

# College of Health Professions

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## DEAN

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## ASSOCIATE DEAN

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Health Administration—Michael Nowicki, Ed.D.  
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Physical Therapy—Barbara Sanders, Ph.D.  
Radiation Therapy—Ronnie Lozano, M.S.R.S.  
Respiratory Care—Gregg Marshall, Ph.D.

## ACADEMIC ADVISING CENTER

Health Professions Building 207  
T: 512.245.3506 F: 512.245.1615  
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The College of Health Professions prepares students for careers in the healthcare field. Through its professional, technical, clinical and academic programs, the college serves as an advocate for change and technical improvement in the field. The college also serves as a catalyst to expand and improve public perceptions of healthcare.

Undergraduate programs are available in clinical laboratory science, communication disorders, healthcare administration, health information management, nursing, radiation therapy, and respiratory care. Graduate programs are offered in communication disorders, healthcare administration, health services research, and physical therapy. The college has a number of cooperating teaching sites and more than 800 affiliations with hospitals and other healthcare facilities.

A number of programs offered in the College of Health Professions have specific admission requirements in addition to Texas State admission requirements. Most programs also have requirements for student liability insurance and immunizations. Background checks and drug testing may be required.



## Academic Advising Center

The mission of the College of Health Professions Academic Advising Center is to provide academic advising which supports undergraduate students seeking admission to a health professions program offered in the College of Health Professions. The Center also prepares degree audits for all undergraduate students in the College of Health Professions, and in coordination with the Dean's Office, verifies graduation.

## Clinical Laboratory Science Program

Health Professions Building 350-B  
T: 512.245.3500 F: 512.245.7860  
[www.txstate.edu/cls](http://www.txstate.edu/cls)

## DEGREE PROGRAM OFFERED

Bachelor of Science in Clinical Laboratory Science (BSCLS),  
major in Clinical Laboratory Science

The Bachelor of Science in Clinical Laboratory Science with a major in Clinical Laboratory Science prepares students to function as clinical laboratory scientists or medical technologists in a wide variety of settings from physician office laboratories to modern tertiary care hospital laboratories. The clinical laboratory scientist can become an indispensable top-level laboratory worker, a supervisor, a specialist, a researcher, or an educator.

The requirements during the first two years of study include courses in biology, chemistry, and mathematics, along with courses in the humanities and social and behavioral sciences. The junior and senior years combine clinical experiences in the affiliated clinical laboratories with advanced academic study in the CLS disciplines.

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences. Graduates of the program are eligible to take the national certification examination for the Medical Laboratory Scientist (MLS) given by the Board of Certification of the American Society for Clinical Pathology (ASCP).

## Admission Process

Students are selected in the spring semester of their sophomore year for the junior class. Because of the limited number of students that can be accepted for the junior class, students are encouraged to maintain an overall GPA above 2.50. Acceptance into Texas State and declaration as a clinical laboratory science major does not imply that the student will be accepted into the junior class. The criteria for student selection for the junior class includes scholastic ability, particularly in the sciences, and a personal interview, and not on the basis of gender, race, color, religion, veteran status or condition of disability, or national origin. Applications for the junior class must be submitted by March 1. Applicants will be notified of their status by April 30.

### Program Progression

Successful program progression requires students to complete each semester in a lock-step sequence with a grade of “C” or higher in all major courses. According to CLS program policy, students with a grade of less than a “C” in a CLS course will be stepped out of the program and individuals must reapply to the program the following semester. To be considered for program readmission, all original program admission criteria and an approved schedule for retaking courses must be met.

### Graduation

Requirements for BSCLS completion and graduation include a Texas State GPA of 2.0 with a CLS major GPA of 2.25.

### Liability Insurance

1. Students who participate in the internship portions of the Clinical Laboratory Science program are required to purchase liability insurance, or demonstrate proof that they are insured.
2. Students may obtain information on liability insurance from the program office.

### Immunization Requirements

It is a policy of the College of Health Professions that each student must provide a Health Report completed by a physician, and must take certain immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and forms to be supplied may be obtained through the program office.

### Background Check and Drug Screening

As a condition for placement in professional practice sites, students will be required to have a background check and drug screening and meet other requirements set by individual sites. Information on the drug screening process will be provided by the CLS Program.

Bachelor of Science in Clinical Laboratory Science (BSCLS) Major in Clinical Laboratory Science Minimum required: 137 semester hours							
General Requirements:							
1. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.							
2. See the Academic Services section of the catalog for course options that satisfy literature, natural science, and social science components.							
Freshman Year		Sophomore Year		Junior Year		Senior Year	
Course	Hr	Course	Hr	Course	Hr	Course	Hr
BIO 1130, 1131, 1330, 1331	8	BIO 2430, 2450, 2400 or 2440	12	ART, DAN, MU, or TH 2313	3	CLS 4322, 4326	6
CHEM 1341, 1141, 1342, 1142	8	CHEM 2130, 2330, 2150, 2350	8	HP 3302	3	CLS 4227, 4318, 4440, 4460	13
ENG 1310, 1320	6	COMM 1310	3	CLS 3305, 3410, 3323, 3412, 3424	18	CLS 4340, 4341, 4370, 4463	13
MATH 1315	3	ENG Literature	3	Social Science Component	3	CLS 4225, 4361, 4464	9
US 1100	1	PHIL 1305 or 1320	3				
HIST 1310	3	HIST 1320	3				
POSI 2310	3	POSI 2320	3				
PFW two courses	2						
<b>Total</b>	<b>34</b>	<b>Total</b>	<b>35</b>	<b>Total</b>	<b>27</b>	<b>Total</b>	<b>41</b>

## Courses in Clinical Laboratory Science (CLS)

- 3305 Introduction to Clinical Laboratory Techniques. (2-3) Clinical Laboratory Science students will be introduced to techniques, procedures, and instrumentation commonly used in clinical laboratories.
- 3323 Clinical Microscopy and Analysis of Body Fluids. (2-3) Study of body fluids present in the various anatomical compartments of the body as they differ in health and disease. Physical and chemical tests, and microscopic examination of select body fluids are performed.
- 3410 Clinical Chemistry I. (3-4) Designed to acquaint the clinical laboratory science student with some of the concepts, techniques, procedures, and instrumentation used in clinical chemistry.
- 3412 Hematology/Coagulation I. (3-4) Qualitative and quantitative evaluation of formed elements of the blood and studies in coagulation abnormalities.
- 3424 Clinical Immunology. (3-3) Principles of immune response and underlying immunologic procedures of diagnostic value are discussed. Lectures and laboratory emphasize detection, identification, nature of antigens and antibodies, and the antigen-antibody reactions encountered.
- 4225 Laboratory Management and Supervision. (2-0) Lectures and discussions of general principles of management and supervision of the clinical laboratory and its personnel. (WI)
- 4227 Introduction to Clinical Practice. (2-0) Discussion of professional and technical requirements for clinical laboratory science students and their role and responsibilities as a unit of the health care team. (WI)
- 4318 Hematology II. (2-3) In-depth study of theoretical and practical aspects of clinical hematology and hemostasis with emphasis on principles, methodology, problems encountered, and clinical applications.
- 4321 Directed Study in Clinical Laboratory Science. (2-6) An in-depth study of a narrow range of topics or a related problem in the clinical laboratory sciences. Topics to be announced; may be repeated for credit when topics vary.
- 4322 Computer Applications in Clinical Laboratory Operations, Management and Research. (1-4) Study of clinical laboratory computer systems and programs utilized in quality assurance, data management and statistical analysis. (WI)
- 4326 Medical Parasitology. (2-3) Lecture and laboratory instruction in medically important parasites producing disease in humans with emphasis on epidemiology, life cycles, identifying characteristics, and pathology of these parasites.
- 4340 Clinical Microbiology II. (2-3) Study of medically important fungi, viruses, chlamydiae, rickettsiae, and advanced topics in clinical microbiology. Automated identification of microorganisms, database management, and epidemiologic techniques will be discussed.
- 4341 Molecular Diagnostics. (2-3) This course consists of an introduction to the principles, methodologies and applications of molecular diagnostic procedures used in clinical laboratories. Emphasis is placed on the procedures used in the identification of infectious agents that cause human disease, in the diagnosis of inherited diseases, and the diagnosis of cancer.
- 4361 Research Methods in Clinical Laboratory Science. (2-3) Directed independent research covering the principles of research and development of clinical laboratory methodology. (WI)

- 4370 Clinical Chemistry II. (2-3) A study of the theoretical and practical aspects of clinical chemistry. Manual and automated laboratory procedures for quantitative analysis of various body fluids.
- 4440 Clinical Microbiology I. (3-6) Study of pathogenic and non-pathogenic bacteria, fungi, and viruses with special emphasis on methods of isolation from body fluids, cultural and differential biochemical characteristics of body pathogens.
- 4460 Immunohematology. (3-4) Study of theoretical and practical consideration of major blood groups with emphasis on grouping and typing, antibody detection and identification, compatibility testing and component therapy in blood transfusion service.
- 4463 CLS Clinical Practice I. (0-16) Structured clinical experience assigned on an individual basis for observation, study, and practical application of techniques and methodology in the clinical laboratory.
- 4464 CLS Clinical Practice II. (0-16) Continuation of Clinical Laboratory Science Practice I; structured clinical experience assigned on an individual basis for observation, study and practical application of techniques and methodology in the clinical laboratory.

## Department of Communication Disorders

Health Professions Building 150B  
T: 512.245.2330 F: 512.245.2029  
[www.health.txstate.edu/CDIS](http://www.health.txstate.edu/CDIS)

### DEGREE PROGRAM OFFERED

Bachelor of Science in Communication Disorders (BSCD), major in Communication Disorders

The Department of Communication Disorders provides undergraduate students with the academic background to successfully enter a graduate program in speech-language pathology or audiology. The undergraduate curriculum provides knowledge in normal and disordered speech, language, swallowing and hearing processes. Coursework in the major is supported by additional courses in psychology, counseling, biology, physics, and statistics.

The Department prepares students at the graduate level to diagnose and manage speech-language problems in children and adults. A master's degree is required for state licensure and national certification. The graduate program is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology.

### Admission Process

Students are initially considered Pre-professional Communication Disorders majors. Once the student is accepted into the Junior/Senior sequence, the major becomes Communication Disorders.

Admission to the CDIS Junior/Senior-level courses is competitive and selective. Enrollment is limited by student/faculty ratios

in both academic and clinical components of the program. To be considered for admission to the Junior/Senior-level courses, the following is required:

1. **Students must be in overall good standing to apply.**
2. An overall GPA of 3.0
3. Completion of a minimum of 50 hours of coursework from the freshman and sophomore courses listed on the CDIS Degree Plan. The 50 hours must be completed by the end of the Summer I session in the same calendar year in which the student wishes to begin the Junior/Senior sequence.
4. The following courses must be taken in the 50 hours:
  - a. PHYS 1310: Elementary Physics
  - b. CDIS 1331: Introduction to Communication Disorders
  - c. BIO 2430: Human Anatomy and Physiology
  - d. HP 3302: Biostatistics
  - e. PSY 3300: Lifespan Development
5. These classes must be completed by the end of the Summer I session in the same calendar year in which the student wishes to begin the Junior/Senior sequence.
6. A minimum grade of C in support and major classes listed as part of the freshman/sophomore years on the Degree Plan (HIM 2360: Medical Terminology; BIO 2430: Human Anatomy and Physiology; HP 3302: Biostatistics; PSY 3300: Lifespan Development; CDIS 1331: Introduction to Communication Disorders).

Students are ranked by their GPA in the five required classes (CDIS 1331, HP 3302, PHYS 1310, PSY 3300 and BIO 2430) and admittance in the Junior/Senior year is based on this ranking. Preference for admission is given to students who have not repeated any of the five courses.

The application for admission is submitted to either the department or to the CHP Advising Center by May 15th. Admission decisions are made after the end of Summer 1. All students will be notified by letter of the CDIS Undergraduate Admission Committee's decisions. Student selection is made on academic performance and not on the basis of race, color, religion, gender, age, or national origin.

### **CDIS Progression and Repeat Course Policy**

1. The Junior/Senior-level courses (Bachelors of Science Degree in Communication Disorders) academic sequence begins during the fall semester only.
2. Courses must be taken in sequence identified in the catalog.
3. After admission into the Junior/Senior sequence, failure to enroll in all of the recommended CDIS courses for that semester as identified by an advisor in conjunction with the Degree Plan will delay graduation at least a year.
4. CDIS students must receive a grade of "C" or higher in each CDIS class. If a grade below "C" in a junior- or senior-level CDIS courses is earned, the student will not be allowed to continue as a Communication Disorders major and must change majors to something other than CDIS. This change will be done in conjunction with the student's CDIS academic advisor and the College of Health Professions' Advising Center.
5. Make no less than a "C" in support courses: BIO 2430, HIM 2360, HP 3302, ENG 3303, COUN 3320, PSY 3300

and PSY 4342 or 3350.

6. Have a GPA of 2.75 in the major in order to graduate.
7. If a student has not earned the minimum major requirement of 2.75 for graduation and earned "C" or higher in all CDIS courses, the student will be allowed to re-take a CDIS courses only until the student achieves the GPA of 2.75.

### **Liability Insurance**

1. Students who participate in the clinical or internship portions of the Department of Communication Disorders are required to purchase liability insurance or demonstrate proof that they are insured.
2. Students may obtain information on liability insurance from the departmental office.

**Bachelor of Science in Communication Disorders (BSCD)**  
**Major in Communication Disorders**  
**Minimum required: 120 semester hours**

**General Requirement:**

Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.

Freshman Year		Sophomore Year		Junior Year		Senior Year	
Course	Hr	Course	Hr	Course	Hr	Course	Hr
COMM 1310	3	BIO 2430	4	CDIS 3325, 3312, 3459	10	CDIS 4317, 4330, 4340, 4344	12
CDIS 1331	3	ART, DAN, MU, or TH 2313	3	CDIS 3462, 3469, 3475	12	CDIS 4350, 4370, 4420, 4466	14
ENG 1310, 1320	6	ENG Lit. (2310, 2320, 2330, 2340, 2359, or 2360)	3	COUN 3320	3	PSY 4342 or PSY 3350	3
US 1100	1	HIM 2360	3	ENG 3303	3		
HIST 1310	3	PSY 3300	3				
MATH 1315	3	PHYS 1110, 1310	4				
PSY 1300	3	HIST 1320	3				
PFW two courses	2	HP 3302	3				
BIO 1421	4	PHIL 1305 or 1320	3				
POSI 2310	3	POSI 2320	3				
<b>Total</b>	<b>31</b>	<b>Total</b>	<b>32</b>	<b>Total</b>	<b>28</b>	<b>Total</b>	<b>29</b>

**Courses in Communication Disorders (CDIS)**

1331 Introduction to Communication Disorders. (3-0) Study of speech, hearing, and language development and its disorders; descriptions of communicative disorders and their etiologies for the speech-language pathologist, health professional, and classroom teacher. (MC)

3312 Neuroanatomy for Communication Disorders. This is a lecture course that examines the organization of the brain, spinal cord, and peripheral nervous system. Significance of the areas of the nervous system that are primary or secondary for speech, language and hearing are the main focus of this course.

3325 Anatomy and Physiology of the Speech Production System. (3-0) Description of structure and function of the speech production system with emphasis on physical problems in speech, language, and hearing.

3459 Phonemics and Phonetics. (3-1) Analysis of normal and abnormal phonological processes in children and adults. Proficiency in transcription using the alphabet of the International Phonetic Association emphasized.

3462 Remediation of Articulatory and Phonological Disorders. (3-2) This course prepares students to manage articulation and phonological disorders. Current therapeutic models are reviewed. Observation of therapy and instruction in preparation of written clinical reports are required. Prerequisites: CDIS 3325, and 3459. (WI) (MP)

3469 Introduction to Hearing Science. (3-2) Study of acoustics, auditory physiology and perception of sound. Includes discussion of auditory sensitivity, signal detection, psychoacoustic methods, perception of pitch and loudness, binaural hearing and speech perception. Associated laboratory promotes reinforcement of concepts addressed in lecture through review, problem solving and weekly assignments.

3475 Speech Science. (3-2) Normal processes of speech production will be addressed from anatomic, physiologic, kinematic, aerodynamic, acoustic, and perceptual perspectives. Measurement and analysis techniques, instrumentation, and experimental paradigms used to study speech production and perception will be emphasized. Prerequisites: CDIS 3325 and 3459.

4301 Advanced Independent Study. (3-0) In-depth study of selected topics in Communication Disorders for the exceptionally motivated student. Work done on an independent basis with faculty member and only with prior departmental permission.

4317 Service Delivery in Communication Disorders. (3-0) Provides a foundation of clinical management to prepare CDIS students to work in a variety of settings. Emphasis will be placed on techniques of goal and objective sequencing, report writing, evaluation of services, ethics, and interdisciplinary collaboration. Prerequisites: CDIS 3459, 3462 or 4466 or 4350 and 4330. (WI)

4330 Speech and Language Development. (3-0) Course to acquaint students with acquisition of speech and language in children. Basic information from linguistics, psycho-linguistics, psychology, and communication are examined for children in various stages of development.

4340 Augmentative Communication Systems. (3-0) Designed to review methods of non-oral communication as applied to hospital, rehabilitation, and school settings. Use of electronic communication systems emphasized. Prerequisites or co-requisites: CDIS 4330.

4344 Clinical Practicum in Communication Disorders. (1-4) Supervised clinical practicum in speech-language pathology. Must be taken each semester student participates in any supervised clinical practicum in speech-language pathology. Prerequisites: CDIS 1331, 3459, 3462 or 4466, 4330.

(Concurrent registration in 4330 acceptable).

- 4350 Survey of Neurogenic Communication Disorders. (3-0)  
This course provides an introduction to acquired speech, language, cognitive and swallowing disorders resulting from brain injury. Basic neuroanatomy and physiology are reviewed, followed by discussion of the etiology, diagnosis, treatment, and prognosis of these disorders. Emphasis is placed on aphasia, dysarthria, apraxia of speech, right hemisphere syndrome, traumatic brain injury, dementia, and dysphagia. Prerequisite: CDIS 3312.
- 4370 Aural Rehabilitation. (3-0) Principles and procedures in the habilitation and rehabilitation of hearing impaired children and adults. Prerequisites: CDIS 4420. (MC) (WI)
- 4420 Introduction to Audiology. (3-2) Relates anatomy and physiology of the auditory system and the science of acoustics to the study of normal and pathological auditory function. Laboratory experience in administration and interpretation of audiological tests. Discussion of professional opportunities in the field of audiology and provision of audiological service to special populations. Prerequisite: CDIS 3469. (MC)
- 4466 Clinical Management of Language Disorders. (4-2) Study of principles and procedures for the identification, description, assessment and remediation of language disorders in infants, children, and adolescents. Students will observe demonstrations of assessment procedures and types of language disorders within the context of clinical procedures. Describing observed behaviors and analyzing language samples will be emphasized. Prerequisite: CDIS 4330.

## School of Health Administration

Health Professions Building 250  
T: 512.245.3494 F: 512.245.8712  
[www.health.txstate.edu/HA](http://www.health.txstate.edu/HA)

### DEGREE PROGRAM OFFERED

Bachelor of Healthcare Administration (BHA), major in Healthcare Administration

### MINOR OFFERED

Healthcare Administration

The Healthcare Administration major integrates healthcare management theory and practice, and prepares graduates to assume entry to mid-level management positions in a variety of healthcare settings. These settings include health maintenance organizations (HMO's), physician group practice, hospitals, insurance companies, clinics, and medical offices. Healthcare administrators manage employees, prepare and maintain budgets, procure resources and perform other administrative functions so that the clinical professionals can provide their services. The major is certified by the Association of University Programs in Health Administration.

### Admission

Any student in Texas State may declare Pre-Healthcare Administration as the major. To declare Pre-Healthcare Administration as a major, contact the School Administrative Assistant and schedule an appointment with the BHA Director.

Admission to the Healthcare Administration program is competitive with a limited number of applicants accepted to each class. In addition to the minimum criteria for program consideration, applicants to the BHA program are required to have an interview with the BHA Program Director. BHA applicants meeting the minimum criteria listed below will be considered for program admission:

- Successful completion of all general education core and support courses with a "C" or better in the following courses: MATH 1315 or an equivalent, ECO 2301 or 2314, HP 3325 or an equivalent, and HA 3308.
- Texas State GPA of 2.75 or higher.
- Completion of the GSP (grammar, spelling, and punctuation) test with a passing score (70% or higher). Applicants are allowed to take the GSP a maximum of three times.

The application packet to the BHA program should be submitted by the posted deadline and include:

- BHA Application
- Interview Sheet signed by the BHA Program Director
- Copy of GSP test results (supplied to you by HA)

### Progression and Repeat Course Policy

BHA majors are required to take courses in a prescribed sequence and are required to successfully complete with a grade of "C" or better.

- All 3000-level courses before enrolling in any 4000-level courses.
- All 4000-level courses before enrolling in field placement. In addition, all BHA majors are required to pass an EXIT exam administered in HA 4141 before enrolling in field placement.

BHA majors are required to make a "C" or better in all HA courses and are allowed to repeat each HA course once, and only once, to improve their grade. In the event that BHA majors do not make a "C" or better when repeating a course, they will be suspended from the major. BHA majors suspended from the BHA program have a right of appeal and should contact the BHA Director.

### Graduation

To graduate with a BHA degree, a student must:

- a. Complete all required courses.
- b. Have a grade of "C" or better in each HA course.
- c. Have a 2.00 Texas State GPA or better and 2.25 HA GPA or better.
- d. Have met University residence requirements.
- e. Pass an EXIT exam administered in HA 4141.

### Liability Insurance

- Students who participate in the field placement portion of the Healthcare Administration program are required to purchase liability insurance or demonstrate proof they are insured.

- Students may obtain information on liability insurance from the school office.

take certain immunizations before the student can be placed in a clinical or **residency** assignment. Information on these requirements and forms to be supplied may be obtained through the school office.

### Immunization Requirements

It is a policy of the College of Health Professions that each student must provide a Health Report completed by a physician, and must

Bachelor of Healthcare Administration (BHA) Major in Healthcare Administration Minimum required: 120 semester hours							
General Requirements:							
1. A 2.75 Texas State GPA is required for program admission.							
2. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.							
3. See Academic Services section of the catalog for course options that satisfy literature, natural science, and social science components.							
Freshman Year		Sophomore Year		Junior Year		Senior Year	
Course	Hr	Course	Hr	Course	Hr	Course	Hr
COMM 1310	3	ART, DAN, MU, or TH 2313	3	HA 3309, 3315, 3324, 3329 3375	15	HA 3345, 4305	6
ENG 1310, 1320	6	ECO 2301 or 2314	3	HA 3340, 3341, 3344, 3376, 4307	15	HA 4315, 4320, 4325	9
US 1100	1	ENG Literature	3			HA 4141	1
HIST 1310	3	HA 3308	3			HA 4848	8
MATH 1315	3	HIST 1320	3				
PHIL 1305 or 1320	3	HP 3325 or equivalent	3				
PFW two courses	2	CIS 1323 or CS 1308	3				
POSI 2310	3	POSI 2320	3				
Social Science Component	3	Electives/Minor	8				
Natural Science Component	7-8						
<b>Total</b>	<b>34-35</b>	<b>Total</b>	<b>32</b>	<b>Total</b>	<b>30</b>	<b>Total</b>	<b>24</b>

### Minor in Healthcare Administration

The Healthcare Administration minor is designed to complement the student's major with the objective of providing an introductory curriculum, which can assist the student in gaining employment in healthcare and healthcare related career fields. This objective can be achieved by: building on general education core foundations; offering scheduling flexibility for non-traditional students; introducing students to health services management functions through the mastery of certain skills including communication, decision-making, and coordination, unique to healthcare administration; and preparing students for graduate study. The minor requires 18 hours including a 9-hour core of required courses, HA 3308, 3324, and 4307, and 9 hours of electives chosen from HA 3309, 3315, 3329, 3340, 3341, 3344, 3375, and 3376. HA 3308 must be taken prior or concurrent with other HA courses.

### Courses in Healthcare Administration (HA)

- 3308 Healthcare Organization. (3-0) Overview of the healthcare system and the role hospitals have played and continue to play in the future. Analysis of organizational structure of a hospital and other healthcare agencies, administrative and management elements necessary for policy determination, decision making, and control to achieve institutional goals and objectives.
- 3309 Ethics in the Health Professions. (3-0) This course introduces the student to a sound foundation in well-established ethical theories and a familiarity with terms, concepts and issues in ethics as applied to the health professions. Also provides practical methods for proceeding from considered reflection to informed action in solving ethical problems.

- 3311 Independent Study in Healthcare Administration. (3-0) An in-depth study of a single topic or problem confronting the healthcare industry. This course affords the student an opportunity to focus on a topic/problem or group of related problems impacting healthcare managers. This course may be repeated for credit with a different emphasis.
- 3315 Healthcare Administration History, Culture, and Language. (3-0) An introduction to the historical and cultural development of modern healthcare administration in contemporary American society. Special attention is given to the mores of health services delivery including critiques and use of professional behavior and language. (MC)
- 3324 Supervisory Management for Healthcare Managers. (3-0) Introduction to the following functions of supervisory management: planning, organizing, staffing, influencing, and controlling; as well as the connective processes of decision-making, coordinating, and communicating in healthcare organizations. (WI)
- 3329 Human Resources in Healthcare Management. (3-0) Human resource management as applicable to the healthcare field. Human resource planning, staffing, job requirements, job descriptions, sources of labor supply, training and education programs, salary administration, employee communications, legal considerations, union-management relations.
- 3340 Management of Health Information Systems. (3-0) Provides an introduction to information systems for healthcare facilities and agencies. Covers determining what information is needed by whom; designing information flows, procurement of computer/telecommunication resources, assuring

- information security, and continuing management of information systems supporting healthcare delivery.
- 3341 **Training and Professional Development in Healthcare.** (3-0) This course examines the training and professional development processes as applied to the healthcare industry. Emphasis is placed on staff developments, need analysis, task analysis, development of training and continuing education programs for healthcare personnel. (WI)
- 3344 **Patient Care Management & Quality Improvement in Health Care Integrated Delivery Systems.** (3-0) This course is an introduction of integrated delivery systems and their operations. It includes an examination of patient care management and the patient experience. A framework for understanding healthcare quality efforts is also an integral part of the course.
- 3345 **Employment Law in Healthcare Management.** (3-0) Examines the legal aspects of healthcare human resource management. Each of the major federal and state enactments impacting human resource management will be studied in depth. Prerequisite: HA 3329.
- 3375 **Principles of Accounting for Healthcare Managers.** (3-0) Provides an introduction to accounting useful in healthcare facilities and agencies, and demonstrates the application of accounting principles and techniques in the healthcare field. Prerequisites: ECO 2301 or 2314 and HP 3325 or equivalent.
- 3376 **Financial Management for Healthcare Managers.** (3-0) A concentration in the fundamentals of healthcare financial management including the financial organization of non-profit facilities, sources of operating revenue, management of working capital, and the allocation, control and analysis of resources. Prerequisites: ECO 2301, HA 3375 or approval of instructor.
- 4121 **Problems in Healthcare Administration.** (1-0) In-depth study of a singular problem considered to be of immediate concern to the health care industry. Special emphasis is placed on problems unique to managers in the field of health administration. May be repeated with permission of department chair.
- 4141 **Healthcare Comprehensive Exam and Review.** (1-0) A course in which each of the respective faculty will review their portion of the comprehensive examination that all HA majors are required to successfully pass during their final semester of study. The comprehensive exam will be administered at the conclusion of the course.
- 4221 **Problems in Healthcare Administration.** (2-0) In-depth study of a narrow range of topics considered to be of immediate concern to the health care industry. Special emphasis on problems unique to managers in the field of health administration. May be repeated with permission of department chair.
- 4305 **Healthcare Services Marketing.** (3-0) The course applies the principles of services marketing to healthcare organizations. The course will present tools to identify and close the gaps that exist between customer expectation of services and the services provided and to ensure quality of health care.
- 4307 **Essentials of Healthcare Law.** (3-0) This course includes a review of the laws pertaining to healthcare institutions, physicians, and other healthcare workers who contribute to patient care. Tort and contract law are emphasized. The course addresses policy issues and ethics through topics like patient rights, reproduction, and end of life decisions.
- 4311 **Cost Accounting for Healthcare Organizations.** (3-0) A study of the cost accounting methods and techniques appropriate to the healthcare industry. The focus is on the control and measurement of costs, budgeting practices, and the generation of financial information to aid in supervisory and managerial decision making. Prerequisite: HA 3375.
- 4315 **Health Services Problem Solving and Decision Making.** (3-0) An introduction to methodologies used to seek solutions to health administration problems which affect technical and professional personnel. Designed to place emphasis on techniques most directly applicable to models of administration and management decision making.
- 4320 **Seminar in Healthcare Administration.** (3-0) Current trends and problems in health administration affecting health administration technical and professional personnel. Designed to place emphasis in selected areas of administration and management. Research paper and presentation is required of each student. (WI) (MC/MP)
- 4325 **Healthcare Strategic Management.** (3-0) This capstone class integrates accounting, finance, marketing, MIS, and organizational behavior in the creation of sustainable competitive advantage. Health care case studies will be used to illustrate key concepts.
- 4440 **Practicum Internship A.** (0-16) Students with specialization in management participate in a health services based practicum. Experiences in providing opportunities for observation, participation, and practical application of administrative or management skills in the institutional setting are required. Prerequisites: Must have a 2.25 major GPA and have completed all junior year major courses.
- 4441 **Practicum Internship B.** (0-16) Studies tailored to particular interests and needs of individual students. A variety of experiences may be used to enrich the program for students with special needs or demonstrated competencies. Prerequisite: Final semester of study.
- 4848 **Healthcare Administrative Residency.** (0-40) Designed for students who have limited or no previous background in healthcare management/administration. Includes rotation through selected major departments, culminating in a major project. Prerequisite: Final semester of study.

### **Courses in Health Professions (HP)**

- 2351 **Application of Computers in the Health Professions.** (2-1) An introduction to computer applications important to health care including both common and specialized medical software. Common computer applications are introduced using projects and data resources from a healthcare environment. Students also examine specialized medical applications such as the National Library of Medicine, healthcare Internet resources, and telemedicine.
- 3302 **Biostatistics.** (2-2) The course introduces major statistical concepts and procedures as applied to clinical science students with an emphasis on inferential statistics. Topics include: descriptive statistics, hypothesis testing, comparison statistics, relationship statistics, association statistics, and beginning epidemiological ratios. Students are introduced to major statistical packages. Prerequisite: MATH 1315 or 1319.



3325 Healthcare Statistics (3-0) The course introduces major statistical concepts and procedures as applied to healthcare administration students with an emphasis on descriptive statistics. Topics include: healthcare statistical terminology, descriptive statistics, hypothesis testing, comparison statistics, relationship statistics, and association statistics. Prerequisite: MATH 1315 or 1319.

# Department of Health Information Management

Health Professions Building 302  
T: 512.245.8242 F: 512.245.8258  
www.health.txstate.edu/HIM

## DEGREE PROGRAM OFFERED

Bachelor of Health Information Management (BSHIM), major in Health Information Management

## MINOR OFFERED

Health Information Management

## CERTIFICATE OFFERED

Health Information Privacy & Security

The Health Information Management major prepares students to work in the health information management profession which focuses on health care data and the management of health care information resources. The profession addresses the nature, structure, and translation of data into usable forms of information including the electronic health record for the advancement of health and health care of individuals and populations.

Health information management professionals collect, integrate, and analyze primary and secondary health care data, disseminate information and manage information resources, related to the research, planning, provision, and evaluation of health care services. HIM professionals are an integral part of the planning, implementing and utilization of electronic health record systems.

The program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education. Upon completion of the degree, graduates of the program are eligible to sit for the RHIA (Registered Health Information Administrator) examination offered by the American Health Information Management Association.

The BSHIM is offered in two formats—the traditional campus-based program and an on-line program. The Traditional Campus-Based Program is a two plus two program with completion of general education core curriculum and program prerequisite coursework during the first two years. Following application and acceptance into the program, the final two years consists of the professional coursework reinforced with professional practice experience assignments in hospitals and other health care related facilities and organizations. Application deadline is March 1.

The on-line Program is offered primarily for those who have already completed an associate degree in health information or other degree or have previous healthcare work experience. Academic advisement is required to determine eligibility and placement in this program. The courses for the program are offered via web-based instruction, independent study, and professional practice experience. Application deadline is March 1.

## Admission

Any student at Texas State University may declare Pre-Health Information Management as their major. To declare Pre-HIM as a major, contact the Department of Health Information Management to schedule an interview with the Department Chair. It is strongly recommended that students present themselves for academic advising with a HIM program advisor as soon as health information management has been selected as a major.

Admission Process for acceptance to the professional phase of the program to begin the 3000 and 4000 level coursework, students must:

1. Have completed the majority of the Core and other prerequisite coursework;
2. Have a minimum overall GPA of 2.50;
3. Be eligible for admission to Texas State. (University application deadlines are different than the HIM Program deadline. Potential program applicants are encouraged to complete the University process early to facilitate review of transcripts during the HIM Program application process.);
4. Submit HIM Program application by March 1 for consideration to begin the HIM coursework in the fall semester; and
5. Interview with the HIM Program Admissions Committee.

Advanced placement in the major coursework due to previous health information or related coursework and/or work experience will require a review of the student's credentials and transcripts. Because of course sequencing and the scheduling of clinical assignments, students who drop out of the program for one or more semesters will be required to reapply for admission and be re-interviewed by the admissions committee.

## Progression

BSHIM courses are to be taken in a published sequence. The HIM courses are offered in a lock-step sequence. Most courses are offered only once each academic year; therefore, progress in the program may be delayed if a student falls out of sequence due to failure to successfully complete the HIM courses with the required "C" or higher. Because of course sequencing and the scheduling of clinical assignments, students who drop out of the program for one or more semesters will be required to reapply for admission and be re-interviewed by the admissions committee for consideration to be allowed to continue in the program.

## Graduation

To graduate with a Bachelor of Science in Health Information Management, students must successfully complete all HIM courses with a "C" or higher. Graduating students must have attained a 2.0 or higher Texas State University GPA with a minimum of 2.25 GPA in the HIM major courses.

During the second semester of the senior year, students are required to take a five-week professional practice experience course. This course requires that the students spend a minimum of five weeks in other institutions (hospitals, health agencies, etc.) away from campus. Students must furnish their own transportation and housing. Because of the time and distances involved, no courses other than those listed can be taken in the final semester of the senior year.

### Background Checks and Drug Screening

As a condition for placement in some professional practice sites, students may be required to have a background check and/or drug screening and meet other requirements set by individual sites. Information will be provided by program/department /school.

### Liability Insurance

1. Students enrolled in the Health Information Management degree program are required to purchase liability insurance, or demonstrate proof that they have professional liability insurance.
2. Students may obtain information on liability insurance from the HIM Department.

### Immunization Requirements

It is a policy of the College of Health Professions that each student must provide a Health Report completed by a physician, and must take certain immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and forms may be obtained through the program office.

Bachelor of Science in Health Information Management (BSHIM)							
Major in Health Information Management							
Minimum required: 123-124 semester hours							
General Requirements:							
1. BIO 2430 is required; HIM 2360 and CIS 1323 are preferred before admission to the program.							
2. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.							
3. See Academic Services section of the catalog for course options that satisfy literature, natural science, and social science components.							
Freshman Year		Sophomore Year		Junior Year		Senior Year	
Course	Hr	Course	Hr	Course	Hr	Course	Hr
Natural Science Component	7-8	ART, DAN, MU, or TH 2313	3	HIM 3301, 3310, 3463, 3367, 3390	16	HIM 4331, 4363, 4364, 4370, 4401	16
COMM 1310	3	BIO 2430	4	HIM 3368, 3380, 3464	10	HIM 4225, 4383, 4385, 4390, 4501	16
ENG 1310, 1320	6	CIS 1323	3	HIM 3311, 3350	6		
US 1100	1	ENG Literature	3				
HIST 1310	3	HIM 2360	3				
POSI 2310	3	HP 3302	3				
MATH 1315	3	PHIL 1305 or 1320	3				
PFW two courses	2	HIST 1320	3				
Social Science Component	3	POSI 2320	3				
<b>Total</b>	<b>31-32</b>	<b>Total</b>	<b>28</b>	<b>Total</b>	<b>32</b>	<b>Total</b>	<b>32</b>

## Minor in Health Information Management

A minor in Health Information Management requires 22 hours, including HIM 3350, 3380, 3390, 3463, 4331, 4363, and 4385. Appropriate sequencing of courses is necessary for progression to subsequent courses. This minor would enhance and broaden the scope of various other fields of study by providing a well-rounded introduction and an opportunity for practical applications of the administrative functions related to the management of health information. Completing this minor does not meet eligibility requirements for the R.H.I.A. (Registered Health Information Administrator) certification examination offered by the American Health Information Management Association. Academic advisement is important prior to enrolling in HIM minor courses due to sequencing requirements.

## Certificate in Health Information Privacy & Security

A certificate in Health Information Privacy & Security requires 16 hours, which include: HIM 3311, 3350, 3463, 4385, and CIS 4348. Applicants to the program are required to be a Texas State University Undergraduate degree seeking or post-baccalaureate student in good standing.

## Courses in Health Information Management (HIM)

- 2345 The Language of Healthcare: Spanish. (3-0) An introduction of the practical language used in clinical settings to facilitate interaction with Spanish-speaking patients and healthcare professionals. Special emphasis is placed on the use of meaningful medical vocabulary for various healthcare professionals who work with Spanish-speaking patients and their families. Prerequisite: Two semesters of Spanish.
- 2360 Medical Terminology. (3-0) Recognizing and understanding the vocabulary of the health care professions. Emphasis on medical prefixes, suffixes, and word roots as used in oral and written communications.
- 3301 Principles of Health Information Management. (3-0) Exploration of the expanding role of the HIM professional. Emphasis will be on the organizational structure and delivery of healthcare in hospitals and other healthcare agencies and the associated roles of HIM professionals.
- 3310 Fundamentals of Health Information Systems. (3-0) An introduction to the information technology aspects of health information management to include hardware components, systems architecture, operating systems, languages, software applications, tools, and related topics and concepts.
- 3311 Management of HIM Systems. (2-2) An introduction to the system life cycle with an emphasis on the role of the HIM professional in the implementation of electronic health record systems. Systems development and information brokering are considered with particular emphasis on data security.
- 3350 Legal Aspects of HIM. (3-0) A study of the legal issues of Health Information Management with focus on statutory and regulatory requirements, case law and practical applications. Special legal problems associated with access to patient information, disposition of records, confidentiality and privacy, reporting requirements and compliance with current state and federal legislation are emphasized.
- 3367 Disease and Medical Science I. (3-0) An introduction to the general disease process. Stress is placed upon the occurrence of disease, the signs and symptoms of disease, the test values and findings of disease, and the therapeutic treatment of disease.
- 3368 Disease and Medical Science II. (3-0) A continuation of Disease and Medical Science I.
- 3380 Quality Improvement Regulations & Procedures for HIM. (3-0) Overview of regulatory agency requirements for quality improvement, utilization management and risk management. Methods for integrating these procedures for credentialing and peer review are explored.
- 3390 Departmental Management. (3-0) A study of the principles involved in managing HIM departments in hospitals and other healthcare facilities. The course provides the opportunity to apply theory to traditional HIM managerial responsibilities and in the expanded role of the HIM professional.
- 3463 Introduction and Technical Aspects of Health Information Management. (2-4) An introduction into principles and procedures used in health records organization, maintenance and retention, numbering and filing systems and procedures, forms control and design, and imaging. Emphasis placed on functions and duties of the HIM administrator, and relationships of the medical record to the health care delivery system.
- 3464 Nosology. (2-2) Introduction to ICD-CM, CPT and other classifications and nomenclatures. Emphasis will be placed on manual coding of diagnoses and procedures from the acute care facility and the introduction of the use of encoding systems.
- 4101 Problems in Health Information Management. (1-0) Comprehensive study of selected problems related to professional practice issues and changes in the health information management field. Emphasis will be on problem solving and application of management skills. May be repeated with permission of department chair.
- 4225 Health Information Management Research and Education. (2-0) A course of independent reading and research with the student completing a research project and developing an in-service instructional module. Emphasis is on the application of health information management theory and clinical practice. (WI)
- 4331 Health Information Management Research and Data Analysis. (3-0) An introduction to research methods and experimental inquiry to acquaint the student with skills to critique and conduct studies in the health information management domains. The course will also provide the foundation for compiling, analyzing, and displaying statistics related to the delivery of healthcare.
- 4363 Comparative Record Systems. (3-0) Theory and procedures for the maintenance and regulation of patient health information records in non-hospital medical care facilities to include long term care, ambulatory care, psychiatric care, rehabilitation and prison record keeping systems.
- 4364 Classification, Nomenclature and Reimbursement. (2-2) Continued study of ICD-9-CM, CPT 4 and other classification and nomenclatures. The relationship with inpatient and ambulatory care reimbursement systems is also explored.
- 4370 Finance and Reimbursement Methodologies for HIM. (3-0) Course will address the reimbursement cycle from patient registration to claims billing with an emphasis on federal regulations and the role of HIM regarding payment systems. Topics will include accounting principles, budget processes,

- cost/benefit analysis, healthcare finance, compliance strategies, charge-master and casemix management, and payment systems and plans.
- 4383 Seminar in Health Information Management. (3-0) Problem-solving course designed to assimilate actual internship encounters and theory. Emphasis is on integration of knowledge and making transition to the applications required to function as a health information manager.
- 4385 Health Information Management Practicum. (0-8) Assignments made to promote uniformity and competency levels required of entry-level health information management professionals with practical application of administrative, management, and problem-solving skills required to complete projects and portfolio material. (WI)
- 4388 Practicum. (0-8) Faculty-led administrative training for the associate degree health information progression student. Emphasis is placed on analysis of HIM personnel functions, interdepartmental relations, use of health information technology, and committee assignments. Full-time participation of the student is required.
- 4389 4389 Professional Practice Experience. (1-40) Supervised management experience and training in a healthcare or related setting. Student will participate in administrative, management, and problem-solving activities in the institutional setting. Full-time participation is required. Option for health information associate degree and post-baccalaureate students. (WI)
- 4390 Contemporary Leadership Principles for HIM. (3-0) An analysis of the expanded role of the Health Information Management professional in the healthcare environment and application of the principles involved. Topics include strategic planning and forecasting, marketing, entrepreneurialism, leadership, motivation, consensus building, workforce diversity, change management, work redesign/reengineering, and project management. (WI)
- 4401 Health Information Technology Throughout the Enterprise. (3-2) This course studies the integrated use of health information technology throughout the enterprise. Students will evaluate how technology impacts overall hospital operations from both a clinical and administrative perspective and will use planning and assessment tools to simulate technology system implementation.

4501 Professional Practice Experience. (1-40) Supervised management experience and training in a healthcare or related setting. Student will participate in administrative, management, and problem-solving activities in the institutional setting. Full-time participation is required in addition to scheduled campus visits. (WI)

## St. David's School of Nursing

Nursing Building  
Round Rock Campus  
Round Rock, TX  
T: 512.716.2900 F: 512.716.2911  
www.nursing.txstate.edu

### DEGREE PROGRAM OFFERED

Bachelor of Science in Nursing (BSN), major in Nursing

### Mission Statement

The St. David's School of Nursing, located in Round Rock, educates and prepares graduates, using innovative teaching strategies and state-of-the-art technology, to function in professional nursing roles to promote, maintain, and restore health and wellness and to prevent illness among diverse individuals and communities. Graduates demonstrate competence as critical thinkers who effectively collaborate as members of the inter-professional health care team and utilize scientifically-based interventions. These future nurses will provide ethical, safe, and effective patient-centered care and contribute to present and emerging research and health management practices.

The Nursing Program offers a Bachelor of Science in Nursing (BSN). Graduates are prepared to sit for the National Council Licensure Examination for Registered Nurses (NCLEX-RN®) and to meet the minimum competencies for beginning practice as a Registered Nurse. The BSN graduate is prepared to pursue clinical excellence and certification by the American Nurses Credentialing Center (ANCC) and to continue formal education for the Master's Degree and Doctorate in Nursing.

The BSN curriculum is 130 hours, including 65 hours of Texas State core curricular and prerequisite courses; and 65 hours of nursing courses. The degree program in nursing is a five semester program beginning at the junior level. Junior and senior levels combine academic study in nursing and clinical experiences in affiliated clinical settings, as well as hours spent in the simulation laboratories in the School of Nursing building located on the Round Rock campus. The curriculum is designed to accommodate the latest teaching technologies and learning strategies to provide students with the skills, knowledge and abilities needed for professional nursing practice in the 21st Century.

### Admission Process

The application period begins October 1st and closes **January 15**. Admission to the undergraduate major in nursing is competitive and selective. Applicants must have a prerequisite GPA of **2.90** or higher and a science GPA of 3.00 or higher. Science courses require a minimum grade of "C" or higher for admission Applicants may only repeat two of the following courses once: anatomy and

physiology I and II, **nutrition**, and microbiology. These courses should not have been taken more than 5 years prior to application. An overall 3.0 GPA is recommended in order to be competitive in the application process. Students may only have a maximum of 18 remaining prerequisite credit hours, with only 9 of these credit hours in prerequisite science courses. Remaining courses may be taken in spring and summer semesters.

Students must be admitted to Texas State University prior to submitting the School of Nursing application. An application fee and copies of all college transcripts are to accompany the School of Nursing application. Additional criteria include a personal persuasive essay, scores from the Test of Essential Academic Skills (pre-nursing entrance assessment) and 2 professional or academic references. One hundred (100) **highly** qualified junior level students will be admitted each fall.

### **Criminal Background Check/Drug Screen**

A criminal background check conducted through the Board of Nursing is required prior to admission to the School of Nursing at Texas State. A valid social security number is required by the School of Nursing clinical partners for the background check. Qualified applicants who have completed the admission procedures receive a FAST Pass - instructions to initiate their criminal background check, including fingerprinting. Applicants aware of eligibility issues on their record, either misdemeanor or felony, should apply to the School of Nursing early. It may be necessary to apply for a Declaratory Order through the Texas Board of Nursing (BON), and this process can take months. If the BON Declaratory Order is granted, it will confirm eligibility to sit for the NCLEX-RN (National Council Licensure Examination for Registered Nurses) after graduation **barring any further incidents**. It does not assure that students will be employed as a nurse, as this is up to the employer. Students must adhere to the policies of the clinical agencies including drug screenings and an additional background check. All students are subject to random or for cause screens.

### **Liability and Health Insurance**

Once accepted to the Nursing Program students must purchase liability **and health** insurance.

### **Immunizations and Basic Life Support**

It is a policy of the College of Health Professions that each student must provide a Health Certificate completed by a health care provider. A list of required immunizations must be obtained and evidence provided. The completed Immunization and Tests Form and Health Certificate must be submitted to the SON Admission and Retention Coordinator. Students must stay current on immunizations. Basic Life Support for Healthcare Professionals must be completed and a copy of the card sent to the School of Nursing.

### **Academic Progression**

Students enrolled in the Nursing Program are required to maintain a grade of at least a "C" in all courses in the nursing curriculum. Nursing courses are offered in a lock-step sequence. Each course may be offered only once each academic year; therefore, progress in the program may be delayed if a student falls out of the sequence due to failure to successfully complete nursing courses. A student who falls out of sequence (whether due to illness, course failure, or other reasons) cannot be assured of a space in subsequent

courses, though every effort will be made to accommodate him/her. The decision is based upon the Admission, Progression and Graduation Committee's review and consideration. In addition, a student may repeat a nursing course only once. If the student does not earn a grade of at least "C" upon repeating the course, the student cannot continue in the Nursing Program. **A student may repeat a nursing course only one time. After a second nursing course failure, dismissal from the nursing program will be recommended.** Withdraw failing is considered a failing grade.

### **Graduation**

To graduate with a Bachelor of Science in Nursing Degree, a student must successfully complete all nursing courses with a "C" or better in addition to completing all prerequisite courses. Graduating students must have attained a 2.0 or higher Texas State University GPA with a minimum of a 2.50 GPA in the Nursing major.

**Bachelor of Science in Nursing (BSN)**  
**Major in Nursing**  
**Minimum required: 130 semester hours**

**General Requirements:**

1. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
2. See the [Academic Services](#) section of the catalog for course options that satisfy literature, natural science, and social science components.

Freshman Year		Sophomore Year		Junior Year - 1st Semester		Junior Year - 2nd Semester	
Course	Hr	Course	Hr	Course	Hr	Course	Hr
CHEM 1141, 1341	4	BIO 2440	4	NURS 3310, 3110	4	NURS 3440, 3240	6
PSY 1300	3	BIO 2451, 2452	8	NURS 3300	3	NURS 3460, 3260	6
FCD 1351 or PSY 3300	3	BIO 1330, 1130	4	NURS 3220, 3221	4	NURS 3302	3
MATH 1315	3	COMM 1310	3	NURS 3430	4		
ENG 1310, 1320	6	ENG Literature	3				
HIST 1310	3	NUTR 2360	3				
PHIL 1305 or 1320	3	POSI 2320	3				
PFW two courses	2	ART, DAN, MU, or TH 2313	3				
US 1100	1	HIST 1320	3				
POSI 2310	3						
<b>Total</b>	<b>31</b>	<b>Total</b>	<b>34</b>	<b>Total</b>	<b>15</b>	<b>Total</b>	<b>15</b>

Summer		Senior Year - 1st Semester		Senior Year - 2nd Semester	
Course	Hr	Course	Hr	Course	Hr
NURS 3330	3	NURS 4350, 4250	5	NURS 4272	2
NURS 3441, 3241	6	NURS 4311, 4211	5	NURS 4380, 4280	5
		NURS 4370	3	NURS 4471	4
				NURS 4201	2
<b>Total</b>	<b>9</b>	<b>Total</b>	<b>13</b>	<b>Total</b>	<b>13</b>

## Courses in Nursing (NURS)

- 3110 Health Assessment Across the Life Span Practicum. (0-3) This course requires demonstrated competency in the performance and documentation of physical assessments of well individuals and nursing care plans using the nursing process, critical thinking, and evidence-based practice. Apply teaching/learning principles in meeting the education needs of patients and demonstrate measures to maintain confidentiality of personal health information.
- 3220 Essentials of Nursing Care Practicum. (0-6) This course requires the use of nursing process and clinical reasoning principles to provide safe, effective, patient-centered care. Evidence-based practices will be used when performing essential nursing skills and procedures to care for patients experiencing acute and chronic alterations in health status.
- 3221 Essentials of Nursing Care. (2-0) This foundation course focuses on basic concepts related to essential nursing care of patients across the life span. Integration of knowledge of family systems, evidence-based practice, clinical reasoning, and the nursing process to provide safe, effective, patient-centered care will occur.
- 3240 Nursing Care Across the Life Span Practicum. (0-6) This course uses clinical experiences to apply the nursing process in providing safe, effective, and quality care to patients and families across the life span. Clinical reasoning and judgment will be used to provide ethical, holistic, and patient-centered nursing care, promote health, prevent disease, and manage illness.
- 3241 Acute Nursing Care of Adults Practicum. (0-6) This course requires the use of evidence-based and collaborative practice principles in providing safe, effective, and quality care to adult patients experiencing acute, rapidly changing, life-threatening alterations in health status. Clinical reasoning and judgment will be used to provide ethical, holistic, patient-centered nursing care, manage illness, and promote health.
- 3260 Psychiatric Mental Health Nursing Practicum. (0-6) This course utilizes clinical experiences to promote application of the nursing process in providing quality care to those experiencing mental health issues across the life span. Competency in using evidence-based practices to promote health, prevent disease, and manage illness will be developed.
- 3300 Foundations of Professional Nursing Practice. (3-0) This course explores the history of nursing in the context of the evolving healthcare system. Laws, regulations, and ethical guidelines impacting nursing licensure and professional practice will be examined. The delivery of patient and family-centered, evidence-based, and safe quality care will be explored. (WI)
- 3302 Research and Ethics. (3-0) Introduction to critical appraisal of qualitative and quantitative research, and application of research and evidence-based processes used to improve decision-making and patient care outcomes across health care settings. Integration of theory, information systems, clinical judgment, interprofessional perspectives and analysis of ethical conduct provide a foundation for learning the research process.. (WI)
- 3310 Health Assessment Across the Life Span. (3-0) Conducting health histories and physical assessments of well individuals and developing nursing care plans that include patient age-specific health promotion, illness prevention, and risk factors will be emphasized. Assessments will encompass cultural domains, diversity, belief systems, and the implications for traditional as well as complementary and alternative healthcare.
- 3330 Healthcare Systems. (3-0) Healthcare systems access and barriers, policies, nursing role in healthcare delivery systems, critical thinking skills applied to the healthcare system. Socialization to the professional nursing role. Continuing and formal education for advancement. Qualitative and quantitative research in relation to healthcare systems, nursing practice, and current topics.
- 3430 Pathophysiology and Pharmacology for Nurses. (4-0) Introduction and overview of pathology, clinical pharmacology and pharmacotherapeutics, including how major drugs are used therapeutically for age-specific clients. Other topics to be covered include drug laws and regulations, patient and nurse safety.
- 3440 Nursing Care Across the Life Span. (4-0) This foundational course focuses on the use of clinical reasoning and judgment to provide collaborative care to patients across the life span experiencing chronic and acute alterations in health status. Content is presented based on evidence-based practice and the prevalent health needs of patients.
- 3441 Acute Nursing Care of Adults. (4-0) This course focuses on the use of evidence-based practice and clinical reasoning and judgment to provide collaborative care to adult patients experiencing acute, rapidly changing, life-threatening alterations in health status.
- 3460 Psychiatric Mental Health Nursing. (4-0) This course applies theories, concepts, knowledge, and skills for the comprehensive nursing care of those coping with mental health issues. Building on a liberal education, this course integrates theories of mental illness, psychopathology, and current research findings as they relate to the presentation of symptoms and holistic management of care.
- 4201 Professional Growth and Empowerment. (2-0) This course focuses on issues related to professional practice, career planning, personal goal setting, and empowerment of self and others. Factors related to job performance, performance expectations and evaluation, reality orientation, and commitment to lifelong learning will be discussed.
- 4211 Nursing Care in Complex Health Practicum. (0-6) This course focuses on providing care to patients with complex health alterations and life situations. Nursing care to patients in a variety of settings will be provided using the concepts of therapeutic communication and collaborative interventions with a focus on the complexity of the patient's or family's needs.
- 4250 Maternal, Newborn, and Pediatric Nursing Practicum. (0-6) This course is the clinical companion to NURS 4350. Concepts, knowledge, and skills taught in NURS 4350 will be applied to both simulation lab and clinical settings. Evidenced-based, developmentally and culturally appropriate nursing care in a variety of patient-care settings will be emphasized.
- 4272 Leadership and Management of Nursing Care II. (2-0) Leadership and management theories, trends and issues in

healthcare settings, resources, priorities, unit management, delegation and assignment of staff, staff evaluation, performance improvement and safety. Validation of evidence-based leadership and management process and outcomes.

- 4280 Community-Based Nursing Practicum. (0-6) **Health assessment and planning will be conducted for diverse community groups including education, support groups/ resources, advocacy, response to situational crises, bio-terrorism and environmental emergencies, group dynamics, and impact on communities. Clinical experiences will occur in community or public health settings.**
- 4311 Nursing Care in Complex Health. (3-0) This course explores traditional and contemporary nursing concepts related to complex health alterations, compensations, and environments across the life span. Therapeutic communication, education, and collaborative interventions with diverse individuals and groups are emphasized including the use of complementary and alternative modalities to meet the needs of patients.
- 4350 Maternal, Newborn, and Pediatric Nursing. (3-0) This course applies the nursing process and evidenced-based practice to the care of maternal, newborn, and pediatric patients in acute care settings. The course emphasizes the use of the nursing process to provide care to individuals and families that is developmentally and culturally focused.
- 4370 Leadership and Management of Nursing Care I. (3-0) Leadership theories applied to unit and middle management leadership. Personal attributes for nursing leadership in direct client care areas, including adult care, obstetrics, pediatrics, and behavioral health. Qualitative and quantitative research in relation to leadership and middle management process and outcomes. (WI)
- 4380 Community-Based Nursing. (3-0) **Using a variety of philosophical perspectives, community-based nursing care, learning to contrast care in hospital-based settings while transitioning into organizations within the community will be explored. Reflective assessment skills and mindful intervention/teaching projects will be developed.**
- 4471 Leadership and Management of Nursing Care II Practicum. (0-12) Apply leadership and management skills in a variety of nursing care situations. Nursing unit leadership, staff assignments based on assessment of client needs, resources, priorities, and competencies of staff. Oversee and evaluate evidence-based nursing care provided.

## Department of Physical Therapy

Health Professions Building **310B**  
T: 512.245.8351 F: 512.245.8736  
[www.health.txstate.edu/PT](http://www.health.txstate.edu/PT)

The Department of Physical Therapy is a graduate department offering a Doctor of Physical Therapy (DPT). For more information, contact the Department of Physical Therapy or visit <http://www.health.txstate.edu/PT>

[www.health.txstate.edu/pt](http://www.health.txstate.edu/pt). While the Department offers no undergraduate degree, it does provide advisement to students interested in pursuing a graduate degree in Physical Therapy.

The requirements for admission include: 1) completion of a baccalaureate degree with a minimum 3.00 GPA in the last 60 hours of course work completed for that degree; 2) minimum 3.00 GPA in all science courses; 3) preferred minimum GRE of **150 on verbal and 145 quantitative**; 4) completion of all prerequisite courses, including general psychology, abnormal or developmental psychology, statistics, medical terminology, human physiology and anatomy or human structure and function, vertebrate physiology or physiology of exercise, general chemistry I and II, and general physics I and II.

### Courses in Physical Therapy (PT)

3400 Human Structure and Function. (2-6) A study of the structure and function of the human body with emphasis on the skeletal, muscular and nervous systems. Course focuses on anatomy and physiology of body systems of special interest to students preparing to be health professionals. Laboratory study of the human cadaver is included.

## Radiation Therapy Program

Health Professions Building **220**  
T: 512.245.9081 F: 512.245.1477  
[www.health.txstate.edu/rtt](http://www.health.txstate.edu/rtt)

### DEGREE PROGRAM OFFERED

Bachelor of Science in Radiation Therapy (BSRT), major in Radiation Therapy

The radiation therapist is a key member of the professional team, which uses various forms of radiation to treat cancer patients. Radiation therapy may be used alone, or in combination with surgery or chemotherapy, and is the treatment of choice for cure of many cancers. Because of sustained contact with patients, the radiation therapist has considerable responsibility in patient care, dietary counseling and treatment evaluation. The radiation therapist must also appreciate the significant psychological impact that cancer has on patients and their families. The program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The curriculum complies with the professional curriculum of the American Society of Radiologic Technologists.

The degree program, Bachelor of Science in Radiation Therapy with a major in Radiation Therapy, is a two- and one-half year program beginning in the junior year. The junior and senior years combine clinical experiences in the affiliated radiation therapy facilities with advanced academic study in the professional disciplines. The program is designed to prepare students for the technical, theoretical, and psychological aspects of this career. Students acquire the



technical skills necessary to plan, deliver, and record a prescribed course of radiotherapy. Upon completion of the degree, students are eligible to apply to the ARRT national registry examination.

### Admission

Any student entering Texas State may declare Pre-Radiation Therapy as their major. Admission to Texas State does not guarantee admission to the program. Admission to the program is competitive and selective. It is recommended that students arrange academic advising at least once prior to making application. The academic sequence begins during the fall semester. Enrollment is limited by student/faculty ratios in the clinical components of the program. The deadline for submission of applications is January 15.

General Admission Requirements:

1. Admission to Texas State
2. Satisfactory completion of all general education requirements and a minimum overall GPA of 2.75.
3. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
4. Students must receive a “C” or higher in all math, science, and support courses: BIO 2430, HP 3302, AT 3358, HIM 2360, HA 4307, HA 4307, HA 4315, PHYS 1320, PHYS 1110, CHEM 1341, CHEM 1141.
5. See [Academic Services](#) section of the catalog for course options that satisfy literature components.
6. Completion of an application packet for admission.
7. Three letters of reference and a career goal statement.
8. Successful interview of selected candidates with admission committee.
9. 40 hour clinical observation with completed evaluation on file by Jan. 15.
10. Students must be able to perform the 13 Technical Standards indicated by the American Disabilities Act (refer to program website or department for more information).
11. Previous misdemeanor or felony convictions will affect admission to the program.

### Criminal Background Check/Drug Screening

As a condition for placement in some professional practice sites, students may be required to have a background check and/or drug screening and meet other requirements set by individual sites. Information on the process of drug screening will be provided by the school/department/program. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for state license status following graduation and may affect admission consideration to the Radiation Therapy program.

### Academic Progression

Students enrolled in the Radiation Therapy Program are required to maintain a grade of “C” or better in all coursework. Radiation Therapy courses are offered in a lock-step sequence. Each course is offered only once each academic year; therefore, progress in the program is affected should a student fall out of the sequence due to failure to successfully complete a course. A student who falls out of sequence (whether due to illness, course failure, or other reasons) will be delayed one year to repeat the course. In addition, a student may repeat a radiation therapy course only once. If the student

does not earn a grade of at least “C” upon repeating the course, the student cannot continue in the program.

### Graduation

To graduate with a Bachelor of Science in Radiation Therapy Degree, a student must successfully fulfill the general education requirements and complete all radiation therapy courses with a “C” or better. The student must meet the requirements for clinical competency as described in the Directed Clinical Learning syllabi. Graduation students must have attained a 2.0 or higher Texas State University GPA with a minimum of a 2.75 GPA in the Radiation Therapy major.

### Liability Insurance

1. Students who participate in the clinical and internship portions of the Radiation Therapy program are required to purchase liability insurance, or demonstrate proof that they are insured.
2. Students may obtain information on liability insurance from the program office.

### Immunization Requirements

It is a policy of the College of Health Professions that each student must provide a Health Report completed by a physician, and must take certain immunizations before the student can be placed in a clinical or internship assignment. Information on these requirements and forms to be supplied may be obtained through the program office.

**Bachelor of Science in Radiation Therapy (BSRT)**

**Major in Radiation Therapy**

Minimum required: 131 semester hours

Freshman Year		Sophomore Year		Junior Year		Senior Year	
Course	Hr	Course	Hr	Course	Hr	Course	Hr
BIO 1320, 1421, 2430	11	AT 3358 or RTT 3340	3	RTT 3300, 3301, 3302, 3310, 3314	15	RTT 4310, 4330, 4331	9
CHEM 1141, 1341	4	PHYS 1110, 1320	4	RTT 3350	3	RTT 4361, 4190	4
COMM 1310	3	ENG Literature	3	RTT 4370	3	RTT 4121, 4122, 4191, 4221, 4222, 4371	10
ENG 1310, 1320	6	HA 4307, 4315	6	RTT 3120, 3121, 3220, 3221	6		
US 1100	1	HP 3302 or equivalent	3	RTT 4189, 4220, 4120, 4360	7		
HIST 1310, 1320	6	POSI 2310, 2320	6				
MATH 2417	4	PFW one course	1				
PHIL 1305 or 1320	3	HIM 2360	3				
PSY 1300	3						
PFW one course	1						
ART, DAN, MU, or TH 2313	3						
<b>Total</b>	<b>45</b>	<b>Total</b>	<b>29</b>	<b>Total</b>	<b>34</b>	<b>Total</b>	<b>23</b>

**Courses in Radiation Therapy Technology (RTT)**

3120 Clinical Simulation Lab I. (0-4) Students are provided instruction and simulated practice in a controlled laboratory setting. This course provides first-year students foundational clinical set-up skills from which to build on during the clinical learning practicum course.

3121 Clinical Simulation Lab II. (0-4) Students are provided instruction and simulated practice in a controlled laboratory setting. This course provides instruction, demonstration and participation in immobilization, positioning and simulation with the aid of an anthropomorphic phantom. Students will learn aspects of simulation for basic treatment delivery applications.

3220 Directed Clinical Learning I. (1-16) Students will observe the basic operations of the radiation oncology clinic while interacting with the multidisciplinary team involved in providing treatment and care. The student will be introduced to oncology terminology, equipment, and techniques used for treatment. Learning is achieved through direct patient care, with instruction, demonstration and direct supervision. Prerequisite: Acceptance into the major.

3221 Directed Clinical Learning II. (1-16) Students will gain additional skills in clinical procedures, interaction with patients and professional personnel. Students apply knowledge from previous clinical learning experience under the supervision of a registered radiation therapist. Students are tested on intermediate clinical radiation therapy skills.

3300 Patient Care in Radiation Oncology. (3-0) This course will focus on basic nursing concepts involved in providing care for the cancer patient. Topics to be included in the class will be cancer as a chronic health problem, social roles and cancer, multidisciplinary approach to patient care, psychosocial dimension of cancer, in-treatment examinations, follow-up examinations, emergency management, chemotherapy and nutritional aspects of treating patients with cancer.

3301 Introduction to Radiation Oncology. (3-0) An overview of radiation oncology and the role of the radiation therapist. Presentations will orient the student to the physical and

biological basis of radiation equipment, procedures, tumor pathology, and patient interaction. (WI)

3302 Radiologic Science and Medical Imaging. (3-0) This course will cover the principles governing production of radiation, interaction of radiation with matter, and protection of the radiation worker and patient from exposure. Basic principles of x-ray equipment, exposure factors, latent image formation, and processing of radiographs are presented. Prerequisite: Program Director's approval.

3310 Physics of Radiation Therapy I. (3-0) Students will learn the principles of radiation physics as they apply to the treatment and care of the cancer patient. Course will include a thorough review of x-ray production, fundamental principles, concepts and terminology. Topics studied include measurements, general principles, structure of the atom, structure of the matter, electrostatics, magnetism, electrodynamics, electromagnetism, rectification and production and properties of radiation and radiographic techniques.

3314 Radiation Therapy Sectional Anatomy. (3-0) The course provides instruction in identifying cross-sectional anatomy to develop the ability to make anatomic correlations between multiple planes of view. Major organs, lymphatics, vessels are emphasized as related to the clinical significance in the field of radiation therapy.

3340 Oncologic Pathology. (3-0) This course introduces the concept of disease, histology, types of growth, etiology and biological behavior of neoplastic diseases. Topics: the inflammatory process and clinical patterns, types of edema and etiology hormones related to growth; characteristics of benign and malignant tumors; histological grading; and pathophysiology across the lifespan and associated diseases.

3350 Radiobiology. (3-0) This course will cover the principles of cell response to radiation, including tissue sensitivity, survival, repair and the latent effects of irradiated tissue. Topics to be covered include the development of radiation science, cellular targets for radiation action, target theory, physical/chemical factors affecting radiation response, biological factors, repair and recovery, fractionated doses and dose rate,

- early/acute effects of whole body exposure, late/chronic effects of whole body exposure, and radiation protection dose guidelines.
- 4120 Clinical Simulation Lab III. (0-4) Students are provided instruction and simulated practice in a controlled laboratory setting. A continuation of RTT 3121. This course provides instruction, demonstration and participation in immobilization, positioning and simulation with the aid of an anthropomorphic phantom. Students will learn aspects of simulation for basic and intermediate treatment delivery applications.
- 4121 Clinical Simulation Lab IV. (0-4) Students are provided instruction and simulated practice in a controlled laboratory setting. A continuation of RTT 4120. This course provides instruction, demonstration and participation in immobilization, positioning and treatment simulation. Students will learn aspects of simulation for basic, intermediate, and some advanced treatment delivery applications.
- 4122 Clinical Simulation Lab V. (0-4) Students are provided instruction and simulated practice in a controlled laboratory setting. A continuation of RTT 4121. This course provides instruction, demonstration and participation in immobilization, positioning and treatment simulation. Students will learn aspects of simulation for basic, intermediate, and some advanced treatment delivery applications.
- 4189 Radiation Therapy Literary Scholarship and Manuscript Writing. (1-0) This intensive writing course provides instructions in research strategies, critical review and analysis of peer reviewed publications. An introduction to scholarly resources and professional manuscript development using peer reviewed journal guidelines for the profession of radiation therapy. This course prepares students for RTT 4191 Radiation Therapy Seminar. (WI)
- 4190 Professional Issues in Radiation Therapy. (1-0) This capstone course provides a comprehensive review of the program curriculum and clinical practice in the field. Current radiation therapy treatment management techniques and issues are presented for analysis.
- 4191 Radiation Therapy Seminar. (1-0) This course is a continuation of RTT 4189. The course provides instruction in the completion of a final draft for the student's technical manuscript. The course work builds from the completed manuscript and draws from the material and knowledge gained in RTT 4189 to develop a formal presentation.
- 4220 Directed Clinical Learning III. (1-16) Students will continue to develop skills during this clinical course. Progressive interaction with patients and professional personnel are monitored as students practice radiation therapy in a supervised setting. Additional areas include problem solving, identifying machine components and basic side effect management. Students will demonstrate competence in beginning, and intermediate procedures.
- 4221 Directed Clinical Learning IV. (1-24) The course provides students the opportunity to continue to develop confidence and increased skill in simulation and treatment delivery. Students will demonstrate competence in beginning, intermediate, and some advanced procedures through supervised clinical instruction, progressing through a competency-based educational sequence.
- 4222 Directed Clinical Learning V. (1-24) The student will complete their clinical training by practicing all the skills they have learned in the classroom, lab, and clinical practicum. The student will continue demonstrating proficiency while completing the Skills Competency Checklist.
- 4310 Physics of Radiation Therapy II. (3-0) Students will continue to learn the principles of cell response to radiation. Topics covered will include properties of x-ray and gamma radiation, radiation units, x-ray production, photon interactions, beam characteristics, radioactivity, treatment units, and particle irradiation.
- 4330 Quality Assurance. (3-0) Students will study quality assurance tests related to patient charts, treatment accessories, patient communication devices, machine reading and safety devices. Emphasis on quality control procedures to include Continuous Quality Improvement (CQI), Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and responsibilities of each team member in relation to quality assurance duties.
- 4331 Operational Issues in Radiation Therapy. (3-0) Course content is designed to focus on various radiation therapy operational issues. Accreditation, CQI development and assessment techniques will be presented. Human resource issues and regulations impacting the radiation therapist will be examined. Topics include the role of network information systems within the radiation oncology department. (WI)
- 4360 Dosimetry I. (3-0) This course will cover the basic concepts in treatment planning and clinical dosimetry. Students will learn to identify treatment preparation processes and needs for beam modifying devices. Students will also be taught iso-dose charts for several treatment arrangements and be able to calculate a variety of external beam treatment formulas.
- 4361 Dosimetry II. (3-2) Students will learn additional concepts in treatment planning and clinical dosimetry addressed in Dosimetry I. Computerized treatment planning applications will enhance the understanding of medical dosimetry.
- 4370 Clinical Radiation Oncology I. (3-0) The first of a two-part course, this course advances the student's knowledge of neoplastic disease management. Instruction will focus on the regional anatomy and physiology, epidemiology and etiology, detection and diagnosis, diagnostic procedures, histopathology, patterns of spread principles of treatment, staging, and prognosis.
- 4371 Clinical Radiation Oncology II. (3-0) The second of a two-part course, this course is a continuation of disease specific instruction. Instruction will focus on the regional anatomy and physiology, epidemiology and etiology, detection and diagnosis, diagnostic procedures, histopathology, patterns of spread, principles of treatment, staging, and prognosis.

# Department of Respiratory Care

Health Professions Building 351  
T: 512.245.8243 F: 512.245.7978  
www.health.txstate.edu/rc

## DEGREE PROGRAM OFFERED

Bachelor of Science in Respiratory Care (BSRC), major in  
Respiratory Care

The Bachelor of Science in Respiratory Care Program prepares students to practice as respiratory care professionals and take their place as a key healthcare team member. Skilled in assessing patients with breathing disorders in the emergency room, intensive care units and many other areas in healthcare facilities, respiratory therapists work directly with physicians on newborn, pediatric or adult patients to analyze oxygen levels and breathing difficulty. Therapists administer medications to relieve breathing distress, provide pulmonary/lung therapies, and conduct lung diagnostics for all ages. Graduates find employment in many settings such as hospitals, pulmonary rehabilitation clinics, doctors offices, sleep labs, homecare, and air-life transport teams working with patients in the emergency room, newborn/pediatric/adult intensive care units, and many other areas.

Respiratory care (RC) majors take classes on the San Marcos campus and gain clinical experience in area hospitals. Students successfully admitted to the program must complete the sequenced curriculum within the cohort group. Individuals taking core courses prior to applying for admission to the RC program should contact the College of Health Professions' Advising Office. Students completing an associate degree in RC from another university or college are eligible to apply for admission to the BSRC Program at Texas State for bachelor degree completion. For information on this option, see the department chair. The BSRC Program is accredited by the Commission on Accreditation for Respiratory Care (CoARC) and qualifies graduates to take national board credentialing exams offered by the National Board for Respiratory Care immediately upon completion.

The department also offers a graduate certificate in Polysomnographic Technology (sleep studies) at the graduate level that is fully accredited by CoARC and qualifies individuals to sit for national board credentialing exams immediately upon completion. The polysomnographic (PSG) graduate certificate is comprised of six courses (15 credit hours) with three courses offered each fall and spring. Individuals credentialed in PSG provide diagnostic and therapeutic treatment for those suffering from sleep disorders such as obstructive sleep apnea, insomnia, narcolepsy, and other conditions.

Admission for the Polysomnographic Technology certificate is granted each summer for a cohort starting in the fall. Please refer to the Graduate catalog for admission requirements and course descriptions.

## Admission Process

Application for admission to the RC program must be made to the RC department in addition to regular university admission procedures. All applicants must have an overall GPA of 2.50 to apply. **It is highly recommended that individuals interested in applying for the RC program complete RC 2213 prior to application.** Admission is competitive and enrollment is limited depending on student/faculty ratios in the clinical phase of the program. All courses must be taken in sequence and completed with a grade of C or higher in order to progress to the next semester in the curriculum. Due to performance standards of the profession, students must meet specific ADA standards in accordance with physical and emotional requirements of the academic program in order to qualify for admission.

## Liability Insurance

1. Students who participate in the clinical portion of the respiratory care program are required to purchase liability insurance, or demonstrate proof that they are insured.
2. Students may obtain information on liability insurance from the departmental office.

## Immunization Requirements

It is a policy of the College of Health Professions that each student must provide the College Health Report completed by a physician, and must complete specific immunizations before being placed in a clinical or internship assignment. Information on these requirements and forms may be obtained through the departmental office.

## Background Checks and Drug Screening

As a condition for placement in some professional practice sites, all students are required to have a background check and/or drug screening to meet requirements individual sites. Information on the drug screening process will be provided by the department. Previous misdemeanor or felony convictions under various titles of the Texas Penal Code may affect eligibility for state respiratory care practitioner license status following graduation and may affect admission consideration.

## Program Progression

Successful program progression requires students to complete each semester in a lock-step sequence with a grade of "C" or higher in all RC courses. According to departmental policy, students with a grade of less than a "C" in a RC course will be ineligible to continue the program and must reapply to the program the following year. To be considered for program readmission, all original program admission criteria must be met. If readmitted, an assessment of clinical skills will be required to determine appropriate clinical placement in the curriculum sequence.

## Graduation

Requirements for BSRC completion and graduation include a Texas State GPA of 2.0 with a RC major GPA of 2.25.

**Bachelor of Science in Respiratory Care (BSRC)**  
**Major in Respiratory Care**  
**Minimum required: 124 semester hours**

**General Requirements:**

1. Any student who did not complete at least two years of the same foreign language in high school is required to take 6-8 hours of the same foreign language.
2. \*See the **Academic Services** section of the catalog for course options that satisfy literature components.

Freshman Year - 1st Semester		Freshman Year - 2nd Semester		Sophomore Year - 1st Semester		Sophomore Year - 2nd Semester	
Course	Hr	Course	Hr	Course	Hr	Course	Hr
US 1100	1	BIO 2430	4	HIST 1320	3	POSI 2320	3
ENG 1310	3	ENG 1320	3	BIO 2440 or 2400	4	PHIL 1305 or 1320	3
POSI 2310	3	COMM 1310	3	ENG Literature*	3	ART, DAN, MU or TH 2313	3
PSY 1300 or SOCI 1310	3	HIST 1310	3	PFW	1	Statistics - HP 3302, SOCI 3307, PSY 3301 or MATH 2328	3
HIM 2360	3	MATH 1315	3	PHYS 1310/1110	4	CHEM 1341/1141	4
PFW	1						
BIO 1330	3						
<b>Total</b>	<b>17</b>	<b>Total</b>	<b>16</b>	<b>Total</b>	<b>15</b>	<b>Total</b>	<b>16</b>

Junior Year - 1st Semester		Junior Year - 2nd Semester		Junior Year - Summer		Senior Year - 1st Semester	
Course	Hr	Course	Hr	Course	Hr	Course	Hr
RC 3313	3	RC 3321	3	RC 3333	3	RC 4211	2
RC 3315	3	RC 3323	3	RC 3232	2	RC 4212	2
RC 3212	2	RC 3322	3	RC 3334	3	RC 4314	3
RC 3314	3	RC 3324	3			RC 4316	3
RC 3316	3	RC 3125	1			RC 4317	3
<b>Total</b>	<b>14</b>	<b>Total</b>	<b>13</b>	<b>Total</b>	<b>8</b>	<b>Total</b>	<b>13</b>

Senior Year - 2nd Semester	
Course	Hr
RC 4223	2
RC 4321	3
RC 4322	3
RC 4225	2
RC 4224	2
<b>Total</b>	<b>12</b>

## Courses in Respiratory Care (RC)

- 2213 Introduction to Respiratory Care. (2-0) This course offers an in-depth overview of the respiratory care profession to acquaint the student with the responsibilities of the respiratory therapist as part of healthcare team. Progression of the profession, career opportunities, past and future impact of profession on patient recovery and health maintenance, and medical gas therapy will be covered.
- 2352 Cardiopulmonary-Renal Anatomy and Physiology. (3-0) Detailed study of the structure and function of the respiratory, cardiovascular, and renal systems. Prerequisite: BIO 2430 or instructor approval.
- 2375 Respiratory Care Practice III. (0-16) A supervised clinical education experience in which the student organizes and administers advanced respiratory therapeutics on assigned patients in adult critical care. Diagnostic procedures, including arterial blood gas procurement and measurement, bedside physiologic monitoring, airway care, basic pulmonary function testing, as well as monitoring and maintenance of ventilator parameters are performed.
- 3125 Pulmonary Function Testing. (0-4) This course examines the most common pulmonary function tests, their techniques, and the pathophysiology that may be evaluated by each test. Pulmonary function equipment, calibration, and the American Thoracic Society guidelines will be discussed. Laboratory practice of performing the tests will be provided to develop skills for testing patients.
- 3212 Pharmacology. (2-0) A comprehensive study of pharmacology principles. Receptor theory, clinical applications of medications, and historical analysis of first-generation medications will be covered. Current medication trends and recommendations are also examined.
- 3232 Hemodynamic Diagnostics. (2-0) An advanced study of cardiovascular hemodynamic measurements. Normal cardiovascular physiology and measures are examined, as well as variations caused by disease. Current clinical trends and practices in hemodynamic procedures are also explored.
- 3310 Cardiopulmonary/Renal Gross Anatomy. (2-3) Designed to acquaint the student with the anatomy and physiology of the cardiovascular, pulmonary, and renal systems. Students will participate in the cadaver dissection and radiographic anatomy by matching cadaver cardiopulmonary structures with radiographic findings. Prerequisites: BIO 2430 and RC 2352.
- 3311 Applied Pathology. (3-0) Lecture series and case presentation related to pathophysiology, etiology, symptoms, diagnosis and treatment of selected pulmonary disease entities, cardiac diseases, neurologic disease processes and occupationally acquired disease entities as they relate to respiratory function. Clinical Simulation software utilized for clinical patient assessment, diagnostic data gathering and treatment. (WI)
- 3313 RC Clinical Practice I. (0-16) This course provides an introduction to respiratory care clinical skills, including vital signs, chest assessment, infection control, aerosolized medication delivery, oxygen therapy, hyperinflation therapy, and airway clearance. This course prepares the student for direct patient care to be performed in more advanced courses. Direct patient care is performed under close supervision.
- 3314 Respiratory Care Instrumentation. (2-3) Through lectures and lab exercises, students are acquainted with concepts of design, function, and operation of basic respiratory care equipment. Oxygen cylinders, regulators, flowmeters, oxygen analyzers, oximeters, oxygen adjuncts, humidifiers, nebulizers, airways, and pressure cycled ventilators will be covered. The course also covers respiratory pharmacology, decontamination of equipment, and arrhythmia recognition.
- 3315 Cardiopulmonary - Renal Anatomy and Physiology. (2-3) This course provides an in-depth human gross anatomy study of the cardiac, respiratory, and renal systems. Clinical application of pulmonary anatomy and physiology will also be explored.
- 3316 Fundamentals of Respiratory Care. (3-0) This course provides a study of theories and modalities utilized in delivering, monitoring, and evaluating basic respiratory therapeutics to patients with compromised respiratory function in various healthcare settings. Aspects of artificial ventilation, arterial blood gas analysis, lung volume diagnostics, and hyperinflation intervention will be covered in patient scenarios.
- 3321 Cardiopulmonary Pathology. (3-0) As an introduction to the assessment, treatment, and pathophysiology of respiratory diseases, this course focuses on the signs, symptoms, etiology, pathophysiology, diagnosis and treatment of selected diseases. Utilizing clinical simulation software to develop critical thinking regarding assessment, diagnostic data gathering. (WI)
- 3322 Critical Care Concepts. (3-0) This course provides students with an in-depth study of selected respiratory care techniques with an emphasis on the care of critically ill patients. Critical skills and knowledge of mechanical ventilation, bedside diagnostic techniques, patient monitoring, and rehabilitation are explored in the critical care setting.
- 3323 RC Clinical Practice II. (0-16) Students perform clinical procedures and interact with patients and professional personnel in a healthcare institution under the supervision of a respiratory therapist. Students gain direct patient care experience as presented in medical/surgical and pediatric clinical situations. Preparatory instruction is provided for mechanical ventilation and other critical care procedures.
- 3324 Critical Care Instrumentation. (2-3) A comprehensive study of advanced equipment and technology utilized in the critical care, homecare, pulmonary rehabilitation and blood gas lab settings. Lectures and class activities will detail hardware for hemodynamic monitoring, supplemental oxygen administration, noninvasive monitoring, blood gas measurement, quality control and assurance and mechanical ventilator concepts.
- 3330 Advanced Respiratory Care Technology. (3-0) In-depth study of respiratory physiology comparing the cardiopulmonary system of the adult, infant, and fetus. Emphasis is placed on how to evaluate, treat and monitor patients with respiratory insufficiency or failure.
- 3333 RC Clinical Practice III. (0-16) A supervised clinical education experience in which the student administers advanced respiratory therapeutics to patients in the adult critical care setting. Diagnostic and monitoring procedures, including arterial blood gases, bedside physiologic monitoring, airway care, advanced pulmonary function testing, ventilator management will be performed according to physician orders.
- 3334 Neonatal Respiratory Care. (2-3) An in-depth study of neonatal utero development, fetal lung development, fetal circulation, and cardiovascular changes at birth. Neonatal

- respiratory emergencies, neonatal respiratory diseases and management, congenital defects, and respiratory care procedures specific to the neonate will be discussed. A specific emphasis on neonatal mechanical ventilation will be included.
- 3335 RC Clinical Practice IV. (0-16) This course provides an advanced clinical education experience in respiratory therapeutics on patients in the adult critical care setting. Appropriate clinical expectations include experience in arterial blood gas procurement and measurement, bedside physiologic monitoring, airway care, and monitoring of mechanical ventilation in the intensive care unit.
- 3352 Advanced Ventilator Concepts. (3-0) In-depth study of specific ventilators used in adult, pediatric and neonatal ventilation to include ventilator classification, method of operation, parameter interrelationships and ventilator patient monitoring. Lectures and class activities will focus on ventilator analysis of several contemporary volume, time, pressure, and flow-cycled ventilators.
- 3365 Respiratory Care Practice IV. (0-16) Advanced clinical education in the intensive care setting in which the student monitors and administers critical care therapeutics on assigned patients in the adult and neonatal intensive care setting. Physician input and pulmonary rounds assist students in theory and application of care for the critically ill patient.
- 3375 ICU Internship. (0-16) Through affiliations with agencies, hospitals and selected treatment centers the student interns in the intensive care setting by monitoring and administering critical care therapeutics. Analysis and clinical application of advanced ventilator care of patients is emphasized along with patient care diagnostics and management in the ICU.
- 4211 Respiratory Care Research (2-0) This course provides an introduction to applied experimental design, research ethics, and data analysis focusing on the respiratory care profession. Students will participate in each step the research process from developing a personal research hypothesis and research design through IRB submission. Prerequisite: HP 3302 or equivalent.
- 4212 Critical Care Clinical Simulation. (1-3) This course will prepare respiratory care students to successfully navigate multiple clinical simulation patient cases. Clinical simulations covered reflect real-life patient scenarios and mirror the content found on national board exams. Students will receive focused attention on board exam review and evidence-based care.
- 4214 Polysomnography Instrumentation II. (0-2) Advanced study of waveform characteristics and montage development, filters, and PSG electronics. Signal pathways, reference electrodes, impedance checking, and filter settings in calibration waves will be covered. Prerequisite: Departmental approval.
- 4220 Cardiovascular and Pulmonary Diagnostics. (2-0) Examination of non-invasive monitoring technology in respiratory care, hemodynamic monitoring, acid-base interpretation of blood gas and application, and pulmonary function test interpretation.
- 4223 ICU Internship. (0-8) Through affiliations with agencies, hospitals and selected treatment centers, the student interns in the intensive care setting by providing patient care and administering critical care therapeutics. Analysis and clinical application of advanced ventilator care of patients is emphasized along with patient care diagnostics and management in the ICU.
- 4224 Research Seminar. (2-0) A study of the research process from a review of research design to methodology implementation including data collection, statistical analysis, and presentation of a research proposal on a topic in the respiratory care discipline. The course provides direct research experience culminating in a research paper and presentation. Prerequisite: RC 4211.
- 4225 Specialization Internship. (0-8) This course provides the student with an internship opportunity to gain clinical experience in sub-specialty areas including pediatrics, adult intensive care, neonatal intensive care, pulmonary function testing, home care/durable medical equipment, subacute care, pulmonary rehabilitation, polysomnography, education, and research. Specific specialty offerings will be based on clinical availability.
- 4246 Respiratory Care Internship. (0-16) Provides the student with opportunities to gain clinical experience in specialty areas to include pediatrics, adult critical care, neonatal intensive care, pulmonary function diagnostics, home care, subacute care, pulmonary rehabilitation or polysomnography. Specific specialty offerings will be based on clinical availability. Repeatable for credit with different emphasis.
- 4310 Fundamentals of Polysomnography. (3-0) Introduction to the physiology of sleep, including sleep neurology, sleep architecture, and the classification of sleep disorders. Review of basic cardiac physiology and ECG arrhythmia recognition. Sleep pathologies will be discussed according to etiology, pathophysiology, symptoms, diagnosis, treatment, and prognosis. Prerequisite: Departmental approval.
- 4313 Polysomnographic Therapeutic Intervention. (3-0) In-depth study of the treatments available for sleep apnea, including CPAP, BiPAP, oxygen therapy, patient adjunctive fitting, surgical intervention, and the role of the sleep tech in titration. Special attention will be given to titration algorithms, nocturnal seizure disorder studies, REM behavior disorder studies, MSLT's and MWT's. Prerequisite: Departmental approval.
- 4314 Advanced Ventilator Concepts. (2-3) This course provides an in-depth study of specific adult mechanical ventilators addressing traditional and proposed ventilator classification, various methods of operation, parameter interrelationships and ventilator patient monitoring. Lectures and class activities will focus on ventilator analysis of several contemporary volume-, time-, pressure- and flow-cycled ventilators with advanced graphics interpretation required.
- 4315 Neonatal Respiratory Care. (3-0) In-depth study of neonatal intensive care, pediatric/neonatal respiratory emergencies, chronic pediatric respiratory diseases, fetal lung development, fetal circulation, changes at birth, neonatal respiratory disease and its management, congenital defects and other related aspects.
- 4316 RC Clinical Practice V. (0-16) This course provides an advanced intensive care clinical education requiring students to monitor and administer critical care therapeutics on assigned patients in the adult and neonatal critical care setting. Cardiopulmonary diagnostic experience will be gained through arterial blood gas and co-oximetry assessment with

- ventilator graphic analysis.
- 4317 Pulmonary Rehabilitation. (3-0) This course is designed to introduce students to the medical, ethical, and insurance reimbursement issues of pulmonary rehabilitation, homecare, and sleep diagnostic facilities. The role of therapists in case management, treatment requirements, and discharge planning along with the impact of legislation, regulations, and politics will be explored.
- 4318 Independent Study in Respiratory Care. (3-0) This course provides the student an in-depth study on a topic or health-care problem impacting respiratory care. The course may be repeated for credit with a different emphasis.
- 4320 Contemporary Issues in Cardiopulmonary Care. (3-0) This course is designed to prepare senior-level students for the dynamic evolution of respiratory care as a profession. It will build on previous didactic courses and clinical experiences. It will examine opportunities for respiratory therapists in continuing care and home care and also cover the impact and role of legislation, regulations, professional organizations and politics in respiratory care. Ethics of patient care and professional behavior will be explored. Repeatable for credit with different emphasis. (WI)
- 4321 Leadership and Management for Respiratory Care Professionals. (3-0) This course is designed to comprehensively examine the dynamic evolution of respiratory care as a profession. The role of the respiratory care professional in the areas of leadership, management, and professional ethics will be explored with regards to the profession's impact on legislation, regulation, and politics. (WI)
- 4322 RC Practitioner Seminar. (3-0) Students will research and present selected case studies by students to physicians, therapists, and colleagues. Presentations will emphasize total patient management with etiology, symptoms, pathophysiology, diagnosis, and treatment of specific diseases including asthma, pulmonary embolism, CHF, COPD, ARDS, neurologic diseases, inhalational injury, pneumonia, sleep disordered breathing, AIDS, and drug overdose. (WI)
- 4330 Pulmonary Rehabilitation. (3-0) An introduction to medical, ethical, and reimbursement issues of respiratory care pulmonary rehab and home care. The role of the therapist in cost containment, treatment requirements, and discharge planning will be addressed. Frequently applied respiratory and durable medical equipment will be discussed in detail.
- 4341 Respiratory Care Seminar. (3-0) Individual and group presentation of selected case studies by the student to physicians, therapists and other students. Emphasis placed on total patient management with etiology, symptoms, pathophysiology, diagnosis, and treatment of specific diseases such as asthma, pulmonary edema, CHF, CF, COPD, ARDS, neurologic diseases, pulmonary fibrosis, pneumonia, bronchiectasis, AIDS and drug overdose. (WI)
- 4350 Respiratory Care Research. (3-0) An introduction to research methods, experimental inquiry, and naturalistic observations. This course is designed to acquaint the student with the necessary skills to conduct research in respiratory care. The primary purpose is to provide a foundation from which the student will critique, develop, and apply multiple research strategies. Repeatable with different emphasis. Prerequisite: HP 3302 or equivalent.
- 4412 Clinical Polysomnography-Sleep Staging I. (0-10) Direct patient diagnostic monitoring is performed under close supervision in a sleep lab. Differential amplifiers, amplifier calibration, artifact correction, and the professional role of the sleep tech will be demonstrated. Prerequisite: Departmental approval.
- 4415 Clinical Polysomnography-Sleep Staging II. (0-10) Advanced clinical education in sleep staging rules, light, delta, and REM sleep scoring and analysis. EEG, EMG, ECG, and respiratory events will be discussed in-depth and are components of the polysomnogram report. Prerequisite: Departmental approval.