Develop- ment 4301 (Capstone Course)..... | 3 | | |
| Art, Dance, Music, or Theatre 3313 ... | 3 | | |
| Ag 3319..... | <u>3</u> | | |
| Total | 29-30 | | |

Please see advisor for suggested courses.

Agribusiness Core

Required core courses: Agriculture 3317 or 3318, 3351, 3352, 3353 or 3375, 4380, Accounting 2361, Math 1329 or 2321 or 2417. Students are encouraged to enroll in 1000 and 2000 level courses in the sophomore year.

Agricultural Business and Management Specializations

Select one of the following:

Agribusiness Operations: Accounting 2362, Agriculture 4381, 4383, Economics 2310, 3314, and nine hours of upper division electives with approval of department advisor.

Agricultural Systems Management: Agriculture 2374 or 3311 or 4371(A-E), 3310, 3455, 4361, Physics 1420, and six hours of electives with approval of department advisor.

Horticultural Business: Agriculture 3304, 3305, 3306, 3311 or 3427, 3329, 4300 or 4302, and six hours of upper division electives with approval of department advisor.

**Bachelor of Science in Agriculture
Major in Animal Science
(Minimum required: 129-130 semester hours)**

| Sophomore Year | Hours | Junior Year | Hours |
|-------------------------------------------|--------------|------------------------------------|--------------|
| Agriculture 2313, 2373, 2383 | 9 | Agriculture 2421, 3314 | |
| Chemistry 1420 | 4 | 3321, 3351, 3426..... | 17 |
| Literature Component..... | 3 | Agriculture 3301 | |
| Mathematics 1315, 2321 | 6 | (or *Biology 3450)..... | 3-4 |
| Philosophy 1305..... | 3 | Chemistry 2330 | 3 |
| Biology 1420 | 4 | Political Science 2310, 2320 | 6 |
| Social Science Component..... | 3 | English 3303..... | 3 |
| Total | 32 | Total | 32-33 |

| Senior Year | Hours |
|-----------------------------------------------------------------------|--------------|
| Agriculture 3325, 3331 | |
| 4325, 4326, 4328, 4330..... | 18 |
| Agricultural Service and Develop- ment 4301 (Capstone Course)..... | 3 |
| Art, Dance, Music, or Theatre 3313 ... | 3 |
| Biology 3440 or 4423..... | 4 |
| Ag 3319..... | 3 |
| Total | 31 |

*Prerequisite: Biology 2460

**Bachelor of Science in Agriculture
Major in General Agriculture
(Minimum required: 132 semester hours)**

Notes:

1. A teaching certificate is available with this degree
2. For certification requirements, please see a departmental advisor.

| Sophomore Year | Hours | Junior Year | Hours |
|-----------------------------------------------|--------------|------------------------------------|--------------|
| Agriculture 2373, 2383, 2313 or 2379 | 9 | Agriculture 3426..... | 4 |
| General Agriculture Core..... | 6 | General Agriculture Core..... | 13 |
| English (Literature), English 3303 | 6 | Electives | 9 |
| Mathematics 1315, 2321 | 6 | Political Science 2310, 2320 | 6 |
| Philosophy 1305..... | 3 | Total | 32 |
| Social Science Component..... | 3 | | |
| Total | 33 | | |

| Senior Year | Hours |
|------------------------------------------------------------------|--------------|
| General Agriculture Core..... | 15 |
| Electives | 9 |
| Agricultural Service and Development 4301 (Capstone Course)..... | 3 |
| Art, Dance, Music, or Theatre 3313 ... | 3 |
| AG 3319..... | 3 |
| Total | <u>33</u> |

General Agriculture Core

Core requirements are Agriculture 2374, 3310, 3427, 4325, 4326, 3317 or 3318, 3353 or 4361, 4310, plus six (6) hours of upper level courses in one of the agricultural areas shown below and three (3) hours from one of the remaining areas: animal science, agricultural systems management, agribusiness operations, or horticultural business.

Concurrent Endorsements for Agricultural Science and Technology: Students completing certification requirements in General Agriculture may secure additional pre-employment program endorsements by completing the following courses:

- General Agricultural Mechanics (PEL):** Agriculture 3375, and 4371E or 3455
- Agricultural Power and Machinery (PEL):** Agriculture 4371, 3375
- Horticulture (PEL):** Agriculture 3304, 4300

Courses in Agricultural Service and Development (ASD)

1110 (AGRI 1131) Careers in Agri-Business and Industry. (1-0) Career information and opportunities in the Agricultural World of Work will be emphasized. Qualifications and employment opportunities in Texas will be stressed.

(WI) **3205 Principles of Agricultural Development. (2-0)** The principles and concepts of community leadership and development in changing urban and non-urban settings. Emphasis will be given to leadership styles and approaches, community development processes, and the educator's role in the change process.

(WI) **4212 Program Building. (2-0)** This course will focus on program and curriculum development in agricultural education settings. Primary course elements will include determining program and curriculum goals and objectives, implementing the program, and curriculum evaluation.

(WI) **4301 Professional Development in Agriculture. (3-0)** This course requires students to select a topic of current interest appropriate to the major. Critical analysis of the situation including both positive and negative aspects will be encouraged. Findings will be presented in both oral and written form. (Capstone Course)

(WI) **4311 Instructional Methods for Career & Technology Educators. (2-2)** An analysis of the instructional techniques, strategies and methods appropriate to the effective teaching of career and technology subjects including application in the areas of instructional planning, organizing and evaluating learning activities, lesson preparation, diagnosis of learning differences, and the ethical and legal aspects of teaching. Teaching special populations and teaching in multicultural environments will also be addressed.

(WI) **4681 Student Teaching in Agricultural Science and Technology. (0-6)** Planning for teaching agricultural science in selected schools in Texas. Prerequisite: Senior classification.

Courses in Agriculture (AG)

1445 (AGRI 1419) Animal Husbandry. (3-2) An introductory course designed to acquaint students with the importance of the livestock industry. A study of the types and breeds; market classes and grades of beef cattle, swine, sheep, goats, horses, and poultry; attention will be given to breeding, judging, care, and management.

2313 Agronomic Crops. (2-2) A study of the production, harvest practices, storage, and use of cereal and feed grains, fiber crops, forages, and other related crops requiring special technology.

2345 Horse Management. (2-2) A course designed as a broad but thorough coverage of most areas of horse husbandry and production, including anatomy, physiology, breeding, feeding, training, and health care. Laboratory sessions are designed to acquaint the student with modern methods of breeding, training, and care of the horse.

2367 Animal Ultrasonography. (2-2) A study of current developments and utilization of animal ultrasonography technology in agriculture. Hands-on training in animal growth and development, animal breeding, animal handling and management, animal reproduction, computer technology and data interpretation.

2373 Introduction to Agricultural Engineering. (2-2) An introductory course designed to acquaint students with a wide range of concepts, principles and applied technologies in agricultural engineering. A problem solving course.

2374 Metals and Welding Processes for Agriculture. (2-2) Principles and practices of applied metallurgy and welding. The course emphasizes the management of the technologies and techniques associated with Oxy-fuel welding and cutting. Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), Gas Metal Arc Welding (GMAW), and Plasma Arc Cutting (PAC).

2379 (AGRI 1315 & HORT 1301) General Horticulture. (2-2) A survey of the general field of horticulture; a study of the principles and practices of propagation; the growth and fruiting habits of horticultural plants; and the culture, harvesting, handling, and utilization of fruit. Prerequisite: Biology 1410.

2383 (AGRI 2317) Introduction to Agricultural Economics. (3-0) The role of agriculture in the general economy; the study of basic economic concepts with their application to the agricultural firm; the structure and operation of the marketing system; the functional and institutional aspects of agricultural finance; international trade; and government farm programs.

2390 (AGRI 1309) Computer Applications in Agriculture. (2-2) Introduction to computers and computer technology; operation and application of the computer in production agriculture and agricultural business, services and industries. Includes characteristics of computer hardware and software, accessing and using the computer in agriculture.

2421 Range Forage and Pasture Crops. (3-2) Production, utilization and management of major range and forage plants in production systems that will meet the nutritional needs of both wild and domestic animals on a sustained basis.

(WI) 3301 Genetics of Livestock and Plant Improvement. (3-0) Fundamental principles of genetics and their application to higher plants and animals. The physical basis of Mendelian inheritance, expression and interaction of genes, gene frequency, linkage, sex linkage, inbreeding, line breeding, and crossbreeding as applied to selection indices for livestock and plants.

3304 Propagation of Horticultural Plants. (2-2) Principles and practices of propagating ornamental plants, vegetables, and fruits by sexual and asexual methods including germination of seed, layerage, graftage, division, cuttage, bulbs, corms, and other vegetative plant structures. Study of physical, physiological and environmental factors affecting propagation of ornamental plants.

3305 Plant Materials for Outdoor Landscapes. (2-2) Study of herbaceous and woody plant material including fruit and ornamental trees, shrubs, annuals, perennials, and ground covers. Their identification, nomenclature, and use in the planning and development of home landscapes. Basic principles and practices of landscape construction and maintenance such as site preparation, transplanting operation, control of plant pests, and pruning practices are included.

(WI) **3306 Flowers and Plants for Interior Design. (2-2)** Study of flowers, cut flowers, foliage and blooming pot plants to enhance the interior design of homes and businesses including their identification, cultural requirements, uses, diagnoses and corrective measures of disorders. Basic principles of flower arrangement and the preparation of floral and plant decoration as used in interior design.

3310 Internal Combustion Engines. (2-2) To include principles of 2 stroke and 4 stroke cycle engines, ignition and combustion types including injection systems. Components including power and power transmissions and hydraulic systems to be addressed. Prerequisites: Math 1315 and AG 2373.

3311 Agricultural Practices and Pollution Control. (2-2) Principles and practices of applied physical, chemical, and biological control of air, soil, and water pollution arising from production and processing of agricultural products. Prerequisites: Chemistry 1410, Math 1315, AG 2373 and 2390.

3314 Animal Health and Disease Control. (3-0) A course designed to enable the animal science student to understand basic veterinary principles as applied to prevention of disease in domestic livestock. Common diseases of livestock are considered, with emphasis on sanitation and modern preventative methods concerned with keeping livestock healthy. Prerequisite: AG 1445.

3317 Farm Management. (2-2) Tools and techniques which are basic to the study of farm organization and decision making, the wise allocation of factors of production, the keeping of records, and income tax management. Prerequisites: AG 2383 and 2390, Math 1315.

3318 Agricultural Business Management. (3-0) Introduction to the institutions and functions in agribusiness. The institutional structure of the agribusiness sector such as the feed, farm machinery and equipment, farm chemicals, financial institutions and private and public agri-services will be delineated. The second part of the course will introduce and develop the various functions such as organizational behavior, financial management, market management and human resource management. Prerequisites: AG 2383 and 2390 or consent of instructor.

3319 International Food and Fiber Systems. (3-0) Presents the food and fiber system from an international Component. Analysis of food production and consumption patterns under different world economic systems, causes of surpluses and shortages throughout the world; the role of trade in solving food and agricultural problems. Outlook and situation for food and fiber is discussed for both developed and developing nations, and impact of U.S. food policy on world trade flows is presented.

3321 Range Management. (3-0) Practical problems met in managing native pastures and rangelands. Attention to determining range condition and proper stocking rates, methods of handling livestock on the range, range reseeding, brush control, and poisonous plants. The ecological and physiological response of range vegetation to grazing.

(WI) **3325 Animal Nutrition. (3-0)** Principles of animal nutrition with emphasis on digestion, absorption, metabolism, and function of nutrients; estimation of feed-stuff nutritive value; and requirements of animals. Prerequisites: Chemistry 1410 and 1420 or 1430, AG 1445 or consent of instructor.

3329 Economic Entomology. (3-0) A study of the most common insects of field crops, fruits, vegetables, and farm animals; life history, methods of attack,

damage, and means of preventing and controlling. Collection and mounts of insects will be made.

3331 Reproduction in Farm Animals. (2-2) An examination of the anatomy and physiology of reproductive systems of livestock of economic importance. Attention is given to reproductive failure and disease. The laboratory includes pregnancy testing, semen collection and evaluation, artificial insemination techniques, and evaluation of breeding records. Prerequisite: AG 1445.

3345 Livestock Selection and Evaluation. (2-2) Detailed consideration of the factors involved in the selection and evaluation of beef cattle, sheep, swine, rabbits, goats, and chickens. Emphasis will be placed on the care, grooming and exhibition of livestock projects.

(WI) **3351 Agricultural Marketing and Sales. (3-0)** A study of the food marketing system and farm input sales; includes the functional systems approach that integrates the agricultural input industries into a discussion of food marketing; takes a micro approach to the development of marketing management skills needed in agribusiness; and provides a critical outlook on issues ranging from inputs to final food products. Prerequisites: AG 2383, Math 1315.

3352 Quantitative Methods in Agricultural Economics. (3-0) Principles involved in collection, tabulating and analyzing agricultural data. Topics include sampling procedures, questionnaire development, descriptive analysis of data, correlation, prediction and forecasting and tests of significance. Simple computer programs will be stressed for class exercises during the course. Prerequisites: AG 2383 and 2390, Math 1315.

3353 Agricultural Structures and Environment. (2-2) Principles and practices associated with structural components, selection, materials of construction, heat and moisture control, and the environmental issues of waste management systems; a problem solving course. Prerequisites: Math 1315, AG 2373 and 2390. Recommended: TECH 1413 and 2310.

3375 Agricultural Machines and Equipment. (2-2) The optimization of the equipment phases of agricultural production and processing. Emphasis will be placed on management and decision-making principles concerned with the efficient selection, operation, repair, maintenance, and replacement of machinery and equipment. Prerequisites: Chemistry 1410, Math 1315, AG 2390

3426 Soil Science. (3-2) The fundamental principles of soil science to acquaint the student with some physical, chemical, and biological properties of the soil. Prerequisite: Chemistry 1410.

(WI) **3427 Environmental Soil Management Systems. (3-2)** Management of soils as pertaining to their place in the environment. Special emphasis will be given to the role of soil in conventional agricultural systems, natural resource systems, waste management systems, and reclaimed and artificial soil systems. Prerequisite: AG 3426.

3455 Land Surveying. (3-2) Engineering practices used in plane and geodetic surveying including differential and profile leveling, topographic, land, boundary and cadastral, and construction surveys. Laboratory exercises include use of dumpy levels, transits and total stations, and GPS (Global Positioning System) total station with RTK (real time kinematic). Planimeters and stereoscopes are used in analyzing aerial maps. Prerequisites: Math 1315 or Math 1317 or Math 1319, AG 2373, AG 2390.

(WI) **4185 Current Problems in Technical Agriculture. (1-0)** A course for advanced undergraduates to study subject matter of special interest in agriculture. Problems in agronomy, economics, animal science, plant science, and farm mechanics may be selected. Prerequisite: Approval by department chair. May be re-

peated for up to three semester hours credit. Course may not be taken for graduate credit.

(WI) **4300 Greenhouse and Nursery Management. (2-2)** Planning greenhouses for commercial and home use; plant-nursery layouts. Study of the physical and economic factors affecting the production of plants in the greenhouse and other forcing structures, and in the field; management techniques used in the production and marketing of greenhouse and nursery plants.

(WI) **4302 Fruit and Vegetable Crop Production. (2-2)** Factors influencing small-fruit and tree-fruit and vegetable crop production in the field including root stocks, varieties, soil, planting, transplanting, irrigating, fertilizing, pruning, insects, diseases, nematodes, weeds, chemicals, harvesting, storing, and marketing; greenhouse production of certain vegetables.

4310 Agricultural Internship. (0-6) Supervised on-the-job experience in an agriculturally related business or agency. This course may be repeated for credit with approval of the department chair or advisor. See department chair or advisor for prerequisites.

4315 Fertilizers and Soil Productivity. (2-2) The principles of fertilizer use for maintenance of soil productivity. Fundamentals of crop producing power of soils will be discussed, as well as proper fertilizer preparation and proper application for greater economic returns. Restricted to those who have had AG 3426 and preferably are second-semester juniors or seniors.

(WI) **4322 Range Improvement Practices. (2-2)** A study of the various techniques available for increasing the productivity of rangelands including the use of grazing systems, range seeding, herbicides, prescribed burning, range fertilization and mechanical treatments of the land surface.

4325 Feeds and Feeding. (2-2) Study of feedstuffs used in livestock enterprises. Application of basic nutrients to the needs of different species of livestock. Formulating rations, methods of feeding, feed control laws, and feeding investigation.

(WI) **4326 Advanced Animal Husbandry-Ruminants. (3-0)** The application of scientific and technological advances to production and management in ruminant animal production and management.

4328 Advanced Animal Husbandry-Nonruminants. (3-0) Application of basic principles in the production and management of nonruminant animals. Scientific and technological advances with emphasis on overall management, health care, nutrition, genetics, physiology, and marketing of nonruminant animals.

4330 Food Technology: Processing Meats. (2-2) Evaluation and grading of carcasses; wholesale and retail cuts of beef, pork, lamb, and poultry. Emphasis on quality controls, testing of finished products that have been frozen, cured, fried, pickled, and canned.

4343 Organization and Management for Laboratory Programs. (3-0) Instructional programs involving laboratory equipment and facilities will be examined. Curriculum, teaching methods, equipment and facility management practices including various aspects of safety, tool management, inventory and security are emphasized along with facilities layout planning. Prerequisite: Agriculture 2390.

4361 Agricultural Electrification. (2-2) Electrical fundamentals applied to agricultural production and processing. Circuits, power, energy, wiring design, and motor fundamentals; selection, installation and operational characteristics. Sensors and control devices including switches, relays, timers, and circuit breakers will be studied.

4371 Topics in Agricultural Systems Management

Study of selected topics not currently available in existing courses. Topics to be considered will be taken from the following:

4371A Advanced Farm Power and Machinery (3-0)

4371B Water Utilization and Management (3-0)

4371C Energy Use and Management in Agriculture (3-0)

4371D Agricultural Structures Design (3-0)

4371E Agricultural Materials Handling (3-0)

4380 Agricultural Finance. (3-0) An introduction to finance and financial problems faced by agribusiness managers. The subject matter includes financial analysis, planning, and control; capital budgeting; capital structure, liquidity, and risk management; and financial markets. Prerequisites: AG 2383, Math 1315, ACC 2361 and 2362.

(WI) **4381 Agricultural Policy. (3-0)** Identification and analysis of governmental programs and policies affecting the production and marketing of agricultural products. An economic evaluation of alternative policies and their application for farmers, consumers and agribusinesses will be considered. Prerequisite: AG 2383.

(WI) **4383 Agricultural Resource Economics. (3-0)** Economic concepts and institutional factors relating to the use of agricultural resources such as land, air, water, energy, space, etc. Emphasis is on the conservation of resources and the environmental interactions resulting from the use of natural resources for agricultural production. Prerequisite: AG 2383, Math 1315 Or 1319, or consent of instructor.



Department of Criminal Justice

Acting Chair and Associate Professor-McLaren. Professors-Mullins, Pollock, Stone. Associate Professors-Becker, Jamieson, Mijares, Perkins, Smith. Assistant Professors-Henson, Supancic. Lecturer-Murphy.

The Department of Criminal Justice offers courses leading to a Bachelor of Science degree in Criminal Justice with majors in law enforcement, corrections, and criminal justice.

This degree program prepares students to pursue advanced academic degrees and to serve the community in the operation and management of criminal justice agencies which include federal, state, county, and municipal law enforcement; probation; courts; institutional corrections; parole; and related agencies. The program is founded on an interdisciplinary and academic approach to the role of criminal justice in the maintenance of social order in a democratic society.

Students pursuing a degree in criminal justice should be willing to meet the standards required of such a career. The majority of criminal justice agencies require sound academic preparation, psychological stability, physical agility, and a record free of criminal or excessive traffic offenses.

No more than 21 hours in criminal justice may be transferred from a two-year college. If the two-year college is in the State of Texas, the 21 hours must be composed of the four criminal justice core courses (or their equivalents) and nine hours in either the law enforcement area CJ 2310, CJ 2315, and CJ 2330 (or their equivalents) or in the corrections area CJ 2310, CJ 2355, CJ 2366 (or their equivalents).

For more information, call 512/245-2174 or visit the Criminal Justice Department, Hines Academic Center, Room 120, or our website www.cj.swt.edu/

General Education

See requirements under University College.

NOTE: Math 1315 may be a prerequisite for other required courses.

Other Degree Requirements-All Majors

Criminal Justice Core

- Criminal Justice 1310, Introduction to Criminal Justice
- Criminal Justice 2324, Crime in America
- Criminal Justice 2350, The Courts and Criminal Procedure
- Criminal Justice 2360, Fundamentals of Criminal Law

Upper Division core courses listed under "Requirements for Each Major"

Major Requirements

Free Electives (minor if desired)

The Five Major Options in Criminal Justice

The student may select a major in law enforcement, corrections, or criminal justice. The law enforcement and corrections majors include optional internships. Students selecting an internship option must meet criteria described under "Requirement for Internship" set out below. The Criminal Justice major includes the development of advanced research and writing skills and includes interdisciplinary course work.

Internship

A student must meet the following requirements before being allowed to enroll in an internship course: SWT GPA of 2.25, CJ GPA of 2.50, completion of 93 college course work hours (including 21 in CJ), English 1310 and 1320, CJ 3346, History 1310 and 1320, Communications 1310, Math 1315 or 1319 and Math 2328 or CJ 3347, Political Science 2310 and 2320, 7 hours of Natural Science. Lab fee and permission of Internship Coordinator also required.

Bachelor of Science in Criminal Justice Majors in Criminal Justice, Corrections, Law Enforcement (Minimum required: 128 semester hours)

| Freshman Year | Hours | Sophomore Year | Hours |
|----------------------------------------|-------|----------------------------------------------|-------|
| Criminal Justice Core 1310, 2324,..... | | Criminal Justice Core 2350..... | 3 |
| 2360..... | 9 | Literature Component..... | 3 |
| English 1310, 1320..... | 6 | Major Requirements (Sophomore Level)..... | 9 |
| University Seminar 1100..... | 1 | Mathematics 1315 or 1319..... | 3 |
| History 1310, 1320..... | 6 | Philosophy 1305..... | 3 |
| Natural Science..... | 7-8 | PFW Component (two courses)..... | 2 |
| Psychology 1300..... | 3 | Political Science 2310, 2320..... | 6 |
| Total | 32-33 | Sociology 1310..... | 3 |

Total 32

| Junior Year | Hours | Senior Year | Hours |
|----------------------------------------|-------|--------------------------------------|-------|
| Art, Dance, Music, or Theatre 3313 ... | 3 | Capstone Course..... | 3 |
| International Component Course..... | 3 | Major Requirement and Electives..... | 29 |
| Major Requirement and Electives.. | 19-20 | Total | 32 |
| Speech Communication 1310..... | 3 | | |
| CJ 3347 or Mathematics 2328..... | 3 | | |
| Total | 31-32 | | |

Requirements for Each Major

(1) LAW ENFORCEMENT (INTERNSHIP OPTION)

Required Criminal Justice Core and 2310, 2315, 2330, 2355, 3300, 3323, 3346, 4310, 4350, 4301 and 4302.

INTERDISCIPLINARY COURSE WORK:

Psychology 1300, Sociology 1310

Select six hours from: Political Science 3311, 3314, (or Criminal Justice 4332), Psychology 3315, 3331 (or Sociology 3319), Sociology 3325, 3327, 3343, or 3347

Three hours of Statistics: (CJ 3347 or Math 2328) Sociology minors may use Sociology 3307.

Computer literacy: CS 1308 or equivalent

(2) LAW ENFORCEMENT (WITHOUT INTERNSHIP)

Required Criminal Justice Core and 2310, 2315, 2330, 2355, 3300, 3346, 3323, 4310, 4350, 4365, three semester hours advanced criminal justice electives.

INTERDISCIPLINARY COURSE WORK:

Psychology 1300, Sociology 1310

Select six hours from: Political Science 3311, 3314 (or Criminal Justice 4332), Psychology 3315, 3331 (or Sociology 3319), Sociology 3325, 3327, 3343, or 3347.

Three hours of Statistics: (CJ 3347 or Math 2328)

Computer Literacy: CS 1308 or equivalent

(3) **CORRECTIONS (INTERNSHIP OPTION)**

Required Criminal Justice Core and 2310, 2355, 2366, 3300, 3323, 3325, 3346, 4310, 4301, 4302 and 4352.

INTERDISCIPLINARY COURSE WORK:

Psychology 1300, Sociology 1310

Select six hours from: Political Science 3311, 3314 (or Criminal Justice 4332), Psychology 3315, 3331 (or Sociology 3319), Sociology 3325, 3327, 3343, or 3347.

Three hours of Statistics: (CJ 3347 or Math 2328)

Computer Literacy: CS 1308 or equivalent

(4) **CORRECTIONS (WITHOUT INTERNSHIP)**

Required Criminal Justice Core and 2310, 2355, 2366, 3300, 3323, 3325, 3346, 4310, 4352, 4365, three semester hours advanced criminal justice electives.

INTERDISCIPLINARY COURSE WORK:

Psychology 1300, Sociology 1310

Select six hours from: Political Science 3311, 3314, (or Criminal Justice 4332), Psychology 3315, 3331 (or Sociology 3319), Sociology 3325, 3327, 3343, or 3347.

Three hours of Statistics: (CJ 3347 or Math 2328)

Computer Literacy: CS 1308 or equivalent

(5) **CRIMINAL JUSTICE GENERALIST**

Required Criminal Justice Core and 2310, 2355, 3300, 3323, 3346, 4310, 4332, 4350 or 4352, 4365

INTERDISCIPLINARY COURSE WORK:

Psychology 1300, Sociology 1310, Psychology 3315, English 3311

Three hours of Statistics: (CJ 3347 or Math 2328)

Computer literacy: CS 1308 or equivalent and 15 hours selected from the following courses: CIS 3370; Psychology 3353; Management 3303, 4375; Speech Communication 3319; Philosophy 1330, 2330; Political Science 3318, Sociology 3325.

Courses in Criminal Justice (CJ)

1310 (CRIJ 1301) Introduction to Criminal Justice. (3-0) History and philosophy of criminal justice: ethical considerations, crime defined, overview of criminal justice system, law enforcement, court system, prosecution and defense, trial process, and corrections.

2310 (CRIJ 2328) Police Systems and Practices. (3-0) Police profession: organization of law enforcement systems, the police role, police discretion, ethics, police-community interaction, and current and future issues. Prerequisite: Criminal Justice 1310.

2315 (CRIJ 2323) Legal Aspects of Law Enforcement. (3-0) Police authority and responsibilities: constitutional constraints, laws of arrest, search, seizure, and police liability. Prerequisite: Criminal Justice 1310.

2324 (CRIJ 1307) Crime in America. (3-0) American crime problems: historical component, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and prevention of crime.

2330 (CRIJ 2314) Criminal Investigation. (2-2) Investigative theory: collection and preservation of evidence, sources of information, interview and interrogation, uses of forensic sciences, case and trial preparation. Prerequisite: Criminal Justice 1310.

2350 (CRIJ 1306) The Courts and Criminal Procedure. (3-0) Judiciary in the criminal justice system: structure of American court system, prosecution, right to counsel, pre-trial release, grand juries, adjudication process, types and rules of evidence, and sentencing. Prerequisite: Criminal Justice 1310.

2355 (CRIJ 2313) Correctional Systems and Practices. (3-0) Corrections in the criminal justice system: organization of correctional systems, correctional role, institutional operations, alternatives to institutionalization, treatment and rehabilitation, and current and future issues. Prerequisite: Criminal Justice 1310.

2360 (CRIJ 1310) Fundamentals of Criminal Law. (3-0) A study of the nature of criminal law: philosophy and historical developments, major definitions and concepts, classification of crime, elements of crimes and penalties using Texas Statutes as illustrations, and justifications of and defenses to criminal responsibility.

2366 Community Corrections and Rehabilitation. (3-0) A study of community programs for adult and juvenile offenders, treatment modalities in various correctional settings, and the administration, legal issues, and future trends associated with community-based corrections in America. Prerequisite: Criminal Justice 1310.

(WI) **3300 Juvenile Justice. (3-0)** A study of the juvenile justice process to include both the specialized juvenile law and the role of the courts, police and corrections in juvenile justice. Prerequisite: Criminal Justice 1310.

3323 Mid-Level Management in Criminal Justice Agencies. (3-0) Introduction and overview of the organizational theories of classical behavioral, and systems management concepts. Included in the course content are an analysis of the functions of management in modern CJ organizations, internal and external environmental factors, individual & group dynamics, motivation, and leadership styles. Prerequisites: Criminal Justice 1310 and 2310 or 2355.

3325 Penology. (3-0) Role of the institution in the process of corrections including the philosophy of imprisonment, the inmate subculture and special problems and programs in institutions. Prerequisite: Criminal Justice 1310 and 2355.

(WI) **3346 Research in Criminal Justice. (3-0)** Analysis of criminal justice research, survey methods, and the utilization of research in criminal justice. Prerequisite: Criminal Justice 1310 and 2324, CS 1308 or equivalent and Statistics (Math 2328, Psychology 3301, Sociology 3307 or equivalent).

3347 Statistics For Criminal Justice. (3-0) The theory and application of statistical inferential techniques, and correlation and regression for behavioral science data and its applications in Criminal Justice. Emphasis is on the collection, analysis, and interpretation of statistical data in criminal justice settings.

(WI) **4301-4302 Internship I and II. (0-6)** Field service training in public and private criminal justice agencies at the federal, state and local levels. The internship is designed to provide actual work experience, observation, and analysis in the student's chosen career field. (See departmental information under "Requirements for Internship").

(WI) **4310 Special Problems in the Criminal Justice System. (3-0)** A study of contemporary problems in administration, management, organization and operation of criminal justice agencies. Prerequisite: Completion of all 2000 level required courses in Criminal Justice. (Capstone Course).

(WI) **4314 Terrorism in the United States (3-0)** Terrorist groups operating in the U.S. are examined with special emphasis on the far-right (militia, Christian identity,

neo-nazi, other racist groups). Analyzed are their belief systems and structures, organizational structure, tactics and targets, and weapons. Future trends are discussed, including the threat posed by nuclear, biological, and chemical terrorism.

4321 Occupational Crime. (3-0) A study of the problems of organized and upper social status criminal activities with emphasis on statutes and their application to fraud, embezzlement, deceptive trade practices and illegal trade practices.

(WI) **4326 Women and Criminal Justice. (3-0)** This course is designed to explore women's involvement in three primary areas of criminal justice-as victims, criminals and practitioners employed in criminal justice agencies. It will analyze the impact of sex and gender on such things as criminological theory, sentencing, prison subcultures victimization and career choices. Prerequisite: junior standing.

(WI) **4327 Ethics of Social Control. (3-0)** This course is designed to explore moral decision making. Basic moral or ethical frameworks are applied to ethical decision which often need to be made in the criminal justice system. Prerequisite: junior standing.

4332 Advanced Criminal Justice Management. (3-0) A critical analysis of the nature of organizations within the criminal justice system. An analysis of theories of organizations and of organizational changes within law enforcement agencies. An examination of the quantitative data gathered by the Criminal Justice System and its effective use and presentation. Prerequisites: Criminal Justice 1310 and 2310 or 2355.

(WI) **4350 Contemporary Legal Issues in Law Enforcement. (3-0)** An in-depth study of recent developments in criminal law and procedure. Their effects upon the criminal justice agency official in society will be given special attention. Includes specific case studies with emphasis on analyzing factual situations and legal issues. Prerequisites: Criminal Justice 1310, 2310 and 2315.

(WI) **4352 Contemporary Legal Issues in Corrections. (3-0)** A study of the developing body of law defining the rights and duties of persons confined in penal institutions with equal emphasis on legal issues associated with probationers, parolees, and similar status's within the corrections branch of the criminal justice system. Prerequisite: Criminal Justice 1310 and 2355.

4362 Readings in Criminal Justice. (3-0) An individualized readings course tailored to the academic and professional interests and needs of the student. Emphasis is placed on developing in-depth knowledge of selected criminal justice subjects through directed research. (Permission of instructor is required for course registration.)

(WI) **4365 Comparative Criminal Justice. (3-0)** A survey of the organizational, administrative and philosophical principles of criminal justice systems around the world. Prerequisite: 1310 and 2310 or 2355.

Department of Family and Consumer Sciences

Chair and Professor-Friedman. Professors-Allen, Laman, Williams. Associate Professors-Blunk, Crixell, Garstka, Thompson, Treanor. Assistant Professors-Apple, Brantley, Granato, Rodriguez, Wuest.

The Department of Family and Consumer Sciences, accredited by the American Association of Family and Consumer Sciences, offers five programs that prepare students for diverse professional roles. These five majors include family and consumer sciences, family and child development, fashion merchandising, interior design, nutrition and foods.

Family and Consumer Science majors have a choice of three different tracks: Consumer Science, Family and Consumer Sciences, and Family and Consumer Sciences Teacher Certification. Students choosing the Consumer Science track study family financial decisions and the role of the consumer in the economy. Students prepare for such careers as business consumer liaisons, consumer advocates, or government agency employees. In the Family and Consumer Sciences track, students take courses from all areas of Family and Consumer Sciences and select a minor. Graduates seek employment in business, the extension service, and community agencies. The teacher certification track, approved by the Texas Education Agency, certifies graduates to teach in the public schools.

Family and Child Development majors work in family and child programs, and community agencies. Using an interdisciplinary approach, students focus on human development and relationships across the lifespan.

Fashion Merchandising prepares majors for careers in the merchandising and promotion of apparel, textiles, and other consumer products. Most students choose to complete a Business Administration minor.

A major in Interior Design prepares students for careers as residential and/or commercial designers. The program is accredited by the Foundation for Interior Design Education Research (FIDER), the recognized accrediting agency for this discipline. Students learn to communicate their design concepts and to solve design problems.

Nutrition and Foods majors study the selection, preparation, processing, and consumption of foods. They prepare for careers in medical nutrition therapy, food service administration, public health nutrition programs or private practice and the food industry. The program is approved by the American Dietetic Association and fulfills didactic requirements for associate membership and Texas licensing. Graduates are qualified to apply for post-graduate dietetic internships.

For more information, call 512-245-2155 or visit the Family and Consumer Sciences Department, FCS Building, Room 101 or our website www.fcs_dept/index.html.

Family and Consumer Sciences Core

To provide a common body of knowledge in Family and Consumer Sciences, all majors are required to complete:

Marriage and Family FCS 3355

Professional Family and Consumer Sciences II - FCS 4100

Two (2) Family and Consumer Sciences courses from two (2) areas outside the major to be selected from FCS 1341, 1321 or 3329, 2331 or 1332, 2367 or 3362.

Bachelor of Science in Family and Consumer Sciences
Major in Family and Consumer Sciences
(Minimum required: 128 semester hours)

In addition to General Education and departmental core requirements, the Family and Consumer Sciences major is required to take courses in all areas of Family and Consumer Sciences.

| Freshman Year | Hours | Sophomore Year | Hours |
|----------------------------------------|--------------|-----------------------------------|--------------|
| English 1310, 1320..... | 6 | Family and Consumer Sciences | |
| University Seminar 1100..... | 1 | 1347, 2367 or 3362, 2460 | 10 |
| History 1310, 1320 | 6 | Literature Component | 3 |
| Family and Consumer Sciences | | Philosophy 1305..... | 3 |
| 1321, 1341, 1351, 1361, 2331 | | PFW Component (one course)..... | 1 |
| or 1332..... | 15 | Political Science 2310, 2320..... | 6 |
| Mathematics 1315, or 1316*, | | Natural Science Component..... | 7-8 |
| or 1319..... | 3 | FCS Elective..... | 3 |
| PFW Component (one course)..... | 1 | | <u>33-34</u> |
| | <u>32</u> | | |
| Junior Year | Hours | Senior Year | Hours |
| Art, Dance, Music or Theatre 2313 | 3 | Family and Consumer Sciences | |
| Speech Communication 1310 | 3 | 3355, 3391, 4100, 4301, 4341 | |
| Family and Consumer Sciences | | or 3342, 4347 | 16 |
| 2351, 3329, 3341, 3342..... | 12 | Minor, advanced..... | 9 |
| Minor | 9 | Electives, advanced | 5 |
| Family and Consumer Sciences | | | <u>30</u> |
| Electives | 3 | | |
| Social Science Component..... | 3 | | |
| | <u>33</u> | | |

*Math 1316 is not accepted as a prerequisite for courses in some minors.

Bachelor of Science in Family and Consumer Sciences
Major in Family and Consumer Sciences
(Minimum required: 128 semester hours
with Consumer Sciences Option)

In addition to General Education and departmental core requirements, the consumer science option requires specialized courses in consumer education, family and personal resource management, family finance, consumer law, family financial counseling, and family policy. Students participate in an internship in a related area. Minors for the consumer science option may be in business administration or mass communication.

Minor in Business Administration

| Freshman Year | Hours | Sophomore Year | Hours |
|----------------------------------|--------------|-----------------------------------------|--------------|
| Speech Communication 1310 | 3 | Accounting 2361, 2362 | 6 |
| English 1310, 1320 | 6 | FCS Electives | 6 |
| University Seminar 1100 | 1 | Family and Consumer Sciences 3329 | 3 |
| History 1310, 1320 | 6 | Literature Component | 3 |
| Family and Consumer Sciences | | Natural Science Component | 7-8 |
| 1341, 1347, 2331 or 1332 | 9 | PFW Component (one course) | 1 |
| Mathematics 1315 or 1319 | 3 | Political Science 2310, 2320 | 6 |
| Philosophy 1305 | 3 | | 32-33 |
| PFW Component (one course) | 1 | | |
| | 32 | | |

| Junior Year | Hours | Senior Year | Hours |
|------------------------------------|--------------|----------------------------------------|--------------|
| Business - select four from: | | Art, Dance, Music, or Theatre 2313 ... | 3 |
| BLAW 2361, Computer Information | | Electives, free | 15-16 |
| Systems 3370 or 3374, Finance | | Family and Consumer Sciences | |
| 3312, Management 3303 or 3353 | | 3391, 4100, 4301, 4341, 4347 | 13 |
| or 4373, Marketing 3343 | 12 | | 31-32 |
| Economics 2314, 2315 | 6 | | |
| Family and Consumer Sciences | | | |
| 3341, 3342, 3355, 3362, 4303 | 15 | | |
| | 33 | | |

Minor in Mass Communication

| Freshman Year | Hours | Sophomore Year | Hours |
|----------------------------------|--------------|-----------------------------------------|--------------|
| Speech Communication 1310 | 3 | Accounting 2361 | 3 |
| English 1310, 1320 | 6 | FCS Electives | 6 |
| University Seminar 1100 | 1 | Family and Consumer Sciences 3329 | 3 |
| History 1310, 1320 | 6 | Literature Component | 3 |
| Family and Consumer Sciences | | Natural Science Component | 7-8 |
| 1341, 1347, 2331 or 1332 | 9 | PFW Component (one course) | 1 |
| Mathematics 1315 or 1319 | 3 | Political Science 2310, 2320 | 6 |
| Philosophy 1305 | 3 | | 29-30 |
| PFW Component (one course) | 1 | | |
| | 32 | | |

| Junior Year | Hours | Senior Year | Hours |
|----------------------------------------|--------------|------------------------------------|--------------|
| 6 hours from Mass Communication | | Mass Communication 3343, | |
| 1301, 3375, 4316a, 4356c, 4376a, | | 3355, 3367, 4302 | 12 |
| 4382a, 4382b, 4382c or 4382d | 6 | Family and Consumer Sciences | |
| Economics 2314, 2315 | 6 | 3391, 4100, 4301, 4341, 4347 | 13 |
| Art, Dance, Music, or Theatre 2313 ... | 3 | Electives | 9 |
| Family and Consumer Sciences | | | 34 |
| 3341, 3355, 3342, 3362, 4303 | 15 | | |
| Electives | 3 | | |
| | 31 | | |

Bachelor of Science in Family and Consumer Sciences
Major in Family and Consumer Sciences
(Minimum required: 129 semester hours
with Family and Consumer Sciences Teacher Certification)

In addition to General Education and departmental core requirements, the Family and Consumer Sciences major pursuing teacher certification in Family and Consumer Sciences is required to take from 6 to 12 semester hours in each of the following areas: nutrition and foods, family and child development, fashion merchandising, interior design, and consumer science. Students participate in student teaching for pre-professional experience. No minor is required.

| Freshman Year | Hours | Sophomore Year | Hours |
|-------------------------------------------------------------------|--------------|----------------------------------------------------------------|--------------|
| Computer Science 1308, Technology 1310 or Psychology 3353..... | 3 | Family and Consumer Sciences 1321, 1347, *2331 or 2334..... | 9 |
| English 1310, 1320..... | 6 | Chemistry 1310, 1430 or Biology 1310, 1420..... | 7 |
| University Seminar 1100..... | 1 | Speech Communication 1310 | 3 |
| History 1310, 1320 | 6 | Literature Component | 3 |
| Family and Consumer Sciences 1332, 1341, 1351, 1361..... | 12 | Philosophy 1305..... | 3 |
| Mathematics 1315 or 1319..... | 3 | Political Science 2310, 2320..... | 6 |
| PFW Component (two courses)..... | <u>2</u> | | <u>31</u> |
| | 33 | | |

| Junior Year | Hours | Senior Year | Hours |
|------------------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------------------------|--------------|
| Art, Dance, Music, or Theatre 2313 ... | 3 | Curriculum and Instruction, 4332 | 3 |
| Family and Consumer Sciences 2351, 2367 or 3362, 2460, 3329, 3341, 3355, 3360, 3394..... | 25 | Reading 3323 | 3 |
| Curriculum and Instruction 3310..... | 3 | Family and Consumer Sciences, 3391, 4100, 4301, 4681, ASD 4311, AG 4343, CATE 3313D..... | 22 |
| Social Science Component | <u>3</u> | Health Ed 1310 or 3301 | 3 |
| | 34 | | <u>31</u> |

* Students must demonstrate competency in basic clothing construction techniques.

Bachelor of Science in Family and Consumer Sciences Major in Family and Child Development (Minimum required: 128 semester hours)

In addition to General Education and Family and Consumer Sciences core requirements, the Family and Child Development major is required to take specialized courses including infant and toddler development, child development, parent and family life education, family systems, creative activities for children, and administration of programs for young children. No minor is required. Additional courses in psychology, sociology, and special education are required.

Family and Child Development majors may choose an emphasis in child development or family, or no emphasis. The selected emphasis will determine which course is chosen when optional requirements occur. Students must see an advisor upon selection of an emphasis.

Students also have the opportunity to become a Certified Family Life Educator. Students should consult an advisor for specific information.

| Freshman Year | Hours | Sophomore Year | Hours |
|--------------------------------------|--------------|------------------------------------|--------------|
| Speech Communication 1310 | 3 | Family and Consumer Sciences | |
| English 1310, 1320..... | 6 | 2331 or 3329, 2351, 2353, 3357 ... | 12 |
| University Seminar 1100..... | 1 | Literature Component..... | 3 |
| History 1310, 1320 | 6 | Political Science 2310, 2320..... | 6 |
| Family and Consumer Sciences | | Natural Science Component..... | 4 |
| 1314 or 1347, 1351 | 6 | FCS Elective..... | 3 |
| Mathematics 1315 or 1316 or 1319 ... | 3 | Social Science Component | 3 |
| Natural Science Component..... | 3-4 | <u>31</u> | |
| PFW Component (two courses)..... | 2 | | |
| Philosophy 1305..... | 3 | | |
| | <u>33-34</u> | | |

| Junior Year | Hours | Senior Year | Hours |
|----------------------------------------|--------------|-------------------------------|--------------|
| Art, Dance, Music, or Theatre 2313 ... | 3 | Electives, free..... | 3 |
| Family and Consumer Sciences | | Family and Consumer Sciences | |
| 3351, 3352, 3353, 3355, 3362, | | 4100, 4301, 4347, 4351, 4354, | |
| 3394 | 18 | 4355 | 16 |
| Family and Consumer Sciences, | | Special Education 3381 | 3 |
| Electives, Advanced or | | FCS Elective or 4302S..... | 3 |
| Communications 3318b | 3 | FCS 4303 or 4352 | 3 |
| Elective, Free or Psychology 3313 or | | FCS 3341 or 3354 | 3 |
| Sociology 3383 or Social | | PSY 3332 or WS 3377 | 3 |
| Work 4320 | 3 | <u>34</u> | |
| Social Work 2375 or 4315 | 3 | | |
| | <u>30</u> | | |

*No minor is required; however, Family and Child Development majors may add a minor in Social Work or Psychology, or Early Childhood Intervention.

For a minor in Social Work, a student must take 18 hours; including 1350, 2375, 3355, plus nine hours of Social Work electives; and excluding 3340, 3430, 3435, 4305, 4425, 4645, 4650.

For a minor in Psychology, a student must take Psychology 1300 and 18 additional hours, at least 12 of which must be advanced.

For a minor in Early Childhood Intervention, a student must take FCS 3356, FCS 3357, FCS 4301 and 12 additional hours.

Bachelor of Science in Family and Consumer Sciences Major in Fashion Merchandising (Minimum required: 128 semester hours)

In addition to General Education and Family and Consumer Sciences core requirements, the Fashion Merchandising major is required to take specialized courses in Family and Consumer Sciences including clothing in society, textiles, apparel product analysis, fashion buying principles, historic apparel, fashion merchandising, fashion promotional strategies, and economics of the apparel industry. Students participate in an internship in a related area. Minors for the Fashion Merchandising major may be a Business Administration minor of 21 semester hours, a program with no minor, or an area which provides a suitable background for the student's career objective such as Mass Communications. A minor in Business Administration is strongly recommended. A maximum of 27 semester hours of course work from the College of Business may be applied to this degree. Students electing no minor will be required to take 12 hours of free electives and 6 hours of upper division electives.

Minor in Business Administration

| Freshman Year | Hours | Sophomore Year | Hours |
|-----------------------------------|-------|------------------------------------|-------|
| Speech Communication 1310 | 3 | Economics 2314 | 3 |
| English 1310, 1320 | 6 | Family and Consumer Sciences | |
| University Seminar 1100 | 1 | 2330, 2334 | 6 |
| History 1310, 1320 | 6 | Natural Science Component | 7-8 |
| Family and Consumer Sciences | | Political Science 2310, 2320 | 6 |
| 1332, 1337, 2331 | 9 | Family and Consumer Sciences - | |
| Mathematics 1315 or 1319 | 3 | select two from 1321, 1341, | |
| Philosophy 1305 | 3 | or 3362 | 6 |
| PFW Component (two courses) | 2 | Free Elective | 3 |
| | 33 | | 31-32 |

| Junior Year | Hours | Senior Year | Hours |
|----------------------------------------|-------|-----------------------------------|-------|
| Accounting 2361 | 3 | Business (select four from BLAW | |
| Art, Dance, Music, or Theatre 2313 ... | 3 | 2361, Computer and Information | |
| Family and Consumer Sciences | | Systems 3370 or 3374, Finance | |
| 3330, 3331, 3332, 3355 and 4331 | | 3312, Management 3303 or 3353 | |
| FCS Elective | 3 | or 4375, Marketing 3343) | 12 |
| Mass Communications 3343 or 3367 .. | 3 | Family and Consumer Sciences | |
| Literature Component | 3 | 3342, 4100, 4301, 4337, 4339 | 13 |
| | 33 | Family and Consumer Sciences, | |
| | | Advanced Elective | 3 |
| | | Business Elective, free | 3 |
| | | | 31 |

**Bachelor of Science in Family and Consumer Sciences
Major in Interior Design
(Minimum required: 129 semester hours)**

In addition to General Education and Family and Consumer Sciences core requirements, the Interior Design major is required to take specialized courses in interior design including history of furnishings, environmental housing, basic interiors, contemporary furniture and architecture, residential interiors, and commercial interiors. Students participate in an internship in a related area.

A portfolio review for all Interior Design majors is conducted by the Interior Design faculty immediately upon completion of all Family and Consumer Sciences 3322 course work. The purpose of the review process is to ensure that the most qualified students, evidenced by adequate skill and knowledge levels, will advance in the program. Interior Design students must pass all required Interior Design and Technology classes with a grade of "C" or better. Any student making a grade of "D" or lower in FCS 2322, FCS 3322, and FCS 3323 may not proceed to the next level course until a grade of "C" or better is achieved.

| Freshman Year | Hours | Sophomore Year | Hours |
|----------------------------------|--------------|-----------------------------------|--------------|
| ArtF 1302, ArtC 2305 | 6 | Speech Communication 1310 | 3 |
| English 1310 | 3 | English 1320 | 3 |
| University Seminar 1100 | 1 | Family and Consumer Sciences | |
| Family and Consumer Sciences | | 1332, 3321, 3322, 3323 | 12 |
| 1321, 2321, 2322, 2329 | 12 | Natural Science Component | 7-8 |
| Math 1315 or 1319 | 3 | Technology 1320, 4310, 4313 | 9 |
| PFW Component (one course) | 1 | | 34-35 |
| Technology 1413, 3313 | 7 | | |
| | <u>33</u> | | |

| Junior Year | Hours | Senior Year | Hours |
|----------------------------------------|--------------|---------------------------------------|--------------|
| ArtF 1303, ArtH 2301, ArtH 2302 | 9 | ArtS 2311 or 2331 or 2381 or 3322 ... | 3 |
| Art, Dance, Music, or Theatre 2313 ... | 3 | Family and Consumer Sciences | |
| History 1310, 1320 | 6 | 1341 or 3362, 3355, 4100, 4301, | |
| Family and Consumer Sciences | | 4324 | 13 |
| 3324, 3370, 4322, 4323 | 12 | Philosophy 1305 | 3 |
| PFW Component (one course) | 1 | Political Science 2310, 2320 | 6 |
| | <u>31</u> | Sociology Science Component | 3 |
| | | Literature Component | 3 |
| | | | <u>31</u> |

Bachelor of Science in Family and Consumer Sciences Major in Nutrition and Foods (Minimum required: 128 semester hours)

The curriculum is approved by the American Dietetic Association and includes all academic requirements for admission to a post-graduate dietetic internship, Approved Pre-Professional Practice Program (AP4), ADA registration, and Texas licensure.

In addition to General Education and Family and Consumer Sciences core requirements, the Nutrition and Foods major takes courses in chemistry, administrative science, computer science, biology, and sociology. Specialized courses in advanced nutrition, diet therapy, and food service management are included. Students participate in an undergraduate internship. No minor is required; however, Nutrition and Foods majors may add a minor in Business Administration, Chemistry or Biology.

The department offers a post-baccalaureate Dietetic Internship which currently has developmental accreditation from the American Dietetic Association. See the Graduate Catalog for details.

| Freshman Year | Hours | Sophomore Year | Hours |
|---------------------------------------|-------|-------------------------------------------------------------|-------|
| Chemistry 1341, 1141, 1342, 1142 | 8 | Biology 2430 | 4 |
| Biology 1310 | 3 | Family and Consumer Sciences 1341, 2367, 2368, 2460..... | 13 |
| English 1310, 1320..... | 6 | Literature Component..... | 3 |
| University Seminar 1100..... | 1 | Philosophy 1305..... | 3 |
| History 1310, 1320 | 6 | PFW Component (one course)..... | 1 |
| Family and Consumer Sciences 1361 . | 3 | Political Science 2310, 2320 | 6 |
| Mathematics 1315 or 1319..... | 3 | Psychology 1300 or Sociology 1310 .. | 3 |
| PFW Component (one course)..... | 1 | | |
| Speech Communications 1310 | 3 | | 33 |
| | 34 | | |

| Junior Year | Hours | Senior Year | Hours |
|-------------------------------------------------------------|-------|-----------------------------------------------------------------|-------|
| Accounting 2361 | 3 | Agriculture 3319..... | 3 |
| Biology 2440 | 4 | English 3303..... | 3 |
| Chemistry 2130, 2330, 2450 | 8 | Family and Consumer Sciences 2331 or 3329, 3355, 3391, 4100, | |
| Family and Consumer Sciences 3360, 3361, 3363, 3367..... | 12 | 4301, 4303, 4367, 4368..... | 22 |
| Art, Dance, Music, Theater 2313..... | 3 | Management 3303..... | 3 |
| | 30 | | 31 |

Minors available in Consumer Science, Early Childhood Intervention, Family and Child Development, Family and Consumer Sciences, and Fashion Merchandising.

Courses in Family and Consumer Sciences (FCS)

Many of the subject-matter courses in Family and Consumer Sciences are open to non-majors as electives.

1321 Design I: Visual Awareness. (2-2) Principles of design and color as applied to the individual and his/her environment.

1332 (HECO 1320) Textiles. (3-0) Consumer-oriented study of the relationship of fiber, fabric, and end-uses in clothing and home furnishings.

1337 (HECO 2311) Fashion Fundamentals. (3-0) Survey of the background organization, and scope of fashion industry including an overview of the development, production and distribution of fashion goods and services. Introduction to fashion terminology, resources, product classifications, participants and careers.

1341 Consumers in the Marketplace (3-0) An introduction to consumerism. Topics covered will include: the consumer's role in the economy; consumer responses to the pressures of the economy (credit, inflation, and savings); and an analysis of the largest consumer expenditures (housing, food, and transportation).

1347 Family and Personal Resource Management. (3-0) An analysis of family and personal management processes including resource identification and factors that impact on management and decision making. Contemporary issues in the field will be considered: changing family roles, one-parent families, aging, the handicapped, low income families, the one-person family, and alternate lifestyles.

1351 Lifespan Development. (3-1) Developmental principles underlying behavior as experienced in physical, intellectual, emotional and social changes across the lifespan. A minimum number of observations will be required.

1361 Food Systems. (2-2) Nutrition, food science, and management principles in planning, procuring, preparing, preserving, evaluating and serving of food to fulfill dietary habits or requirements of individuals and diverse ethnic groups. Include federal legislation, environmental issues and culinary principles. Apply principles and theories in small groups in laboratory experience.

2321 History of Furnishings. (3-0) Survey of historical styles of furnishings, architecture, and interiors. Egyptian to the 19th Century.

2322 Interior Design I: Basic Interiors. (3-0) Introductory lecture course for interior design majors analyzing the elements and principles of design as applied to interior environments. Fundamentals of professional requirements, human factors, structural and environmental systems, properties and applications of interior materials, and components of style. Prerequisite: FCS 1321.

2329 (HECO 1325) Environmental Housing. (3-0) Concerned with individual and family aesthetic, social, economic, and psychological values and needs specifically related to the spatial environment as an economic and social process. Emphasis is on the principles of, the resources for, and the dynamics of space planning.

2330 Fashion Promotional Strategies I. (2-2) The study of promotional strategies unique to the fashion industry. Emphasis is placed on techniques used at the retail level to promote merchandise to the final consumer. Prerequisites: FCS 1337

2331 Clothing in Society. (3-0) The study of theories related to clothing, appearance, and fashion and their influences on verbal and nonverbal communications, gender perceptions, cultural identities, and fashion product consumption.

2333 (HECO 1328) Clothing Construction. (2-2) Basic clothing construction techniques. Prerequisite: FCS 1332 or consent of instructor.

(WI) **2334 Textile Product Analysis. (3-0)** The study of textile product quality control issues important to manufacturers, retailers, and consumers. Emphasis is placed on techniques evaluating cost, durability, and end use of textile products. Prerequisites: FCS 1337 and 1332 or consent of instructor.

2341 Consumer Issues and Public Policy. (3-0) Analysis of issues and problems of consumers in the marketplace. Investigation of the impact of both the private and public sectors on economic, legislative, and regulatory policies. Prerequisite: FCS 1341.

2342 Family Consumption. (3-0) A study of family and individual consumption patterns; analysis of past and current levels of consumption; comparison of consumption of goods and services. Prerequisite: FCS 1341.

2351 Child Development. (3-1) The development of the total child from conception through adolescence. Observation in Child Development Laboratory.

2353 Principles of Guidance. (2-2) Theory and practice related to child guidance. Participation in Child Development Center required. Prerequisites: FCS 2351 or approval of instructor.

2367 (BIOL 1322) Principles of Nutrition. (3-0) Principles of human nutrition with emphasis on nutrient function, requirements, and sources. Prerequisite: Three semester hours of science.

2368 Basic Nutritional Care. (3-0) Principles and techniques of assessing nutritional status, interviewing and nutrition counseling, developing individualized treatment plans and educational tools, and accessing community nutrition resources. Practical application through assignments and in-class experiences. Prerequisite: FCS 1361, 2367.

2460 Food Science. (3-2) Scientific principles underlying the selection, preparation, preservation, and storage of foods. Food safety concerns including food-borne pathogens and industrial and environmental contaminants. Apply food science principles and learn basic culinary skills in laboratory experience. Prerequisite: FCS 1361.

3191 Occupational Experiences in Clothing Production, Management and Services. (0-2) Participation in the occupational production of apparel and accessories.

(WI) **3321 Contemporary Furniture and Architecture. (3-0)** A survey of contemporary styles of furnishings, architecture, and interiors from the 19th century to the present. Prerequisite: FCS 2321.

3322 Interior Design II: Residential Interiors. (0-6) An advanced study in various dimensions, purposes, and characters in relation to the small and large residential space. Prerequisite: FCS 2321, 2322, 2329; Technology 3313; ArtC 2305.

3323 Interior Design III: Commercial Interiors. (0-6) Analyzing, furnishing, and estimating of moderate to large commercial and contract spaces. Prerequisite: FCS 3321, 3322; Technology 3313.

(WI) **3324 Professional Practices. (3-0)** A study of the business principles, ethics, and procedures for the interior designer. Prerequisite: FCS 1321, 2322, 3322.

3329 Housing, Interior Design, and Furnishings. (3-0) An application of the basic design principles in planning, designing, and furnishing interiors for contemporary living to reflect function, economy, beauty, and individuality for varying income levels.

3330 Fashion Buying Principles I. (3-0) Merchandising concepts essential for buyers emphasizing fashion goods, assortment planning, and profit analysis. Prerequisite: FCS 1337, Math 1315 or 1319 or consent of instructor.

3331 Historic Apparel. (3-0) A chronological study of Western apparel through the ages. Emphasis on social, economic, and political influences on costume development. Prerequisite: FCS 1331 or consent of instructor.

3332 Fashion Promotional Strategies II (3-0) The study of promotional strategies unique to the fashion industry. Emphasis is placed on techniques initiated by the manufacturers of fashion products such as wholesaling, cooperative advertising, direct marketing, and special events. Prerequisite: FCS 2330 or consent of instructor.

3333 Apparel Design. (2-2) Apparel design by flat pattern techniques. Prerequisite: FCS 2333 or consent of instructor.

3341 Family Finance. (3-0) The study of family financial management during different stages of the family life cycle and at various income levels. Topics considered will include the use of budgeting and record keeping to achieve family economic goals; the role of credit and the need for financial counseling; economic risks and available protection; and alternative forms of saving and investments. Prerequisite: FCS 1341 or consent of instructor.

(WI) **3342 Consumer Law. (3-0)** An in-depth review of the relationship between the consumer and federal and state law and policy. Includes study of both consumer protection legislation and laws which define the consumer's rights and responsibilities. Will consider the operation of government agencies and the courts in various consumer areas as well as avenues of redress on the part of the consumer. Prerequisite: FCS 1341.

(WI) **3351 Creative Experiences: Social Studies and the Arts (3-1)** The application of methods, materials, and planning in the development of curriculum for the preschool child through music, art, literature, dramatic play and social studies. Participation in Child Development Center required.. Prerequisites: FCS 2353 or approval of instructor.

3352 Development of Programs for Young Children. (3-0) The study of group care programs for children including development, implementation and assessment of developmentally appropriate programs. Various theoretical and philosophical Components will be included.

(WI) **3353 Parent and Family Life Education. (3-0)** The study of relationships between theory and practice in family life education programs. Opportunity to develop, implement, and evaluate agencies and group programs in family life education. Prerequisites: FCS 2353, 3357, or approval of instructor.

3354 Creative Experiences: Science and Math (3-1) The application of methods, materials and planning in the development of curriculum for the preschool child through math, science, nutrition and outdoor play. Participation in Child Development Center required. Prerequisites: FCS 2353 or approval of instructor.

3355 Marriage and Family. (3-0) Universality and uniqueness of families; rational choices based on research studies in courtship, marriage adjustment, and interpersonal relations within families.

3356 Introduction to Early Childhood Intervention. (3-0) This course provides an interdisciplinary orientation to the professional discipline of early childhood intervention and the early intervention specialist (EIS).

3357 Infant and Toddlers. (2-2) The study of infants and toddlers in home and group settings; implementation of learning strategies based on developmental principles. Directed participation in the Child Development Center. Prerequisites: FCS 2353 or approval of instructor.

3360 Quantity Food Production Management. (2-3) Principles and techniques of planning, procurement, production, evaluation, service, and research in Food Service Systems. Prerequisite: FCS 2360 or consent of instructor.

3361 Food Service Systems Management. (2-2) Principles, policies, and procedures relating to systems design, decision hierarchy, organization structure, personnel, and purchase of food and equipment. Prerequisite: FCS 2360 or consent of instructor.

3362 Nutrition and Health. (3-0) For non-science majors. Involves the study of the nutrients and their function in promoting health throughout the life span. Includes standards for consumer selection of a proper diet and analysis of nutrition-related health problems.

3363 Nutrition for Wellness and Fitness. (3-0) Study of the nutritional requirements for attainment and maintenance of health and disease prevention,

sports and fitness. Discussion of appropriate use of dietary supplements and herbs, as well as a critical appraisal of popular diets. Course will also explore causes and treatment of overweight, obesity and eating disorders. Prerequisites: FCS 2367, 2368, BIO 2430 or permission of instructor.

(WI) **3367 Nutrition in the Life Span. (3-0)** An in-depth study of the normal growth, development, and nutrition associated with pregnancy, infancy, childhood, adolescence, and adulthood. Information regarding nutritional problems of the elderly is included. Prerequisite: FCS 2367 and Biology 2430.

3370 Interior Lighting Design (3-0) The study of the relationship of natural and manufactured lighting sources to the interior environment and its inhabitants. Emphasis is on light science and technology and the effects upon health, behavior, color, and form. Application will include issues of aesthetics, energy conservation, codes, evaluation, and specifications in lighting design. Prerequisites: FCS 3322, TECH 1413, ARTC 2305, or consent of instructor.

(WI) **3390 Vocational Home Economics: Observation and Methods. (3-0)** Introduction to characteristics and philosophy of Family and Consumer Sciences. Development of curriculum through the identification of objectives, content, learning experiences and materials, and evaluation techniques. Emphasis on characteristics, problems, and special needs of various socioeconomic, ethnic, handicapped groups. Observation in school and community programs is required. Prerequisite: Curriculum and Instruction 3325.

(WI) **3391 Communication Skills and Techniques. (2-2)** Analysis of factors that influence program planning and application of program development to planning for groups or individuals with differing purposes and organizational structure. Planning, developing, and implementing the use of alternative media and methods: the use of audio-visuals; demonstration techniques; radio; and television. Special emphasis on methods suitable for use with adults.

(WI) **3392 Fundamentals of Occupational Home Economics. (3-0)** Study of the occupational programs for Home Economics: coordinated vocational academic education; vocational education for the handicapped; cooperative education; pre-employment laboratory education including curriculum development.

(WI) **3393 Occupational Experiences in Home Economics. (1-4)** Classroom study and field experiences in occupational areas of Home Economics: child care; clothing, apparel, and textiles; food production, management, and services; home furnishings; institutional and home management. Prerequisite: FCS 3392.

3394 Problems in Adolescence. (3-0) A study of adolescence as it relates to current critical issues for families and society. The course will focus on specific techniques to analyze and assist the development of adolescents. Emphasis will be on theory and research as it explains the development process.

4100 Professional Family and Consumer Sciences II. (1-0) Family and Consumer Sciences in the professional world and continuing education. Opportunities, interviews, and professional ethics. Development of credentials and portfolios. Required of all seniors majoring in Family and Consumer Sciences.

***4101 Special Problems in Family and Consumer Sciences. (1-0)** A study of selected areas of Family and Consumer Sciences.

4151 Family Health. (1-0) Promoting and maintaining health for individuals and families. Relationship to public health.

(WI) ***4301 Internship in Family and Consumer Sciences. (0-6)** Internship program in Family and Consumer Sciences-related professions, services, business, or industry. Prerequisite: Must meet school, department and program requirements. Nutrition and Foods internship does not qualify students for dietetic registration by The American Dietetic Association. (Capstone Course)

***4302 Topics in Family and Consumer Sciences. (3-0)** In-depth study of a current topic or issue of interest to Family and Consumer Sciences professionals in work with individuals and families. Individual topics are listed in the class schedule as 4302 with appropriate suffixes.

4302C Regional Markets.

4302D International Family and Consumer Science.

4302I Sports Nutrition.

4302L Comparative Studies in Child Development.

4302P Residential Interior Design Fundamentals.

4302Q Adolescent Development.

4302R Practicum in Child Development.

4302S Families and Sexuality.

4302T Alternative Nutrition.

4303 Research Procedures in Family & Consumer Sciences. (3-0) The study and implementation of research procedures for use with family and consumer sciences programs. Includes instrument selection, recruitment and testing of subjects, coding, analysis and dissemination of data. Will include field based experiences using appropriate research procedures.

(WI) **4322 Interior Design IV: Comprehensive Interior Design. (3-0)** Advanced study of materials, components, systems, codes and other factors that relate to public health, safety, and welfare in interior environments. Lecture and application of lighting and other technologies, specifying, scheduling, budgeting, and resource conservation. Prerequisites: FCS 1332, 2322, 2329, 3322; Technology 1320.

4323 Interior Design V: Research/Environmental Design. (0-6) Specialized research in and application of factors impacting the interior environment. Includes design programming, space planning, finish specifying, furnishings design and detailing, and presentation strategies through creative problem-solving. Prerequisite: FCS 4322, Tech 4313.

4324 Interior Design VI: Contemporary Interior Design Issues. (0-6) Specialized research in interior design to include barrier free environments, medical facilities, historic preservation, international interiors, energy issues, and design for special needs. Prerequisite: FCS 1321, 2322, 3322, 3323, 4322, 4323; Technology 1413, 3313, 4313.

4331 Fashion Buying Principles II (3-0) A study of the roles and responsibilities of fashion merchandise buyers. Emphasis on retail buying functions, including developing merchandise plans, selecting products, negotiating terms, and monitoring performance. Prerequisites: FCS 3330, 1337, MATH 1315 or 1319, or consent of instructor.

(WI) **4337 Fashion Merchandising. (3-0)** The study of managerial decisions in the fashion industry with an overview of promotion, distribution, and consumption of fashion apparel. Prerequisite: FCS 3330, or consent of instructor.

(WI) **4339 Economics of Apparel Industry. (3-0)** Economics of textiles and clothing production and world-wide trade market with emphasis on United States textiles and apparel industries. Prerequisite: FCS 4337 and Economics 2310 or consent of instructor.

4341 Counseling for Family Practitioners. (3-0) Family financial issues are studied with an emphasis on the role of the financial counselor. Designed to increase awareness and knowledge of the characteristics of persons in serious financial difficulties, complexity of factors affecting such situations, desirable relationships between the helper and helped, awareness of community resources. Prerequisite: FCS 1341 and 3341.

(WI) **4347 Family Policy. (3-0)** An examination of the policy-making process and the significance of national, state, and local policies as they affect the family.

Frameworks for analyzing social policy will be used to examine existing government efforts and legislation. Implications for bringing about change in policies will be discussed.

(WI) **4351 Cultural Diversity of Families. (3-0)** Study of family diversity through selected family science research methods and topics including family structure and function; family life patterns; multicultural groups; agents of enculturation and family life education. Prerequisite: FCS 3351 or consent of instructor.

(WI) **4352 Administration of Programs for Children and Families I. (3-0)** The history, philosophy, and ethics of programs for young children. Emphasis on responsibilities of the child care administrator in relation to staff, budgets, facility laws, and standards of agency management. Prerequisite: FCS 2353, 3357 and 3355 or approval of instructor.

4354 Administration of Programs for Children and Families II. (3-0) A study of the implementation of family and child development programs. Emphasis will be on program development, personnel and financial management, legal and professional standards. Prerequisite: FCS 3357 and 3355 or approval of instructor.

(WI) **4355 Family Systems. (3-0)** Study and comparison of family systems theory and processes. Investigation of research and resources to enhance the development of family members in various environments. Prerequisites: FCS 1351, 2351, 3353, 3355, 3357 or approval of instructor.

(WI) **4367 Advanced Nutrition. (3-0)** A study of the biochemical and physiological foundations of nutrition. Information pertaining to cytology, biochemical structure of nutrients, energy transformation, nutrient-drug interactions, and the anatomy, physiology, and nutrient metabolism of major organ systems is covered. Prerequisite: Chemistry 2450; FCS 2367 and 3367.

(WI) **4368 Medical Nutrition Therapy. (3-0)** Study of the physiological and biochemical abnormalities of certain disease states of gastrointestinal, endocrine, circulatory, nervous, excretory, and musculoskeletal systems with emphasis of diet modification as a therapeutic measure. Diet modifications for weight control, allergies, neoplastic disease (cancer) and physiological stress are also studied. Prerequisites: FCS 2367 and Chemistry 2450 or consent of instructor.

4390 Vocational Home Economics Education: Principles and Process. (3-0) Analysis of teacher concerns related to professional competencies. Application of classroom management, guidance techniques, learning strategies, and evaluation procedures through laboratory micro-teaching experiences. Field experience required. Prerequisite: Curriculum and Instruction 3325, FCS 3390 and all required Family and Consumer Sciences courses.

4681 Vocational Home Economics: Principles and Process. (0-6) Observation and participation in the total vocational home economics program. Requires a full day in the Teaching Center for ten weeks (five day week except for holidays in public school system). Concurrent enrollment in FCS 4390. Prerequisites: FCS 3390 and completion of all required Family and Consumer Sciences courses.

Department of Military Science

Army Reserve Officer Training Corps

Chair and Professor-Lieutenant Colonel Deeds. Instructors-Major Berkenhoff, Captain Atkisson, Master Sergeant Poppert, Sergeant First Class Gonzalez.

The Army ROTC Program at SWT is designed to develop the professional skills vital to Army officers. The purpose of the program is to qualify students for a commission in the U.S. Army, U.S. Army Reserve, or Army National Guard.

There are two routes available to the student who wishes to obtain a commission through the Army ROTC. Entering students may enroll in the four-year program and students with at least two academic years remaining in college may apply for the two-year program.

The four-year program has two distinct parts - the basic course and the advanced course. Entry into the four-year program requires no formal application; however, an interview is advisable because the student may be eligible for advanced placement. Registration is accomplished at the same time and in the same manner as for other college courses. During the freshman and sophomore years, students enroll in the basic course. Enrollment does not confer any military status or commitment upon the cadet. Successful completion of, or constructive credit for, the basic course is necessary before progressing to the advanced course.

The two-year program, known as the advanced course, is the last two years of the four-year program. This allows the student more flexibility in meeting qualification criteria. The basic requirement is that the student have two academic years remaining at SWT. Coordination should be made with the Professor of Military Science well in advance of anticipated enrollment in order to allow adequate time for application processing. A student may meet some prerequisites as a result of prior military training, ROTC training with any service, or successful completion of ROTC Basic Camp. An interview is advisable in order to determine if a student meets any of the above prerequisites.

Selection for the advanced course is based upon the meeting training prerequisites, and meeting medical standards. Students in the advanced course attend a paid, six-week advanced camp between their junior and senior years. The purpose of this six-week camp is to evaluate the cadets' performance in leadership positions while giving them practical field experience in a military environment.

Textbooks and materials for military science classes are furnished without cost. Members of the advanced course receive \$200 per month tax-free subsistence, up to \$2,000 per school year.

Some scholarship and non-scholarship advanced course cadets are eligible to participate in the Simultaneous Membership Program. This program allows a cadet to join the National Guard or Army Reserve and be paid as an E-5 for participation as an officer trainee. The Professor of Military Science should be consulted for additional information regarding this program.

Scholarships are available on a competitive basis to all cadets in Army ROTC, regardless of classification. These scholarships provide full tuition, laboratory and incidental fees, plus an allowance for books and necessary supplies. All scholarship cadets also receive the \$200 subsistence per month. Complete scholarship information may be obtained by contacting the Professor of Military Science (Army ROTC), 512-245-3232 or visit the Department of Military Science, Frio Building, or our website www.swt.edu/acad_depts/army_rotc/index.htm

Opportunities to attend Airborne, Air Assault, and Northern Warfare Schools are available to cadets on a competitive basis.

Students who complete at least three semester hours of credit in the junior and senior levels of Army ROTC work may not be required to take Political Science 2320.

All Military Science cadets are required to attend a weekly 90 minute leadership laboratory. This gives the cadet an opportunity to practice leadership skills that are useful in civilian occupations as well as the military.

Courses in Military Science (M S)

1000 Leadership Laboratory. (0-1) This course concentrates on practical leadership training. Must be taken concurrently with all other Military Science courses.

1211 Basic Military Skills. (2-0) An introduction to the purpose and scope of the Army Reserve Officers' Training Corps with emphasis on the role of today's Army, officership, leadership, and customs and courtesies of the Army. Basic military skills include rappelling, first aid, physical fitness and time management. Students must enroll in Military Science 1000 concurrently.

1212 The Role of Leaders and Rifle Marksmanship. (2-0) This course is designed to introduce the roles of non-commissioned officers and junior officers in today's Army to the basic course student. Instruction in basic rifle marksmanship is also provided using the M-16 rifle. Students must enroll in Military Science 1000 concurrently.

2211 Dynamics of Tactical Operation. (2-0) The objective of this course is to introduce basic tactical skills. Emphasis is on the operations order, principles of war, squad operations and the roles of the Army National Guard and Army Reserve. Students must enroll in Military Science 1000 concurrently.

2212 Leadership Skills in an Adverse Environment. (2-0) This course is designed to enhance leadership skills needed to operate in adverse conditions. It provides maximum exposure to map reading and skills used to survive in austere combat environments. Students must enroll in Military Science 1000 concurrently.

(WI) 2313 American Military Studies and Battle Analysis (3-0) This course is designed to study Military History as it applies to the principles of war and current military doctrine. Students will analyze historical battles and lessons learned and apply them to the modern battlefield.

3311 Principles and Fundamentals of Military Operations I. (3-0) This course includes theory and application of tactical military operations through platoon level. Heavy emphasis is placed on land navigation techniques and practical work on land navigation courses. Permission from the department chair is required for enrollment. Students must enroll in Military Science 1000 concurrently.

3312 Principles and Fundamentals of Military Operations II. (3-0) Continuation of MS 3311. Special emphasis on platoon leader tactical skills, radio communications, leadership and physical fitness. Permission from the department chair is required for enrollment. Students must enroll in Military Science 1000 concurrently.

(WI) 4311 Essentials of the Military Professions I. (3-0) A comprehensive review of the Army training system and the Soviet Army. Permission from the department chair is required for enrollment. Students must enroll in MS 1000 concurrently.

(WI) 4312 Essentials of the Military Professions II. (3-0) This course provides a review of military law, the Army personnel and logistics systems, and ethics. It also includes seminars on the transition to the officer corps as an active duty or reserve officer. Permission from the department chair is required for enrollment. Students must enroll in Military Science 1000 concurrently.

(WI) 4313 Independent Study in Military Science. (3-0) This course will be designed to meet the needs of the individual student. It will be a directed and closely monitored program targeted at the students' weaknesses/interests. The course will primarily deal with topics pertinent to the military profession; such areas as leadership, management, ethics, law and their application. Course will require week/bi-weekly progress review with instructor.

Occupational Education Program

Professor-Pierson. Assistant Professor-Pevoto, Springer. Instructors-Harkins, Sullivan, Weathersby, Wilson.

The Occupational Education program offers the Bachelor of Applied Arts and Sciences (BAAS) degree. The BAAS is a nontraditional program designed to allow adult students to earn a degree with a major in an individualized academic area. In addition, it allows adults to assist in the choice of courses which would complement their career goals. The following are unique characteristics of the BAAS:

1. Delivery of academic courses may be at nontraditional times, locations other than the parent campus, by video, and via the internet.
2. Academic course work is individualized to meet student needs, but course work does not duplicate an existing traditional academic program.
3. Worklife credit may be awarded for competencies gained through employment prior to entering the program.
4. The major for the BAAS is "Applied Arts and Sciences" and for purposes of calculation of the major grade point average, the first 18 hours taken in the Professional Development will be utilized.
5. Numerous methods for obtainment of academic credit may be employed toward the BAAS degree, including correspondence and extension courses, and credit by examination. Credit by examination is limited to not more than 30 hours and tests may not be taken in the last 30 hours of study.
6. Students choosing the BAAS program through the Occupational Education program must complete 30 hours residence credit with Southwest Texas in order to be awarded the degree.
7. Students who have earned at least 60 semester hours at SWT are eligible to graduate with honors if they have a minimum SWT GPA of 3.40.
8. Due to individualization and the unique nature of the program requirements, students should consult the Occupational Education website, www.ocado.swt.edu or attend a special orientation and draft planning session.
9. Occupational Education has specialized Career and Technology Education courses for those who desire to perform training/development in the work place or be certified in technical areas within the public school.

Bachelor of Applied Arts and Sciences Major in Applied Arts and Sciences (Minimum required: 128 semester hours)

The BAAS degree plan includes the following four modules:

Occupational Emphasis Module (48 semester hours)

This module may be satisfied by credits earned from experiential learning (work/life experience, noncollegiate sponsored instruction, credit by examination), transfer work from other accredited institutions of higher learning, or a comprehensive cooperative education program. Occupational Education 4350 (Occupational Assessment) is the required entry course for this module.

General Education Module (53 semester hours)

This module may be satisfied through a number of options including traditional course work from Southwest Texas and transfer credit from accredited institutions of higher learning plus limited numbers of hours from nontraditional methods including correspondence, extension, and testing. See the University College section of the catalog for requirements. Occupational Education 4340 (2 sections), 6 semester hours, will satisfy the requirements as a capstone course.

Electives Module (9 semester hours)

Nine semester hours of complementary electives are chosen with the advice of the student's degree advisor.

Professional Development Module (18 semester hours)

Professional development sequences are individualized to students' educational needs. All professional development sequences must have courses from at least three academic departments. This module of 18 hours constitutes the major for GPA calculation purposes.

Courses in Occupational Education (OCED)

Students desiring to enter the Occupational Education program must take OCED 4350 as their initial entry course. All students must have a 2.25 GPA to register for the course.

(WI) ***4340 Cooperative Occupational Education. (3-0)** Supervised on-the-job experience in an occupational area. It satisfies the occupational competency requirement for certification in vocational industrial education.

(WI) **4350 Occupational Assessment. (3-0)** Theory and techniques related to the identification, documentation, and assessment of various forms of prior extra-institutional learning. Prerequisites: English 1310, 1320, Speech Communication 1310 or 3327, and English 2310 or Literature Component alternative, or approval of Director.

*Course may be repeated.

Career and Technology Education

The Occupational Education (OCED) Program offers teacher certification programs in the areas of trade and industrial education, health occupations education, marketing education, office education, career investigation*, vocational counseling and guidance*, and job placement coordinators*. Students who choose one of the Career and Technology Education (CATE) certification sequences are prepared for employment in the public schools of Texas provided they satisfactorily complete all required courses and other Texas Education Agency criteria including two to five years of approved work experience and teaching on an emergency permit.

Students who pursue the Bachelor of Applied Arts and Sciences (BAAS) degree may use CATE teacher certification courses to satisfy the professional development and occupational emphasis sequences for that degree. The same restrictions and/or regulations concerning certification by the Texas Education Agency apply.

The Special Topics course CATE 3313 includes: A. Teaching CATE Students with Special Needs; B. Using Microcomputers in CATE; C. Teaching Entrepreneurship in CATE; D. Leadership Activities for CATE Teachers; and is designed to satisfy career advancement requirements as well as apply toward the BAAS.

Trade and Industrial Education

Trade and industrial education for secondary students includes any subject or program designed to develop manipulative skills, technical knowledge, and related information necessary for employment in any craft or skilled-trade occupation which directly functions in designing, producing, processing, fabricating, assembling, testing, maintaining, servicing, or repairing any product or commodity. Training is also available in service and certain semiprofessional occupations.

Certification: Certification courses include the following: CATE 3301, CATE 3302, CATE 3303, CATE 3304, CATE 3305, CATE 3306, CATE 3307, and CATE 3308.

Health Science Technology Education

Health Science Technology programs are designed with the intent that each completing student will have achieved two major goals: (1) attainment of sufficient information, observation, and practical knowledge in the range of health occupations to make an informed choice about further commitment toward a health-related career; and (2) attainment of knowledge and skills necessary for entry-level employment in at least one of the many occupations related to the care of patients, prevention of illness, and maintenance of health. Entry-level employment comprises functions that are supportive to those of duly licensed or certified health practitioners.

Certification: Certification courses include the following: CATE 3301, CATE 3302, CATE 3303, CATE 3304, CATE 3307, and CATE 3308.

Business/Office Education

Business/Office Education certification qualifies individuals to teach Business/Office Education programs in the junior or senior high schools and in adult education centers. Business/Office Education programs are designed to prepare students for entry-level positions in business related occupations. Business/Office Education programs include lab and cooperative education.

Certification: Certification courses include the following: CATE 3380, CATE 3381, and CATE 3313B. Plus, for students seeking the BAAS degree, six hours of advanced electives as specified by the CATE Office Teacher Educator are required.

Marketing Education

Marketing Education is designed to prepare, maintain, and advance people in marketing occupations. The program of instruction is provided through high schools and adult education centers and involves a combination of the following: (1) classroom instruction in marketing or in any specialized marketing area; (2) practical and/or simulated job-oriented experiences; and (3) supervised on-the-job training.

Certification: Certification courses include the following: Marketing 3343, 3355; CATE 3301, CATE 3303, CATE 4302, and CATE 4304. The Texas Education Agency requires: two years of approvable and successful wage-earning experience in the marketing occupations.

Courses in Career and Technology Education (CATE)

***3301 Methods of Teaching Career and Technology Education Subjects. (3-0)** Introduction to fundamentals of teaching as applied to CATE subjects.

***3302 Development, Organization and Use of Instructional Material. (3-0)** Study made of published material available in student's occupational field. Subjects found suitable for CATE classes will be indexed and organized for class use. Instruction sheets necessary for efficient teaching will be written.

***3303 Aims and Objectives of Career and Technology Education. (3-0)** Basic principles involved in development and operation of CAT programs under state and federal laws.

***3304 Human Relations for Career and Technology Education Teachers (3-0)** Combination of psychological and sociological factors which influence relationships of CATE teachers in their pursuit of professional duties.

***3305 Shop and Classroom Organization and Management. (3-0)** Organization of procedures to facilitate teaching: setting up roll-checking devices, issuing procedures for tools and materials, keeping material inventory, using assignment and progress charts, using student leadership in non-teaching class and laboratory routine, and keeping records.

***3306 Analysis and Course Making. (3-0)** Analysis made of occupations to obtain content for instructional information, jobs and operations studied to determine order and content of operation, job evaluation, and job safety. Each student will make a course of study for some particular occupational subject.

****3307 Selection, Placement, and Follow-up in Career and Technology Education. (3-0)** Selecting occupations suitable for young people to learn, placing students in suitable employment on part-time basis, coordinating their school duties with their work activities.

****3308 Problems in Cooperative Training. (3-0)** Organization and presentation of content material necessary in part-time cooperative programs, and direction of study of students engaged in such programs.

*****3313 Special Topics in Career and Technology Education.(3-0)** Selected topics in CATE taught through study and research. Course can be offered as individual instruction or as an organized class. No prerequisites are required. May be repeated 3 times with different emphases for additional credit.

****3380 Management of Business Office Education Programs. (3-0)** Development procedures and policies for managing an office education classroom including cooperative training, student organization, public relations, and program evaluation.

****3381 Instructional Strategies in Business Office Education Programs. (3-0)** For laboratory and teacher-coordinators of CATE programs. Development of

strategies based on an assessment of individual student's needs and office career objectives.

****3382 Organizing and Implementing Cooperative Career and Technology Education Programs. (3-0)** Identification of the CATE student, placement of students in CATE occupations, evaluating prospective business offices to determine the effectiveness of machines and procedures in training CATE students, and analyzing supply and demand data for CATE occupations which insure job entry employment.

4302 Coordination Techniques. (3-0) The cooperative program in Marketing and Distributive Education; program establishment; guidance; selection; placement of students; work adjustment; student objectives; evaluation; labor laws; public relations.

4304 Organization and Management of Marketing Education Programs. (3-0) Organization and administrative structure in the United States; objectives; programs; practices; teacher selection and supervision; evaluative criteria for business; and distributive education requirements.

4310 Independent Study in Career and Technology Education (3-0) Senior level study of various subjects important to the CATE educator. Work done on an independent study basis with permission of major advisor.

*Required for pre-employment laboratory teachers.

**Required for all part-time cooperative coordinators.

***For career advancement and application toward Bachelor of Applied Arts and Sciences degree.