Catalog Home

Texas A&M University-Corpus Christi

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Texas A&M University-Corpus Christi
6300 Ocean Drive
Corpus Christi, Texas 78412
Telephone: (361) 825-5700

Accreditation

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

The Athletic Training Education Program which offers a Bachelor of Science degree with a Major in Athletic Training is accredited by the Commission on Accreditation of Athletic Training Education (CAATE), 2201 Double Creek Drive, Suite 5006, Round Rock, TX 78664; telephone (512) 733-9700.

The Accounting and Business Bachelor's and Master's degree programs are accredited by AACSB International – The Association to Advance Collegiate Schools of Business, 777 South Harbour Island Boulevard, Suite 750, Tampa, FL 33602-5730; USA; telephone 813-769-6500; fax 813-769-6559.

The baccalaureate degree program and the master's degree program in nursing at Texas A&M University – Corpus Christi are accredited by the Commission on Collegiate Nursing Education (http://www.ccneaccreditation.org).

The Doctor of Nursing Practice program at Texas A&M University – Corpus Christi is pursuing initial accreditation by the Commission on Collegiate Nursing Education (http://www.ccneaccreditation.org). Applying for accreditation does not guarantee that accreditation will be granted.
Texas A&M University-Corpus Christi is an accredited institutional member of the National Association of Schools of Music, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190-5248.

The Clinical Laboratory Science program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences, 5600 N. River Rd. Suite 720, Rosemont, IL 60018-5119 – telephone: 773-714-8880.

The bachelor's degree program in Geographic Information Science is accredited by the Applied and Natural Science Accreditation Commission (ANSAC) of ABET, www.abet.org.

The bachelor's degree program in Electrical Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, www.abet.org.

The bachelor's degree program in Mechanical Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, www.abet.org.

The bachelor's degree program in Mechanical Engineering Technology is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, www.abet.org.

The bachelor's degree program in Computer Science-Systems Programming option is accredited by the Computing Accreditation Commission (CAC) of ABET, www.abet.org.

The Counseling and Educational Psychology Department's master's programs in Community Counseling, School Counseling, and Marriage and Family Counseling, as well as the doctor of philosophy in Counselor Education are accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP), 1001 Fairfax Street, Suite 510, Alexandria, VA 22314 – telephone: (703) 535-5990, email: cacrep@cacrep.org.

In addition, numerous memberships are held by the University in selective associations and societies that recognize high standards in specific fields.

Student Responsibility

University personnel may assist students in progressing toward the degree that they are seeking. However, the final and ultimate responsibility for understanding and following the degree requirements rests with the students themselves. Each student is held responsible for knowing degree requirements, for enrolling in courses that fit into degree programs and for taking courses in the proper sequence to ensure orderly progression of work. The student must seek advice about degree requirements and other University
policies when necessary. The student is held responsible for knowing and abiding by University regulations regarding the standard of work required to continue in the University, as well as those dealing with academic integrity, scholastic probation, suspension, and dismissal. Additionally, the student is expected to comply with the rules in the Student Code of Conduct, as well as the processes in the latter, which are administered by the Office of Student Engagement and Success.

The University reserves the right to require a student to withdraw at any time, as well as the right to impose probation on any student whose conduct is unsatisfactory. An admission on the basis of false statements or documents is void upon discovery of the fraud, and the student is not entitled to any credit for work that he/she may have done at the University. Upon dismissal or suspension from the University for cause, there will be no refund of tuition and fees. The balance due the University will be considered receivable and will be collected.

Equal Educational/Employment Opportunity

With respect to the admission and education of students; the availability of student loans, grants, scholarships and job opportunities; the employment and promotion of teaching and non-teaching personnel; and the student and faculty activities conducted on premises owned or occupied by the University, Texas A&M University-Corpus Christi shall not discriminate either in favor of or against any U.S. citizen on the basis of race, creed, color, sex, age, national origin or disability.

Catalog Subject To Change

The provisions of this catalog do not constitute a contract, express or implied, between any applicant, student, or faculty or staff member of Texas A&M University-Corpus Christi or The Texas A&M University System. This catalog is for informational purposes only. The University reserves the right to change or alter any statement herein without prior notice. This catalog should not be interpreted to allow a student that begins his or her education under the catalog to continue the program under the provisions in the catalog.

Message from the President

At Texas A&M University-Corpus Christi, everyone is committed to your success. We understand that your college experience extends beyond the classroom, and we are dedicated to ensuring you have everything you need to focus on your studies, gain valuable experiences and knowledge, and participate in a vibrant and active campus life.
We offer opportunities for students to work directly with faculty on important research that has a positive impact in our communities. Our renowned faculty work on innovative solutions to regional, national and international issues through the Harte Research Institute for Gulf of Mexico Studies, the Conrad Blucher Institute, and the Lonestar UAS Center of Excellence and Innovation. We also offer opportunities to develop leadership skills in every academic discipline.

We are committed to providing an excellent educational environment that embraces diversity, offers a wide variety of student organizations and activities including NCAA Division I athletics, and encourages involvement in our community. We believe in making an impact in your life and look forward to the impact you will make after you become part of our Islander family.

Sincerely,

Kelly M. Miller
President/CEO
Texas A&M University-Corpus Christi

General Information

Directory of Campus Offices and Services

Admissions

Office of Recruitment and Admissions
Student Service Center (SSC 100) (361) 825-7024
email: admiss@tamucc.edu

Financial Assistance

Office of Financial Assistance
Student Services Center (SSC) 115(361) 825-2338

Student Services
Office of Student Engagement and Success
University Center (UC) 318 (361) 825-2612

Dean of Students
University Center (UC) 318 (361) 825-2612

Student Housing
University Center (UC) 318 (361) 825-2612

Career Services
University Center (UC) 304 (361) 825-2628

Disability Services
Corpus Christi Hall (CCH) 116 (361) 825-5816

Office of International Education
University Center (UC) 226 (361) 825-3922

Recreational Sports
Dugan Wellness Center (361) 825-2454

University Center and Student Activities (361) 825-5200
University Center (UC) 216 (361) 825-2707

University Counseling Center
Driftwood Hall 106 (361) 825-2703

University Health Center
Transcripts; Class Schedules
Registrar's Office
Student Services Center (SSC) 100 (361) 825-2624

Library Services
Mary and Jeff Bell Library (361) 825-2643

Tuition and Fees
Business Office
Student Services Center (SSC) – 1st floor (361) 825-2600

Tutoring
Center for Academic Student Achievement
Glasscock Student Success Center (361) 825-5933

Testing
Office of Academic Testing
Student Services Center (SSC) 210 (361) 825-2334

University Services
University Services (Bookstore, Food Services, Copy Services, Mail Services, SandDollar$ Office) (361) 825-5710

Veterans Educational Benefits
The University

Texas A&M University-Corpus Christi, a public institution of higher education, awards bachelor's, master's, and doctoral degrees. Situated on a coastal island, A&M-Corpus Christi's modern campus serves a diverse population of over 12,000 students, including over 1,900 graduate students. The University is a member of The Texas A&M University System.

Institutional Vision and Mission

Vision

Texas A&M University-Corpus Christi is committed to becoming one of the leading centers of higher education in the Gulf of Mexico region while serving the intellectual, cultural, social, environmental, and economic needs of South Texas. As a result, Texas A&M University-Corpus Christi will invigorate and strengthen the region and state through its educational programs, research initiatives, and outreach efforts.

Mission

Texas A&M University-Corpus Christi is an expanding, doctoral-granting institution committed to preparing graduates for lifelong learning and responsible citizenship in the global community. We are dedicated to excellence in teaching, research, creative activity and service. Our supportive, multicultural learning community provides undergraduate
and graduate students with a challenging educational experience through residential, distance learning and international programs. The university's federal designation as a Hispanic Serving Institution (HSI) provides a foundation for closing educational gaps, while its strategic location on the Gulf of Mexico and on the cultural border with Latin America provides a basis for gaining national and international prominence.

Institutional History

The island campus of Texas A&M University-Corpus Christi has been a setting for higher education since 1947. That year, Ward Island became the home of the University of Corpus Christi (UCC), an institution affiliated with the Baptist General Convention of Texas. The UCC campus was developed on land previously used by the U.S. Navy as a radar training facility.

In 1970, Hurricane Celia severely damaged the college campus. The following year, UCC and the Baptist General Convention took steps to end their affiliation. Concerned about higher education in Corpus Christi, a coalition of civic leaders sought local support as well as state legislation to convert the campus of UCC to a state-supported institution with an expanded curriculum.

In 1971, the 62nd session of the Texas Legislature authorized the creation of a state-supported institution of higher education in Corpus Christi. The Board of Directors of the Texas A&I University System was authorized to establish an upper-level university and to prescribe courses for the new institution at the junior, senior, and graduate levels leading to both bachelor's and master's degrees.

Funding was approved by the legislature to initiate planning for the university. The citizens of Corpus Christi approved a bond issue to purchase the campus of the University of Corpus Christi on Ward Island. Subsequently, the campus was given to the State of Texas as a site for the new state-supported university. Civic leaders in Corpus Christi also launched a successful public fund raising campaign to provide local financial support for the fledgling university. On September 4, 1973, several months after UCC completed its final classes, Texas A&I University at Corpus Christi opened its doors with an initial enrollment of 969 students.

In 1977, the legislature changed the name of the institution to Corpus Christi State University. The name of the University System, which also included Laredo State University and Texas A&I University, was changed the same year to the University System of South Texas (USST).

In 1989, the Texas Legislature abolished the University System of South Texas and merged Corpus Christi State University and the other two USST universities into The
Texas A&M University System. In the same year, the legislature approved the expansion of Corpus Christi State University to a four-year comprehensive university, with enrollment of freshmen and sophomores to begin in fall 1994. In 1992, the role of the institution was expanded further when the Texas Higher Education Coordinating Board authorized the University to offer its first doctoral degree program. Another milestone occurred in 1993 when The Texas A&M University System Board of Regents renamed the institution Texas A&M University-Corpus Christi.

The arrival of freshman and sophomore students in 1994 marked the transformation of the institution to a four-year university. Since then, student enrollment, facilities, and program offerings for both undergraduate and graduate students have continued to expand. In 2008, the City of Corpus Christi donated approximately 137 acres of land near the island campus to ensure adequate space for future growth.

Campus Facilities

Located on its own 240-acre island, the University features modern classroom buildings, support facilities, and student apartments and residence halls. Surrounded by the waters of Corpus Christi and Oso Bays, the campus is approximately ten miles from downtown Corpus Christi. Plazas, landscaping, and sculptures enhance the island campus. The University is also developing an additional 137 acres located off of Ennis Joslin Road.

Mary and Jeff Bell Library

The Mary and Jeff Bell Library is the University's major resource for research and study. The Library houses a collection of approximately 578,000 books, bound periodicals, microforms, and government publications, and maintains subscriptions to over 2,800 serials and research sets in paper and microform formats. In addition, the Library provides electronic access to over 30,000 additional titles through approximately 250 database subscriptions. Strong media collections and significant collections of South Texas books and archival materials provide unique resources for scholars.

Librarians assist individuals in locating, using, and evaluating information resources that support and enhance curriculum and research. Librarians also instruct classes in the use of information resources in specific subject areas. Librarians review resources and services regularly to ensure that both collections and services meet changing curricular needs and support the development of new academic programs.

The Special Collections and Archives Department houses a collection of rare books and archives dealing primarily with the life, history and culture of Corpus Christi and South Texas as well as other books and manuscripts that require special housing and handling.
These materials are available to individual students, university classes, and researchers under special and appropriate conditions within the department.

The Library is also an authorized depository for federal. As a depository the library provides the university and general public with access to government information in many formats.

The Library actively participates in national, state, and regional networks, commercial information services, area library agreements and interlibrary loan arrangements that provide access to materials not available on the Texas A&M University-Corpus Christi campus. Through the statewide TexShare cooperative library program, students and faculty have borrowing privileges at many other academic and public libraries in Texas.

Computing Resources

Student computing facilities at Texas A&M University-Corpus Christi are part of the campus network. Computer laboratories available for student use are located in the library and several other buildings. Various types of personal computers, such as Macintosh, RISC, and PC type; full-page scanners; laser printers; and graphic stations make up the laboratory machinery. Most computer laboratories are open over 85 hours per week, and are staffed with student lab assistants who provide support in various programs. The laboratories are equipped with a wide range of software applications, such as word processors, spreadsheets, graphics programs, programming languages, and specialized software applications that support individual classes. Internet access and e-mail are available for university students either on or off campus. Wireless access is available. Remote access to the network is provided. Students receive assistance via computer help sheets, online tutorials and a helpdesk.

Student Services Center

In the round building near the center of campus, students can find the Offices of Recruitment and Admissions, Registrar, Financial Assistance and Veterans Affairs, as well as the Business Office, Academic Testing Center, and other units serving students.

Classroom Facilities

Classroom facilities are located in the Center for Instruction, Center for the Sciences, Science and Technology Building, Center for the Arts, Bay Hall, Island Hall, and the Michael and Karen O'Connor Building. Many teaching areas include state-of-the-art audio-video and computer equipment.
Visual and Performing Arts Facilities

The Performing Arts Center features a 1500-seat concert hall where local, national, and international artists perform. The Center for the Arts houses the Warren Theatre (a 275 seat, continental-style auditorium), the Wilson Studio Theatre (an experimental theatre), and the Weil Gallery. Also affiliated with the University is the Art Museum of South Texas, located in downtown Corpus Christi.

University Center

The University Center provides facilities and services for students, faculty, staff, and guests of the University. The center contains student services offices, space for student organizations and student activities, food services, the bookstore and other shops, the campus post office, a branch bank and study lounges, meeting rooms, and entertainment areas.

Conrad Blucher Institute for Surveying and Science

The Conrad Blucher Institute for Surveying and Science houses research laboratories and provides research and professional development for surveyors, science education and surveying related research.

Carlos F. Truan Natural Resources Center

University programs and state agencies focusing on natural resources are housed in the Carlos F. Truan Natural Resources Center.

Dugan Wellness Center

The Dr. Jack and Susie Dugan Wellness Center includes a gymnasium, free weights, weight machines, cardiovascular exercise equipment (treadmills, elliptical trainers, steppers and bikes), multi-purpose group exercise rooms, and offices for the Recreational Sports Department and Intercollegiate Athletics Department.

Harte Research Institute

This research facility houses the endowed Harte Research Institute for Gulf of Mexico Studies, whose mission is to support and advance the long-term sustainable use and conservation of the Gulf of Mexico.
Blanche Davis Moore Early Childhood Development Center and Math and Science Resource Center

The Blanche Davis Moore Early Childhood Development Center serves as a public school for area children and as a university teaching laboratory and research center. Children attending the school are selected from a stratified random sample. Housed adjacent to the Blanche Davis Moore Early Childhood Development Center is the Math and Science Resource Center which addresses the nation-wide shortage of math and science teachers through programs for teachers and students.

List of Degree Programs

Degree Programs

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<th>Academic Area</th>
<th>Undergraduate Degree</th>
<th>Graduate Degree</th>
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<td>Clinical Psychology</td>
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<td>Criminal Justice</td>
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<td>Curriculum and Instruction</td>
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<td>Finance</td>
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<td>Geospatial Computer Science</td>
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<td>Kinesiology</td>
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<td>Marine Biology</td>
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<tr>
<td>University Studies</td>
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**Pre-Professional Programs**

Pre-law

Pre-dental, pre-medical, pre-optometry, pre-veterinary medicine

These programs are available through a selection of appropriate courses taken for a designated major within the college. A faculty advisor appointed by the college assists in selection of major study and degree plan specialization courses.
*College Abbreviations:

Business: BU
Education and Human Development: EH
Liberal Arts: LA
Nursing and Health Sciences: NH
Science and Engineering: SE
University College: UC

**Graduate and Postbaccalaureate Certificates**

Alternative Certification of Educators
Bilingual Education
Clinical Laboratory Science
Counseling Spanish-Speaking Clients
Educational Diagnostician
English as a Second Language
Family Nurse Practitioner Post-Masters
Gifted and Talented
Health Care Administration
Homeland Security
Geomorphics
Geographic Information Systems
Leadership in Nursing Systems Post-Masters
Nurse Educator Post-Masters
Principal
Reading Specialist
Teacher Certification

Teacher Certification is available through the College of Education and Human Development. Teaching specializations accompanying certification are available through the College of Liberal Arts, College of Education and Human Development, and College of Science and Engineering.

<table>
<thead>
<tr>
<th>Certification</th>
<th>Related Undergraduate Major</th>
<th>College</th>
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</thead>
<tbody>
<tr>
<td>Early Childhood (EC) to Grade 6</td>
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<tr>
<td>EC-6 Core Subjects with Reading Delivery</td>
<td>Elementary Education</td>
<td>EH</td>
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<tr>
<td>EC-6 Core Subjects with Bilingual Delivery</td>
<td>Elementary Education</td>
<td>EH</td>
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<tr>
<td>EC-6 Core Subjects with Early Childhood Delivery with STEM Focus</td>
<td>Elementary Education</td>
<td>EH</td>
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<tr>
<td>Grades 4–8</td>
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<tr>
<td>English Language Arts and Reading English</td>
<td>LA</td>
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<td>Mathematics</td>
<td>Elementary Education</td>
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<tr>
<td>Science</td>
<td>Environmental Science</td>
<td>SE</td>
</tr>
<tr>
<td>Social Studies</td>
<td>History</td>
<td>LA</td>
</tr>
</tbody>
</table>
### Grades 7–12

- English Language Arts and Reading  English  LA
- History  History  LA
- Life Science  Biology  SE
- Mathematics  Mathematics  SE
- Physical Science  Chemistry  SE
- Social Studies  History  LA
- Speech  Communication  LA

### Early Childhood (EC) to Grade 12

- Art  Art  LA
- Music  Music  LA
- Physical Education  Kinesiology  EH
- Spanish  Spanish  LA
- Special Education  Elementary Education  EH
- Theatre  Theatre  LA

### Professional Certifications

See the Graduate Catalog for a list of graduate-level, professional certifications available through the College of Education and Human Development.

### Admissions

Texas A&M University-Corpus Christi considers itself to be an advocate of opportunity, particularly for those persons residing in the South Texas Region. Accordingly, the
admission standards and policies of the University have been designed to identify students who show potential for academic success.

**Undergraduate Admission**

There are eight categories of undergraduate admission to the University:

- Regular Freshman Admission (Regular First-Year Admission)
- Alternative Freshman Admission (Alternative First-Year Admission)
- Transfer Student Admission
- Transient Admission
- International Student Admission
- Postbaccalaureate Admission
- High School Dual Enrollment Program
- Readmission

These categories and their associated requirements are described below.

Applications to Texas A&M University-Corpus Christi through any of the eight admission categories will be processed only after all required documentation and fees have been received. An application is considered to be complete only when the Office of Recruitment and Admissions has received all required documentation, including completed application forms, required test scores, and any other information or fees specifically required. Incomplete applications will not be processed.

Completed applications are processed as they are received, and applicants are usually informed of their admission status within three to four weeks.

Application materials and information concerning all aspects of the admissions process may be obtained directly from:

Office of Recruitment and Admissions
Texas A&M University-Corpus Christi
6300 Ocean Drive, Unit 5774
Corpus Christi, TX 78412-5774

Telephone: (361) 825-2624

Prospective students are strongly urged to apply early.
Application Fee

Applicants applying or reapplying to Texas A&M University-Corpus Christi are required to pay a non-refundable application fee of $40. The fee may be waived only in exceptional cases for applicants with financial hardships. An applicant in such circumstances should request his or her high school counselor, financial aid officer, or social worker to submit a letter verifying the need for a waiver with the application for admission. Applications submitted after the published deadline for the intended semester of enrollment will be assessed an additional $10 late application fee.

Applicants who are not U.S. citizens are considered through International Admission. For international applicants, the nonrefundable application fee is $75.00, paid in U.S. currency. Applications submitted after the published deadline for the intended semester of enrollment will be assessed an additional $10 late application fee.

Freshman Admission Procedure

Application and Transcript Submission

A student may apply for admission by completing the ApplyTexas Application (for U.S. Freshman Admission) online at www.applytexas.org or www.tamucc.edu. Upon completion of the application, an applicant should submit appropriate application fee to Texas A&M University-Corpus Christi. The student must request his or her registrar to (1) send an official final transcript indicating grades through the applicant's junior year and his or her class rank and (2) confirm the courses that will be completed through the senior year. Any student who has already graduated from high school at the time of application must furnish an official transcript, which includes the date of graduation, class rank, and grades for all courses taken and the official high school graduation plan. To be considered official, a transcript must bear an original signature of a school official and/or the school seal. Applicants should submit the application, transcript, application fee, and any supporting credentials directly to the Office of Recruitment and Admissions.

Testing

*Due to COVID-19 and with the Texas A&M University System Chancellor's approval, submission of standardized test scores will be optional for first-time freshman applicants. Instead, Texas A&M University-Corpus Christi will utilize the combination of the student's high school class rank and GPA. Students may still submit SAT and/or ACT test scores for admission; this will not give the student any advantage or disadvantage.
Applicants must take either the Scholastic Assessment Test (SAT) or American College Test (ACT). Students are encouraged to take the SAT or the ACT during the spring of their junior year in high school. However, scores from tests taken later are acceptable if submitted by the freshman admission deadlines.

The SAT and ACT are offered at conveniently located testing centers throughout the United States and in major cities in many foreign countries. Testing dates, locations, and fees required are described in the information bulletin, which may be obtained from the student's high school or by writing the College Board ATP, P.O. Box 6200, Princeton, NJ 08541-6200, or the American College Testing Corporation, ACT Registration, P.O. Box 414, Iowa City, IA 52243-4198.

When registering, designate that the results be sent to Texas A&M University-Corpus Christi by the testing agency. Test scores may also be submitted on the official high school transcript. Test scores are not official and will not be accepted unless furnished in these manners. For Texas A&M University-Corpus Christi, the SAT code is 0366 and the ACT code is 4045.

State of Texas Uniform Admissions Policy

Texas Education Code (TEC) 51.803 – 51.809 requires all first-time freshmen seeking admission at a public four-year institution in Texas to satisfy one of the following college readiness standards in order to be eligible to be considered for admission.

- Successfully complete the Recommended or Advanced/Distinguished high school programs or a pre-college high school curriculum equivalent in content and rigor; or
- Satisfy ACT College Readiness Benchmarks (English- 18, Reading- 22, Mathematics- 22, and Science- 23); or
- Earn at least a 1500 out of 2400 SAT assessment score (Verbal + Math + Writing) or the equivalent

Regular Freshman Admission

Freshman applicants are those citizens or permanent residents of the United States who have not been enrolled in any college-level institution except while still in high school or during the summer immediately following high school graduation and before enrolling in
Texas A&M University-Corpus Christi for the subsequent fall. Freshman applicants are also called "first-year" applicants.

The best predictors of academic success have been a combination of high school class rank and standardized test scores. A student's high school class rank results from ongoing opportunities to demonstrate capabilities in familiar situations, whereas standardized tests use objective measures for gauging academic potential. Regular Freshman Admission is based upon the combination of these two factors.

Applications are reviewed to ensure that applicants present the basic academic preparation required to pursue study at this University. Students who seek admission into Texas A&M University-Corpus Christi must successfully complete the Recommended High School Program, the Distinguished Achievement Program, or another pre-college curriculum that is equivalent in content and rigor to fulfill the academic preparation requirement.

The units of study and acceptable high school courses are:

- **English**: 4 Credits;
- **Laboratory Science**: 4 Credits, at least 1 of which must be in Biology, Chemistry, or Physics;
- **Mathematics**: 4 Credits at the level of Algebra I, Geometry, Algebra II and a higher math;
- **Social Studies**: 3 Credits, which includes Economics;
- **Foreign Language**: 2 Credits in one foreign language or American Sign Language.

Students who have graduated in the top 25% of their high school classes and who successfully complete the required pre-college curriculum are admitted without minimum SAT or ACT score requirements. Such students, however, are required to submit official scores on either the SAT or ACT to the Office of Recruitment and Admissions. Students who have graduated in the top 25% who have not successfully completed a required pre-college curriculum or an equivalent are required to satisfy the automatic admissions standards outlined in Texas Education Code 51.000, including earning a minimum SAT assessment score of 1500 out of 2400 or the ACT composite score of a 21 or satisfy ACT's College Readiness Benchmarks on the ACT assessment.

The following requirements linking high school class standing and minimum SAT/ACT scores will apply:
Class  | Required SAT Score | New Redesigned SAT Composite Score (March 2016 and forward) | ACT Composite Score
---|---|---|---
Top 25% | No minimum | No minimum | No minimum
2nd Quarter | 1,000 | 1080 | 21
3rd Quarter | 1,100 | 1170 | 23
4th Quarter | 1,200 | 1270 | 27

All GED graduates are to present their State of Texas Official Certificate of High School Equivalency indicating a test passing status with a certificate issue date and certificate number.

Holders of GED certificates who seek admission are also subject to Regular Admission Requirements as shown below:

<table>
<thead>
<tr>
<th>SAT Composite Score</th>
<th>New Redesigned SAT Composite Score (March 2016 administration and forward)</th>
<th>ACT Composite Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000</td>
<td>1080</td>
<td>21</td>
</tr>
</tbody>
</table>

Those applicants who do not meet these standards will be considered for Conditional Freshman Admission.

**Freshman Admission Priority Application Dates**

To ensure full consideration, the ApplyTexas Application, application fee, required transcripts, and any supporting documentation must be in the Office of Recruitment and Admissions by the following priority dates:

- Fall Semester - March 1
- Spring Semester - November 1
- Summer Session - April 1

Completed applications received after the deadline date but before the beginning of regular registration will be processed as received.
Conditional Freshman Admission

Those students who do not meet regular admission requirements may be considered for Conditional Freshman Admission. The Undergraduate Admissions Committee will convene early Spring semester to review applications for consideration. In addition to reviewing the student's class rank, standardized test scores, and high school courses, the committee will consider other factors such as participation in extracurricular activities, including evidence of leadership; community service; talents and awards; extenuating circumstances; and employment, internships, and summer activities.

Applicants for Conditional Freshman Admission must have an official SAT or ACT score on file with the University. Applicants who score below a 19 on the ACT, a 900 on the old SAT or a 970 on the new SAT are not eligible for Conditional Freshman Admission. The applications considered under this procedure will be on a case-by-case basis. Students admitted under Conditional Freshman Admission will be subject to specific enrollment conditions based on the applicant's individual circumstances. These conditions may include enrolling in prescribed developmental course work, participating in tutoring sessions and other academic support activities, and meeting other conditions designed to promote academic success. The decision of the Undergraduate Admissions Committee is final. Subsequent admission reviews will be conducted on a case-by-case basis contingent on the submission of new academic credentials that demonstrate the student's admissibility into the University.

Exceptional Talent Policy

Admission based upon exceptional talent provides an important pathway to higher education for students who do not meet regular admissions criteria but who have outstanding abilities and/or experience. Accordingly, a select group of applicants may be considered for admission because they possess exceptional talents that are important to the intellectual vitality, prestige, and diversity of the university community. Areas identified for consideration under exceptional talent admissions include outstanding achievement in intellectual or creative endeavors including the visual and performing arts, communications, athletics, and other experiences that demonstrate unusual promise for leadership.

To determine eligibility, a student must document for the Undergraduate Admissions Committee his or her talent through an audition, portfolio, videotape, or written evidence of exceptional performance. Three written recommendations from individuals who are knowledgeable about the student's performance in his or her talent area are required. In the final selection of these students, the Undergraduate Admissions Committee must also take into consideration the academic record of each applicant to determine his or her
potential to graduate in a timely manner and successfully complete his or her academic career. Applications considered under the Exceptional Talent Policy will be on a case-by-case basis. Students admitted to the University by way of their exceptional talent may be required to take additional leveling courses at the request of the Undergraduate Admissions Committee.

Enrollment Management will monitor the number students admitted under the provisions of this policy and will include this information as part of an annual report to the Faculty Senate and the Provost.

Transfer Admission

The University was an upper-division transfer institution for more than twenty years. During that time, the institution earned a reputation for working effectively with transfer students. It is the aim of Texas A&M University-Corpus Christi to maintain that transfer-friendly reputation. Students who have earned 24 or more transferable semester hours of credit and who wish to transfer to the University must have a minimum cumulative grade point average (GPA) of 2.0 on a 4.0 scale. Those students who wish to transfer with fewer than 24 transferable hours of credit must have minimum cumulative of 2.0 on a 4.0 scale and must also satisfy the regular freshman entry requirements. A transfer applicant may not disregard his or her college record and apply for admission as a freshman. The following additional rules also apply:

1. The applicant must provide official copies of transcripts from each college or university attended. To be considered official, the transcript must bear the seal of the granting institution and must be submitted to Texas A&M University-Corpus Christi by the granting institution.
2. No remedial or duplicate credits may be transferred.
3. The applicant must be eligible to return to his or her previous institution.
4. The cumulative GPA includes all work attempted, excluding remedial, high school, or duplicate courses.
5. Repeated courses are calculated within the GPA according to the standards and rules of the granting institution. When multiple institutions of higher education have been attended, Texas A&M University-Corpus Christi will use the highest repeated course grade in the grade point calculation.

Transfer Admission Priority Application Dates

To ensure full consideration, the completed ApplyTexas Application (for U.S. Transfer Admission) and all required documents and supporting material must be on file in the Office of Recruitment and Admissions by the following priority dates:
Transient Admission

Students who are pursuing a degree at another college or university may be admitted as transient students if they provide proof of enrollment in good standing at their home college or university. Such students must complete an ApplyTexas Application (for Transient Admission) and submit an official transcript from their current institution of enrollment. Enrollment as a transient student is restricted to the summers or one long semester. Summer transient students must reapply each summer that enrollment is sought. Students admitted as transient students who later wish to pursue a degree at this University may do so by completing the regular admission process and meeting all admission requirements. International students cannot be admitted as transient students.

International Admission

International students (non-U.S. citizens) with outstanding academic records will be considered for admission. International students who seek admission to Texas A&M University-Corpus Christi must meet the following requirements:

1. Application and Fee: A completed ApplyTexas Application (for either International Freshman Admission or International Transfer Admission) and a $75 application fee are required.
2. Testing: Prospective students from other countries must demonstrate the ability to speak, write and understand the English language. Prospective students whose native language is not English must take the Test of English as a Foreign Language (TOEFL) examination or the International English Language Testing System (IELTS) examination unless they have already earned a bachelor's degree from an accredited institution in the United States or Canada, or successfully completed two years of instruction (taught in the English language) at a United States or Canadian high school or college. They must also have achieved an SAT Critical Reading Score of 600 or higher or an ACT English Subscore of 27, or provide compelling evidence of English proficiency to the Office of Recruitment and Admissions. A minimum score of 550 on the TOEFL paper examination, 79-80 on the TOEFL internet examination, or a 6.5 or higher on the IELTS examination is required for admission to the University. The TOEFL is
administered by the Educational Testing Service in over 200 centers around the world. A registration form and a "Bulletin of Information for Candidates" may be obtained by writing to TOEFL Registration Office, P.O. Box 6151, Princeton, New Jersey 08541-6151, USA. Applicants from the following countries will be exempt from the TOEFL or IELTS requirements:

Antigua and Barbuda
Australia
Bahamas
Barbados
Belize

Botswana*
Canada (all provinces except Quebec)
Fiji*
The Gambia*

Ghana*
Grenada

Guyana
Ireland
Jamaica

Kiribati
Liberia

Malta*
Marshall Islands
Mauritania
Mauritius

Micronesia
New Zealand

Nigeria
Saint Kitts and Nevis

Saint Lucia
Saint Vincent and the Grenadines
Sierra Leone *
Solomon Islands
Trinidad and Tobago

Uganda
United Kingdom
Zambia*

Zimbabwe*

*countries with asterisks are subject to review

Freshman international applicants must have their test scores for either the Scholastic Assessment Tests (SAT) or the American College Test (ACT) submitted to the Office of Recruitment and Admissions.

3. Transcripts: The University requires all transcripts from international high schools, colleges and universities to be evaluated by a certified evaluation agency approved by the Executive Director of Recruitment and Admissions. The evaluation report must be submitted by the agency to the Office of Recruitment and Admissions. A list of approved evaluation agencies is available from the Office of Recruitment and Admissions.

4. Grade Point Average (GPA): A cumulative GPA of 2.5 for all work attempted at other U.S. colleges or universities is required.

5. Finances: The U.S. Citizenship and Immigration Services (USCIS) and Texas A&M University-Corpus Christi require all international applicants to provide an "Affidavit of Support" form certifying ability to finance study in the U.S. The Affidavit of Support must be completed with U.S. currency figures only.

6. Immunizations and Related Requirements: International students are required to have a tuberculin skin test or chest x-ray and must meet all immunization requirements.

7. Health Insurance: All international students (students who are not citizens or permanent residents of the United States) must be covered by the Texas A&M University System's student health insurance plan or show proof of an equivalent insurance coverage. Students without insurance will not be permitted to register for classes. For information, contact the Coordinator of International Student Services.

International students should contact the Office of Recruitment and Admissions for further information on admission requirements for international students.
The admission application review will not begin until all required documents are received by the Office of Recruitment and Admissions.

An international student must be enrolled for a minimum of 12 semester hours during both the spring and fall semesters. An international student may not be admitted in undergraduate transient (visiting) or non-degree status. An international student sponsored by a program in a regionally accredited college or university may be admitted with the approval of the Office of Recruitment and Admissions.

International Admission Priority Application Dates

The completed ApplyTexas Application for admission of international students and all required documents and supporting material must be on file by the following priority dates:

Fall Semester - March 1

Spring Semester - November 1

Summer Session - April 1

International Student Advising

The Coordinator of International Student Services, located in the Office of International Education, oversees all academic and U.S. Citizenship and Immigration Services (USCIS) requirements of F-1 students attending A&M-Corpus Christi. International students are required to report to the Coordinator of International Student Services at the beginning of each semester to maintain accurate status and essential information. The Coordinator of International Student Services assists students with forms and paperwork required for optional and curricular practical training, changes on the I-20 form, change of status, reinstatement, and medical insurance.

For additional information regarding international students, contact the Coordinator of International Student Services in the Office of International Education at (361) 825-2258.

Postbaccalaureate Admission

A student holding a baccalaureate or higher degree who intends to seek an additional bachelor's degree or an additional undergraduate major or minor, or who intends to take undergraduate course work required for Texas public school teacher certification, should seek admission as postbaccalaureate student. Postbaccalaureate students may enroll in
undergraduate-level courses (numbered below 5000) only. The following documents are required as part of the application process:

1. A completed ApplyTexas Application form.
2. A nonrefundable $40 application fee.
3. Official transcripts documenting all course work taken at any regionally accredited college or university attended and the degree awarded at the completion of all coursework. Official transcripts must be submitted directly to Texas A&M University-Corpus Christi by the granting institutions.

High School Dual Enrollment

TAMU-CC offers high school students the opportunity to earn dual credit; a dual credit course is a class that awards both high school and college credit upon completion. High school students who wish to enroll at the University may do so if they are enrolled in the Islander Academy.

The Islander Academy allows high school students in Nueces County to take college classes at TAMU-CC. Students must complete an Islander Academy application in order to take TAMU-CC classes. For more information see http://dugs.tamucc.edu/Islander%20Academy/index-islander%20acad.html

Qualifications for the Islander Academy:

- You must be a current high school student
- You must have the approval of your legal guardian/parent, your high school counselor and your high school principal
- You must enroll in a course selected from the list of approved dual credit courses for TAMU-CC
- You must be prepared to function in an adult learning environment
- You must meet the Texas Success Initiative (TSI) requirement for reading, writing and math skills prior to enrolling in courses or meet the exemption standards. (A high school student is also eligible to enroll in academic dual credit courses that require demonstration of TSI college readiness in reading, writing, and/or mathematics under the following conditions: if the student achieves a Level 2 final recommended score, as defined by the Texas Education Agency (TEA), on the English II State of Texas Assessment of Academic Readiness End of Course (STAAR EOC); or a combined score of 107 on the PSAT/NMSQT with a minimum of 50 on the reading test; or a score of 460 on the evidence-based reading and writing (EBRW) test on a PSAT/NMSQT exam administered on or after October 15, 2015; or a composite score of 23 on the PLAN with a 19 or higher in English or an English score of 435 on the ACT-Aspire. For Courses that
require demonstration of TSI college readiness in mathematics: if the student achieves a Level 2 final recommended score, as defined by TEA, on the Algebra I STAAR EOC and passing grade in the Algebra II course; or a Level 2 final recommended score, as defined by TEA, on the Algebra II STAAR EOC; or a combined score of 107 on the PSAT/NMSQT with a minimum of 50 on the mathematics test; or a score of 510 on the mathematics test on a PSAT/NMSQT exam administered on or after October 15, 2015 or a composite score of 23 on the PLAN with a 19 or higher in mathematics or a mathematics score of 431 on the ACT-Aspire.)

High school students admitted under the Islander Academy will be advised by the Department of Undergraduate Studies. All students admitted into Islander Academy are subject to all Texas A&M University-Corpus Christi, Texas A&M University System, State of Texas, and federal rules and regulations applicable to degree-seeking students.

Students admitted under this program who wish to continue their degree with TAMU-CC following high school graduation must reapply for admission.

Readmission

Students who have a previous enrollment history with Texas A&M University-Corpus Christi but have not been enrolled for one (1) or more years are required to complete a new ApplyTexas Application. Re-enrollees who have not been enrolled in any postsecondary institution prior to the term for which they are applying and are in good academic standing with the University are eligible for admission.

Students who have enrolled at another institution prior to their return to the University are required to submit official transcripts from all postsecondary institutions attended since leaving A&M-Corpus Christi and must satisfy transfer admission requirements.

Texas Success Initiative (TSI)

The Texas Success Initiative is a state-legislated program that requires students to be assessed in reading, writing, and math skills prior to enrolling in a Texas public institution and to be advised based on that assessment. The Texas Higher Education Coordinating Board (THECB) has approved the TSI Assessment offered by College Board as the only acceptable assessment instrument for entering students. The assessment or the results of the assessment are not a condition of admission, but a condition of registration to an institution.
If a student's score on any section of an assessment is below passing, the student must enroll in appropriate developmental classes. Placement and participation in developmental education is determined on an individual basis for students by the Center for Academic Student Achievement. Students may contact an Intervention Specialist at 361-825-2977 or visit the office in the Glasscock Student Success Center. Students may re-test to meet the TSI standard. Institutions may consider the performance in developmental education, in college-level courses, and on an assessment instrument in determining college readiness. If a student does not participate in the specified courses or program prior to completing all TSI requirements, the student may be dropped from the University. The hours of the required developmental courses will count toward determining full-time status.

If the student fails one or more portions of an assessment and has 60 or more cumulative college level hours in the current semester, the student may not be permitted to enroll in any senior level courses (4000 level) until he or she passes the developmental program.

A student is exempt from the TSI if any of the following applies:

- The student has an associate or baccalaureate degree from an accredited college or university.
- The student, on a single test administration prior to March 2016, has an SAT composite score of 1070 with at least 500 on the Verbal (Critical Reading) and Math sections.*
- The student, on a single test administration on or after March 2016, has a score of 480 on the Evidenced-Based Reading and Writing (EBRW) test and a score of 530 on the mathematics test. (There is no combined score).*
- The student, on a single test administration, has an ACT composite score of 23 with at least 19 on the Math and English sections.*
- The student has an exit-level TAKS score of 2200 on the Math and a 2200 on the English Language Arts section with a 3 on the Writing subscore.*
- The students has a minimum score of 2000 (Level 2) on the STAAR English III EOC for reading or writing and a minimum score of 4000 (Level 2) on the STAAR Algebra II EOC.*
- The student was honorably discharged, retired, or released from active duty as a member of the Armed Forces of the U. S. or the Texas National Guard, or served as a member of a reserve component of the Armed Forces on or after August 1, 1990.
• The student has met the readiness standard at another Texas public higher education institution.
• The student transferred from an accredited Texas private institution of higher education or an accredited out-of-state institution with acceptable college-level course work determined by the receiving institution. Texas A&M University-Corpus Christi has elected to use the following course work with the grade of A, B, C, or Pass/Credit to meet the following standards:

1. Math readiness standard – College Algebra [MATH 1314],
2. Reading readiness standard - A three-credit hour course in history, political science/government, economics, philosophy, literature, or composition,
3. Writing readiness standard – Composition I [ENGL 1301] or Composition II [ENGL 1302].

A student qualifies for a waiver from the TSI if one of the following applies:

• The student is serving on active duty in the Armed Forces of the U. S., Texas National Guard, or Reserve Component of Armed Forces and has been serving for at least three years preceding enrollment.
• The institution waives the TSI requirement for non-degree seeking students. (The student must complete a TSI waiver contract). At the point a student becomes degree-seeking, TSI standards must be met by the student.
• The student has successfully completed a college preparatory course under Texas Education Code §28.014 with one of our partnering school districts or institutions of higher education. *

*SAT, ACT, TAKS, and STAAR EOC scores are valid five years from the date of testing to the first day of enrollment in an accredited Texas public institution of higher education. After April 1, 2004, students holding the composite score on the SAT/ACT may be exempt from a portion of the TSI approved examination in the individual area in which they met the required score. Partial exemptions also exist for TAKS and STAAR EOC scores. Students must have both the required reading and writing TAKS score to be partially exempt from the reading and writing portion of an assessment. Mixing or combining scores from the SAT administered prior to March 2016 and the SAT administered on or after March 2016 is not allowable.

In regards to the college preparatory course, the waiver is good for a period of two years from the date of high school graduation with respect to the content area of the course.

For additional information, contact the Center for Academic Student Achievement at (361) 825-5933 or the Academic Testing Center at (361) 825-2334.
Academic Fresh Start Legislation

The "Right to an Academic Fresh Start" legislation, passed by the 73rd Texas Legislature, entitles residents of this state to seek admission to public institutions of higher education as undergraduate students without consideration of courses undertaken ten or more years prior to enrollment. This law gives students the option of electing to have coursework taken ten or more years prior to the starting date of the semester in which the applicant seeks to enroll either counted as usual or ignored for admission purposes. Applicants who elect to apply for admission under this law and who are admitted as students may not receive any course credit for courses undertaken ten or more years prior to enrollment.

The intent of the "Fresh Start" legislation is to provide students with an opportunity to clear their academic records, if they choose to do so, of all college-level work accumulated ten or more years ago. Students may not pick and choose what is to be ignored and what is not. Either all college hours ten or more years old are ignored or they are counted. Applicants interested in seeking a "Fresh Start" should contact the Office of Recruitment and Admissions.

Immunization and Related Requirements

Recommended Vaccinations

Students are encouraged to submit immunization records voluntarily in order to assure the availability of a more complete medical record while a student at Texas A&M-Corpus Christi. Student Health Services strongly recommends that every student, and their family members, review our updated list of immunizations most appropriate for university students. This list of recommended vaccines was compiled by the American College Health Association (ACHA) with assistance from the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC). See Recommended Immunizations.

Tuberculosis Screening Procedure

Tuberculosis (TB) is a potentially life-threatening disease that has the ability to spread quickly in the close confines of classrooms and student residences on a university campus. Nearly one-third of the world's population has the disease. Students from countries with a high incidence of tuberculosis (as designated by the World Health Organization) and other students who have had extended visits to those countries are at a
greater risk for carrying the disease. Of those with the disease, most have the latent form. Even so, on a college campus it is important to take precautionary measures.

TB Testing Procedure for Newly Admitted International Students

Texas A&M University-Corpus Christi (TAMU-CC), in consideration of the recommendations from the American College Health Association (April 2016), has developed a procedure for mandatory TB screening of newly admitted international students from countries where there is a high incidence of tuberculosis (as designated by the World Health Organization).

All international students who apply to TAMU-CC will be asked screening questions during the application process. If a student is identified as someone who is at high risk for exposure to TB, a hold will be placed on their account and they will be contacted via email by the TAMU-CC Health Center so that they may begin a TB testing process, as outlined below. The student may enroll in the first semester of classes while being tested for TB but must comply with the procedure below in order to enroll in a second semester of classes.

- A newly admitted international student who is identified as in need of a PPD skin test will be required to provide proof of a skin test and reading to TAMU-CC Health Center (located in Sandpiper building) by the 8th day of class.
  - Students can take the PPD test at the TAMU-CC Health Center for a cost of $10* or at the Nueces County Health Department for $15*. The test can also be taken at many pharmacies and physicians' offices at the student's expense.
  - The PPD skin test must be taken in the United States no more than six months prior to the start of the semester but after the visit or residency in the high-incidence country.
  - If the skin test is negative, the student is cleared and the TB Hold is removed from the student's account.
- If the PPD skin test is positive, the student must have a chest X-ray and provide proof of the X-ray to the TAMU-CC Health Center by the 12th day of class.
  - In Corpus Christi, X-rays can be done as a walk-in patient at Radiology Associates, 5742 Spohn Drive (begins with Route 37 on the RTA bus from campus; involves transfers), or Radiology & Imaging of South Texas, 3226 S. Alameda Street (Route 5 on the RTA bus from campus; no transfers). Students can pay in cash for the X-rays (around $30* at RA and $65* at R&I) or present their insurance cards.
  - If the X-ray is negative, the student is cleared and the TB Hold is removed from the student's account.
• If the X-ray is positive, the student must make immediate contact with the Nueces County Health Department at 361-826-7247 for further testing. The Health Department is located at 1702 Horne Road (begins with Route 5 on the RTA bus from campus; involves transfers).

Non-compliance with the above TB Testing Procedure can:

• Cause serious illness and death.
• Result in disenrollment from the university.
• Affect a student's ability to stay in the US on an F-1 or J-1 visa.
• Require intervention by a university official.

TB Testing Recommendations for Continuing Students and Faculty

It is recommended that students and faculty who travel to countries with high incidence of tuberculosis discuss their specific travel circumstances before the trip with a health care provider who can determine the appropriate evaluation. If a month or more is spent in the country, it is recommended that a TB skin test be conducted 4-6 weeks after returning to the US.

For More Information about TB

Center for Disease Control
The World Health Organization
TAMU-CC Health Center

Appeals

Appeals can be made to the associate vice president for Academic Affairs by calling 361-825-3060.

Campus Contact

For additional information on this procedure, please contact the TAMU-CC Health Center by calling 361-825-2601.

*Prices are subject to change.

Bacterial Meningitis Vaccination Policy

In accordance with Texas Senate Bill 1107 (amended by SB 62, effective October 1, 2013), Texas A&M University-Corpus Christi requires all new students under the age of 22 to provide certified proof from a health practitioner that they have received a valid bacterial meningitis vaccination or booster within the last five years. Students must
submit proof of vaccination or booster at least 10 days prior to the intended start of the term of enrollment.

A new entering student includes a first-time student of an institution of higher education or private or independent institution of higher education and includes a transfer student, or a student who previously attended an institution of higher education before January 1, 2012, and who is enrolling in the same or another institution of higher education following a break in enrollment of at least one fall or spring semester.

Students are strongly encouraged to obtain the bacterial meningitis vaccination before entering the United States or moving to the Corpus Christi area. A list of U.S. approved meningococcal vaccines is available: English, Español

Important Facts about Bacterial Meningitis

Students who fail to submit certified proof of vaccination or a valid booster within the required time frame will be unable to register for their intended term. Please note, vaccinations older than 5 years will require a booster and all bacterial meningitis vaccinations and boosters must be administered by a health practitioner authorized by law to administer an immunization.

Valid Proof of Vaccination

1. A complete Evidence of Vaccination against Bacterial Meningitis Form. Use this form if you plan to obtain your vaccination somewhere other than your personal physician's office.
2. A document bearing the signature or stamp of the physician or his/her designee, or public health personnel (must include the month, day, and year the vaccination was administered).
3. An official immunization record generated from a state or local health authority (must include the month, day, and year the vaccination was administered).
4. An official record received from school officials, including a record from another state (must include the month, day, and year the vaccination was administered).

Valid Proof of Vaccination Exemption

1. An affidavit or a certificate signed by a physician who is duly registered and licensed to practice medicine in the United States, in which it is stated that, in the physician's opinion, the vaccination required would be injurious to the health and well-being of the student.
2. Conscientious Objection Form: An affidavit signed by the student stating that the student declines the vaccination for bacterial meningitis for reasons of conscience, including a religious belief. A conscientious exemption form from the Texas Department of State Health Services (TDSHS) must be used and can be
downloaded from the following link: TEXAS DEPARTMENT OF STATE HEALTH SERVICES FORM. Please complete following the instructions provided on the conscientious exemption form. Please allow several weeks for delivery.

Other Vaccination Exemptions

A student is not required to submit evidence of receiving the vaccination against bacterial meningitis, or a booster dose, if:

1. The student is 22 years of age or older by the first day of the start of the semester; or
2. The student is enrolled only in online or other distance education courses; or
3. The student is enrolled in a continuing education course or program that is less than 360 contact hours, or continuing education corporate training; or
4. The student is enrolled in a dual credit course which is taught at a public or private K-12 facility not located on a higher education institution campus; or
5. The student is incarcerated in a Texas prison.

Students are encouraged to visit their primary care provider prior to enrollment at the University. The cost of the bacterial meningitis vaccination may be less expensive in a student's home country or through the student's primary care provider. Students may also obtain the Meningitis vaccination or booster from their local County Public Health Department or other local pharmacies.

For medical questions concerning the meningitis vaccination or booster, students may contact the University Health Center Nurse Line at 361.825.5735. For questions regarding document submission and approval, students should contact the Office of Recruitment and Admissions at 361.825.2624.

All new students must receive the bacterial meningitis vaccination at least 10 days prior to the start of the intended term of enrollment.

How to Submit Evidence of Vaccination or an Affidavit to Decline Vaccination

All documents pertaining to compliance with the bacterial meningitis vaccination policy should be mailed, faxed, emailed, or hand-delivered to Texas A&M University-Corpus Christi Office of Recruitment and Admissions. Applicants who wish to fax their documentation are asked to use the Office of Recruitment and Admissions Fax Cover Sheet.

- Mailing Address:
  Texas A&M University-Corpus Christi
  Office of Recruitment and Admissions
Graduate Admission

For information on graduate admission requirements, see the Graduate Catalog.

General Academic Policies and Regulations

Student Responsibility

University personnel may assist students in progressing toward the degree that they are seeking. However, the final and ultimate responsibility for understanding and following the degree requirements rests with the students themselves. Each student is held responsible for knowing degree requirements, for enrolling in courses that fit into degree programs, and for taking courses in the proper sequence to ensure orderly progression of work. The student must seek advice about degree requirements and other University policies when necessary. The student is held responsible for knowing and abiding by University regulations regarding the standard of work required to continue in the University, as well as those dealing with academic integrity, scholastic probation, suspension, and dismissal. Additionally, the student is expected to comply with the rules in the Student Handbook and Student Code of Conduct, as well as the processes in the latter, which are administered by the Office of Student Engagement and Success. The Student Handbook and Student Code of Conduct are accessible at http://www.tamucc.edu/~students.

The University reserves the right to require a student to withdraw at any time, as well as the right to impose probation on any student whose conduct is unsatisfactory. An admission on the basis of false statements or documents is void upon discovery of the fraud, and the student is not entitled to any credit for work that he/she may have done at
the University. Upon dismissal or suspension from the University for cause, there will be no refund of tuition and fees. The balance due the University will be considered receivable and will be collected.

Transfer Credit Policies

General Regulations

Texas A&M University-Corpus Christi will consider for credit collegiate level work from regionally accredited institutions. However, work completed while an institution is a candidate for accreditation may also be considered. Course work transferred or accepted for credit toward an undergraduate or graduate degree must represent collegiate course work relevant to that degree, with course content and level of instruction resulting in student competencies at least equivalent to those of students enrolled in the relevant degree programs at Texas A&M University-Corpus Christi. College-level work posted on a sending institution's transcript as the result of the College Level Examination Program (CLEP) and other credit-by-examination programs will be treated as transfer work. Remedial, high school, or duplicate work will not be transferred to the University. Acceptability of credit for transfer does not imply that it is applicable to the requirements of a particular degree program.

The student must provide official copies of transcripts from each institution attended. The granting institution must submit official transcripts directly to the University. Hand carried documents will not be accepted for evaluation. Upon receipt, the documents become the property of the University and will not be returned to the student as originals.

All transferred work (with accompanying grades or marks) will be translated into Texas A&M University-Corpus Christi terms. If an equivalency for an undergraduate course has not already been established, the Office of Recruitment and Admissions will consult with the department that represents the course content to determine the course equivalency. If the content and level renders an equivalency impossible, the work will be given a generic title and number. Should the Executive Director of Recruitment and Admissions determine that a student has taken courses of similar level and content at more than one institution (duplicated work), the highest grade of the course attempted will be the grade of record, and all others will be recorded without credit. Transfer work will become a part of the student's record only after matriculation and then only when the student has enrolled in a credit bearing course.

The Office of Recruitment and Admissions is responsible for the evaluation of undergraduate transfer credit. Appeals related to the evaluation of undergraduate transfer credit are submitted to The Office of Recruitment and Admissions.
No more than 45 semester hours of undergraduate work may be transferred from military service, credit by examination and vocational technical courses. This limit applies both to work completed prior to and after matriculation.

The holding of an associate's degree from another institution does not affect the transfer of credit or the transfer policies and practices of Texas A&M University-Corpus Christi.

Texas Common Course Numbering System

The University participates in the Texas Common Course Numbering System (TCCN), a program developed to facilitate transfer of academic course work between Texas public junior and senior institutions. This system is used as the basis for numbering most lower-division courses on campus. A lower-division course with a common course number equivalent will generally use the common number. The catalog section on Lower-Division Transfer Courses lists Texas A&M University-Corpus Christi courses that are equivalent to courses in the common course numbering system.

Resolution of Transfer Disputes for Lower-Division Courses

Public institutions of higher education in Texas use the following procedures in the resolution of credit transfer disputes involving lower-division courses, as required by the Texas Higher Education Coordinating Board:

1. If an institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course credit is denied. A receiving institution shall also provide written notice of the reasons for denying credit for a particular course or set of courses at the request of the sending institution.
2. A student who receives notice as specified above may dispute the denial of credit by contacting a designated official at either the sending or the receiving institution. (The designated officer at Texas A&M University-Corpus Christi is the Executive Director of Recruitment and Admissions.)
3. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Board rules and guidelines.
4. If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, the institution that denies the course credit for transfer shall notify the Commissioner of its denial and the reasons for the denial. The Commissioner of Higher Education or the Commissioner's designee shall make the final determination about a dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.
The Board shall collect data on the types of transfer disputes that are reported and the disposition of each case that is considered by the Commissioner or the Commissioner's designee.

If a receiving institution has cause to believe that a course being presented by a student for transfer from another school is not of an acceptable level of quality, it should first contact the sending institution and attempt to resolve the problem. In the event that the two institutions are unable to come to a satisfactory resolution, the receiving institution may notify the Commissioner of Higher Education, who may investigate the course. If its quality is found to be unacceptable, the Board may discontinue funding for the course.

**Military Transfer Credit**

Persons who have been granted honorable or general discharge from military service of the United States and who would like a review of service records for potential college credit must request the appropriate documentation. Depending on the type of military service, students must request one of the following transcripts sent directly to the Office of Recruitment and Admissions.

1. JST (Joint Services Transcript): Army, Coast Guard, Navy - jst.doded.mil/official.html
2. CCAF Transcript (Community College of the Air Force)

The American Council on Education guidelines will be used in the evaluation. Credit will be awarded only in areas offered within the current curriculum of the institution, and only when the course work is appropriately related to the student's educational programs. The evaluation of military credit is utilized in awarding college credit only and is not considered in determining admission eligibility.

**Foreign Institutions Transfer Credit**

Students who wish to transfer work from foreign institutions must present transcript copies rendered into standard English and certified as true copies by a translator approved by the Executive Director of Recruitment and Admissions. Originals must also be provided. In cases where it is impossible, practically, to obtain official transcripts, alternatives to translated transcripts may be considered on a case-by-case basis.

The University requires students transferring work from foreign institutions to provide an evaluation from a professional source. A list of acceptable companies is available from the Office of Recruitment and Admissions. The student is responsible for costs associated with this service.
Credit by Examination

Texas A&M University-Corpus Christi recognizes the validity of accepting credit for specified levels of achievement on institutionally approved, standardized examinations. Examples include College Level Exam Program (CLEP), Advanced Placement (AP), DSST Program, American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Interview (OPI) test and International Baccalaureate (IB) exams. Such work will be treated as transfer credit. The minimum scores acceptable for the different examinations are stated below. The testing agency must provide examination results (scores) directly to Texas A&M University-Corpus Christi.

A grade of CR (credit) will be assigned where applicable. This grade will not be computed in the student's grade point average, will not carry grade points, and cannot be translated into grades A, B, C, or D. The grade of CR will not replace any existing course grade earned at Texas A&M University-Corpus Christi. Credit earned by examination does not count toward the number of semester credit hours required for graduation with honors. For information regarding applicability of these tests to specific degree programs, students should contact an academic advisor.

CLEP Examinations

The table below shows CLEP exams that may be accepted for lower-division credit (unless otherwise specified), the minimum scores required, the equivalent Texas A&M University-Corpus Christi courses, and the number of semester credit hours that may be awarded for these exams.

CLEP has a policy that an exam of the same title may not be retaken in a three-month period. CLEP will not release scores for an examination of the same title taken within the 3-month period after the initial administration. If a candidate retakes the examination within the 3-month period, the administration will be considered invalid, the score will be canceled and fees will be forfeited. Candidates who are military service members and whose exams are funded by the Dantes Subject Standardized Tests (DSST) may not repeat an examination of the same title; however, they may personally fund a retest after waiting the required period of time.

<table>
<thead>
<tr>
<th>CLEP Exam</th>
<th>Minimum Score Required</th>
<th>A&amp;M-Corpus Christi Course(s)</th>
<th>Credit Hours Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition and Literature:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
<td>Description</td>
<td></td>
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<tr>
<td>---------------------------------------------</td>
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<td>-----------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>American Literature* (essay required)</td>
<td>50</td>
<td>Satisfies the sophomore literature requirement</td>
<td></td>
</tr>
<tr>
<td>Analyzing and Interpreting Literature</td>
<td>50</td>
<td>Satisfies the sophomore literature requirement</td>
<td></td>
</tr>
<tr>
<td>College Composition</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>English Literature* (essay required)</td>
<td>50</td>
<td>Satisfies the sophomore literature requirement</td>
<td></td>
</tr>
<tr>
<td>College Composition with Modular</td>
<td>50</td>
<td>ENGL 1301, ENGL 1302</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>50</td>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td>Foreign Languages:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>50</td>
<td>FREN 1311, &amp; FREN 1312</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>62FREN 1311, FREN 1312, FREN 2311, &amp; FREN 2312</td>
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<tr>
<td>German</td>
<td>50</td>
<td>GERM 1311 &amp; GERM 1312</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>62GERM 1311, GERM 1312, GERM 2311, &amp; GERM 2312</td>
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<tr>
<td>Spanish</td>
<td>50</td>
<td>SPAN 1311, &amp; SPAN 1312</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>66SPAN 1311, SPAN 1312, SPAN 2311, &amp; SPAN 2312</td>
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<tr>
<td>History &amp; Social Sciences:</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>American Government</td>
<td>50</td>
<td>POLS 2305</td>
<td></td>
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<tr>
<td>Human Growth &amp; Development</td>
<td>50</td>
<td>PSYC 2314</td>
<td></td>
</tr>
<tr>
<td>Intro to Educational Psychology</td>
<td>N/AN/A</td>
<td>0</td>
<td></td>
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<tr>
<td>Principles of Macroeconomics</td>
<td>50</td>
<td>ECON 2301</td>
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</table>
Principles of Microeconomics 50  ECON 2302 3
Introductory Psychology 50  PSYC 2301 3
Introductory Sociology 50  SOCI 1301 3
Social Sciences and History 50  Elective 3
U.S. History I: Early Colonizations to 1877 52  HIST 1301 3
U.S. History II: 1865 to the Present 52  HIST 1302 3
Western Civilization I: Ancient Near East to 1648 52  HIST 2311 3
Western Civilization II: 1648 to Present 52  HIST 2312 3

Science and Mathematics:
Calculus 50MATH 2413 4
College Algebra 50MATH 1314 3
College Mathematics 50MATH 1332 3
General Biology 50Elective 3
General Chemistry 50Elective 6
Natural Sciences 50Elective 3
Precalculus 50MATH 2312 3

Business:
Information Systems 50  Elective 3
Introductory Business Law 50  BLAW 3310 3
Financial Accounting  50  ACCT 2301  3
Principles of Management  50***Elective Credit  3
Principles of Marketing  50  MKTG 3310  3

This table is subject to change. For the latest information on CLEP exams, including information on additional CLEP exams for which credit may be accepted, contact the Office of Recruitment and Admissions.

*When a student earns this score, or better, faculty members of the Department of English will review the essay portion of the exam. The chair of the Department of English will determine whether or not to award credit in each case. For the American Literature exam, the department may award credit for ENGL 2333. For the English Literature exam, the department may award credit for ENGL 2332 and ENGL 2333. For the Analyzing and Interpreting Literature exam, the department may award credit for one of the following: ENGL 2332 or ENGL 2333. For the College Composition with Modular exam, the department may award credit for ENGL 1301, or for both ENGL 1301 and ENGL 1302.

**The Spanish CLEP exam can be used for credit towards a major or minor in Spanish, but Spanish faculty must approve it first. For more information, see the Academic Advisor for the Spanish Program.

***Refer to the Graduate Program Director in the College of Business for restrictions on credit for graduate programs.

Advanced Placement Examinations

The list below indicates which Advanced Placement (AP) exams will be accepted as equivalent to Texas A&M University-Corpus Christi courses, the minimum score required, and the number of semester credit hours that may be awarded for these exams.

<table>
<thead>
<tr>
<th>AP Exam</th>
<th>Minimum Score Required</th>
<th>A&amp;M-Corpus Christi Course(s)</th>
<th>Credit Hours Awarded</th>
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<tbody>
<tr>
<td>Art History</td>
<td>3</td>
<td>ARTS 1303</td>
<td>3</td>
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<tr>
<td>Biology</td>
<td>3</td>
<td>BIOL 1406</td>
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<td>Subject</td>
<td>Credits</td>
<td>Course Code</td>
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<tr>
<td>----------------------------------------</td>
<td>---------</td>
<td>------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Biology</td>
<td>4</td>
<td>BIOL 1406 &amp; BIOL 1407</td>
<td>8</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>3</td>
<td>MATH 2413</td>
<td>4</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>3</td>
<td>MATH 2413</td>
<td>4</td>
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<tr>
<td>AB subsection of BC Exam</td>
<td>3</td>
<td>MATH 2413</td>
<td>4</td>
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<tr>
<td>Calculus BC</td>
<td>4</td>
<td>MATH 2413 &amp; MATH 2414</td>
<td>8</td>
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<tr>
<td>Chemistry</td>
<td>3</td>
<td>CHEM 1411</td>
<td>4</td>
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<tr>
<td>Chemistry</td>
<td>4</td>
<td>CHEM 1411, CHEM 1412</td>
<td>8</td>
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<tr>
<td>Comparative Govt. &amp; Politics</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Computer Science A</td>
<td>3</td>
<td>COSC 1315</td>
<td>3</td>
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<tr>
<td>Computer Science A</td>
<td>4</td>
<td>COSC 1435</td>
<td>4</td>
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<tr>
<td>Computer Science Principles</td>
<td>N/A</td>
<td>N/A</td>
<td>0</td>
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<tr>
<td>English, Language and Composition</td>
<td>3</td>
<td>ENGL 1301</td>
<td>3</td>
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<tr>
<td>or</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>English, Literature and Composition</td>
<td>3</td>
<td>ENGL 1301</td>
<td>3</td>
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<tr>
<td>Environmental Science</td>
<td>3</td>
<td>ESCI 1401</td>
<td>4</td>
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<td>European History</td>
<td>3</td>
<td>HIST 2311</td>
<td>3</td>
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<td>French Language and Culture</td>
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<td>FREN 1311 &amp; FREN 1312</td>
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<td>Course</td>
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<td>Human Geography</td>
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<td>Elective Credit, 3</td>
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<td>Latin</td>
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<td>Macroeconomics</td>
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<td>ECON 2301, 3</td>
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<td>Microeconomics</td>
<td>3</td>
<td>ECON 2302, 3</td>
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<td>Music Theory</td>
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<td>MUSI 1311 &amp; MUSI 1116, 4</td>
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<td>Physics 1: Algebra Based</td>
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<td>Physics 2: Algebra Based</td>
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<td>PHYS 1402, 4</td>
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<td>Physics C (Mechanics)</td>
<td>3</td>
<td>PHYS 2425, 4</td>
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<td>Physics C (Electricity &amp; Magnetism)</td>
<td>3</td>
<td>PHYS 2426, 4</td>
<td></td>
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<tr>
<td>Psychology</td>
<td>3</td>
<td>PSYC 2301, 3</td>
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<tr>
<td>Spanish Language and Culture</td>
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<td>SPAN 1311, SPAN 1312, 6</td>
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<td>5</td>
<td>SPAN 1311, SPAN 1312, 9 &amp; SPAN 2311</td>
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<td>Statistics</td>
<td>3</td>
<td>MATH 1442, 4</td>
<td></td>
</tr>
<tr>
<td>Studio Art: Drawing</td>
<td>3</td>
<td>ARTS 1316, 3</td>
<td></td>
</tr>
<tr>
<td>Studio Art: 2-D Design</td>
<td>3</td>
<td>ARTS 1311, 3</td>
<td></td>
</tr>
</tbody>
</table>
### International Baccalaureate Diploma (IBD)

The International Baccalaureate Diploma (IBD) is an international program of courses and exams offered at the high school level. In keeping with Senate Bill 111 passed in 2005, Texas A&M University-Corpus Christi will grant credit (CR) for International Baccalaureate (IB) exams with certain required scores beginning fall of 2006 to incoming freshmen students.

Texas institutions of higher education must award at least 24 semester credit hours in appropriate subject areas on all IB exams with scores of 4 or above, as long as the incoming freshman has earned an IBD. However, course credit does not have to be awarded on any IB exam where the score is a 3 or less. This may mean that students will not receive 24 hours of college credit, even if they have an IBD.

Students submitting an IB transcript for credit evaluation should consider the total number of qualifying credits to be awarded. Federal Financial Aid regulations limit the total number of hours for which a student may receive financial aid based on the total number of hours for the degree. Care should be taken to ensure the credits awarded through the IB transcript evaluation may be applied directly to the student's program of choice to avoid adverse impact on the student's future financial aid eligibility.

Students must submit an official IB transcript to the Office of Recruitment and Admissions. Students may contact the Office of Recruitment and Admissions for more information.

### DSST Examinations

The table below shows DSST exams that are accepted for lower-division credit (unless otherwise specified), the minimum scores required, the equivalent Texas A&M University-Corpus Christi courses, and the number of semester credit hours that may be awarded for these exams.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio Art: 3-D Design</td>
<td>3</td>
</tr>
<tr>
<td>U.S. Govt. &amp; Politics</td>
<td>3</td>
</tr>
<tr>
<td>U.S. History</td>
<td>3</td>
</tr>
<tr>
<td>World History</td>
<td>3</td>
</tr>
<tr>
<td>ARTS 1312</td>
<td>3</td>
</tr>
<tr>
<td>POLS 2305</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1301 &amp; HIST 1302</td>
<td>6</td>
</tr>
<tr>
<td>HIST 2311</td>
<td>3</td>
</tr>
<tr>
<td>DSST Exam</td>
<td>Minimum Score Required</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Astronomy</td>
<td>48/400</td>
</tr>
<tr>
<td>Computing and Information Technology</td>
<td>45/400</td>
</tr>
<tr>
<td>Principles of Physical Science I</td>
<td>47/400</td>
</tr>
<tr>
<td>Principles of Statistics</td>
<td>48/400</td>
</tr>
</tbody>
</table>

**ACTFL Examinations**

Students may receive course credit for their oral proficiency levels in a foreign language through the American Council on Education (ACE) Credit Recommendation Service and Language Testing International (LTI), the assessment agency for the American Council on the Teaching of Foreign Languages (ACTFL). Students who have taken an ACTFL Oral Proficiency Interview (OPI/OPIc) or Writing Proficiency Test (WPT) through LTI, received a proficiency rating by LTI, and received credit recommendation by ACE will receive the following lower-division (LD) course credits in a foreign language at Texas A&M University-Corpus Christi:

**Texas A&M University-Corpus Christi - Credit Recommendations for Official ACTFL Ratings**

<table>
<thead>
<tr>
<th>Official OPI, OPIc, WPT Rating*</th>
<th># of Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novice High/Intermediate Low</td>
<td>3 LD</td>
</tr>
<tr>
<td>Intermediate Mid/Intermediate High</td>
<td>6 LD</td>
</tr>
<tr>
<td>Advanced Low/Advanced Mid</td>
<td>9 LD</td>
</tr>
<tr>
<td>Advanced High/Superior</td>
<td>12 LD</td>
</tr>
</tbody>
</table>

**Legend**

* The 10 ACTFL OPI language proficiency ratings are: Superior, Advanced High, Advanced Mid, Advanced Low, Intermediate High, Intermediate Mid, Intermediate Low, Novice High, Novice Mid, and Novice Low. For candidates completing French, German, or Spanish, credit can be earned in the respective courses of 1311, 1312, 2311, or 2312 based on the approved rating. For candidates completing Chinese, credit can be earned
for CHIN 1311, CHIN 1312, and 6 hours of additional general credit based on the
approved rating. Candidates taking any of the other foreign languages not taught at
Texas A&M University-Corpus Christi will receive the respective amount of general
credit.

For a complete listing of languages and a description of levels of speaking proficiency,
please refer to the ACTFL website (www.actfl.org). To begin the process, students must
submit an application to LTI (www.languagetesting.com)

Other Examinations

Credit may be accepted for other nationally recognized standardized exams. Credit for
such exams will be considered on a case-by-case basis.

Additional Information on Credit by Examination

For further information on testing, contact the Office of Academic Testing at 361-825-
2334.

For more information on the awarding of credit, contact the Office of Recruitment and
Admissions at 361-825-7024.

Other Non-Collegiate Experiences

Texas A&M University-Corpus Christi recognizes the quality and importance of some
non-collegiate training programs offered through industrial sources. In collaboration with
university faculty, offerings detailed in the appropriate ACE publication will be reviewed
for potential credit award. CEU and similar professional credits cannot be translated into
academic credit hours.

Equivalencies

For purposes of transfer, work taken on a trimester system will be converted to semester
hours on a 1-to-1 basis. In the event that the work was taken on a class hour basis, 15
class hours will be equated to 1 semester hour. For conversion from quarter hours to
semester hours, Texas A&M University-Corpus Christi has established the following
equivalencies:

Quarter hours: Semester hours
The University uses the summation of the individual course equivalencies from a particular institution to compute grade point average and/or credits earned. For credit systems other than those listed above, the University Registrar will determine the mathematical relationship and apply it to the record in question.

**Non-Credit Admission (Auditing)**

A student may attend classes for a course without receiving credit if he or she submits a Course Audit Form at the time of registration and has the permission of both the instructor of the course and the dean of the college in which the course is offered. No formal admission to the University is required for course audits. The Course Audit Form is available from the Office of the University Registrar. The fee for auditing a course is the same as that required for registration for credit, however no credit will be awarded, no records will be kept, and the student may be restricted from lab work and tests. A student will not be given permission to audit a course until the first day of classes. Students may not change from credit to audit status after the 12th class day during a long semester or after the 4th class day during the summer. Senior citizens (65 or over) may audit with all fees exempted except material or field trip fees on a space available basis only. If the student is under the age of 22, Texas A&M University-Corpus Christi will require the students to provide certified proof from a health practitioner that he or she has received a Bacterial Meningitis vaccination or booster within the last five years. Under no circumstance may audit be converted to credit. No refunds are given on audits.

**Registration**

New students must apply for admission through the Office of Recruitment and Admissions prior to the term of enrollment. Former students may need to reapply for admission or reactivate their records in the Office of Recruitment and Admissions prior to the term of enrollment. As a general rule, students who have previously attended classes at the University, but who have not been enrolled for two consecutive long
semesters, need to reapply for admission. Information regarding dates, registration, and course offerings are available through the Office of the Registrar. Unless exempted from the Texas Success Initiative (TSI), students must be assessed in reading, writing, and math skills prior to registration. Additional information on the Texas Success Initiative (TSI) is available in the Admissions section of this catalog. Students must register by the specified deadlines for the term in order to be eligible to receive course credit. Registration requires the payment of tuition and fees. More information on tuition, fees, and payment options is available under the Tuition, Fees, and Financial Assistance section of this catalog.

**Academic Advising**

Academic advisors are available to assist students with course sequencing, degree plans, and other academic matters. Each college has an academic advising center, staffed by full-time, professional advisors.

**Unit of Credit**

A semester hour is the amount of credit for one class hour per week for one semester. Each class hour generally requires two hours of preparation on the part of the student, though the actual time required may vary from one to three. Three hours of laboratory work are equivalent to one class hour. Most courses are for three semester hours of credit. Some have variable credit from one to three hours, others four to six hours.

**Classification of Degree-Seeking Students**

Texas A&M University-Corpus Christi enrolls degree-seeking students in both undergraduate and graduate programs. An undergraduate student is one who has not yet received a baccalaureate degree. Graduate student is a student who has earned a baccalaureate degree and is enrolled in graduate coursework.

A degree-seeking undergraduate is classified as a freshman (or first-year student), sophomore, junior, or senior according to the number of semester credit hours earned, as follows:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Semester Credit Hours Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman (or First-Year Student)</td>
<td>fewer than 30</td>
</tr>
<tr>
<td>Sophomore</td>
<td>at least 30, but fewer than 60</td>
</tr>
</tbody>
</table>
Junior at least 60, but fewer than 90
Senior 90 or more

**Enrollment Status for Financial Assistance**

Enrollment status affects a student's eligibility for financial assistance. Students who are enrolled at least half time may be eligible for financial aid. Rules applying to veterans' benefits are available under Veterans Educational Benefits.

<table>
<thead>
<tr>
<th>Enrollment Status</th>
<th>Semester Credit Hours Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time undergraduate student:</td>
<td>Fall or spring term = 12 hours</td>
</tr>
<tr>
<td></td>
<td>Combined summer terms = 12 hours</td>
</tr>
<tr>
<td>Three-quarter-time undergraduate student: Fall or spring term = 9 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Combined summer terms = 9 hours</td>
</tr>
<tr>
<td>Half-time undergraduate student:</td>
<td>Fall or spring term = 6 hours</td>
</tr>
<tr>
<td></td>
<td>Combined summer terms = 6 hours</td>
</tr>
</tbody>
</table>

Non-degree students are not classified as part-time or full-time students, nor are they classified as freshmen (first-year), sophomores, juniors, or seniors.

**Courses of Instruction**

All undergraduate courses offered at Texas A&M University-Corpus Christi are listed in the Course Descriptions section of this catalog. Although the lists of courses are based on the best information available at the time of catalog preparation, course offerings are subject to change without notice. This catalog was prepared well in advance of its effective date; therefore, changes may occur in course content or availability. Some new courses and modified courses are included in this catalog pending their approval by the Texas Higher Education Coordinating Board.

When registering for courses, students should consult the semester class schedule, a separate online publication that provides specific course offering information for a
particular semester or session. The class schedule is made available online before the registration period for each term.

Adding or Dropping a Course

Adding or Dropping a Course: A student may add or drop a course during the time specified in the class schedule. To add or drop a course after the first class day, the student must complete a Class Scheduling Form from the Office of the University Registrar.

Deadline for Dropping a Course with a Grade of W: The grade of W will be assigned to any student officially dropping a course by the date stated in the class schedule. No student is eligible to receive a W without completing the official drop process by this deadline. After the drop date listed in the class schedule, a student will not be allowed to drop a course. A change of section or a change from credit to audit is a change of registration and requires that the add/drop process be followed.

Implications for Financial Assistance: Dropping courses may affect student eligibility for financial assistance.

Six-Course Drop Limit: The State of Texas enacted a statute that applies to students who enroll in public institutions of higher education as first-time freshmen in fall 2007 or later. Under section 51.907 of the Texas Education Code, "an institution of higher education may not permit a student to drop more than six courses, including any course a transfer student has dropped at another institution of higher education." Any course a student drops after the census date published in the class schedule or academic calendar is counted toward the six-course limit unless specifically identified as being exempt. Should you attempt to drop a seventh class, your request will be denied by the University Registrar and the drop not processed due to exceeding the six-drop limit. As a result, you will have to accept a grade in all courses in which you are enrolled and should plan your schedule accordingly.

Withdrawal: If a student should drop all courses for a given semester or term, a Withdrawal Form must be processed. Refer to the following paragraph.

Withdrawal from the University

A student who finds it necessary to withdraw from the University during a semester must file a Withdrawal Form with the Office of the University Registrar. The deadline for withdrawing from the University is the day before the last day of classes during a long semester (fall or spring), and two days before final examinations during a summer
session. Failure to file a Withdrawal Form can result in grades of "F" for all courses in progress.

A student who withdraws from the University according to procedures stipulated for a withdrawal, will be allowed a grace period to rescind the withdrawal. A student may rescind a withdrawal no later than the end of the second University business day following the date of withdrawal or the last class day, whichever is sooner. The date of reinstatement must be among the regular days of classes; days of final examinations and thereafter are specifically excluded.

Should space no longer be available in a class, the student must secure the approval of the dean and instructor before reinstatement in class is allowed.

All indebtedness to the University must be satisfied prior to the reinstatement.

Reinstatement must be requested in writing by the student to the University Registrar. All documentation and requirements for the reinstatement must be filed with the University Registrar by the end of the second business day (following the withdrawal), or else the reinstatement will not occur.

Students receiving veterans benefits for education should contact the Office of Veterans Affairs for specific policies concerning drops and withdrawals. These changes have a direct effect on VA benefits.

**Withdrawal of Students Called to Active Duty**

Section 54.006 of the Texas Education Code states:

Beginning with the summer semester of 1990, if a student withdraws from an institution of higher education because the student is called to active military service, the institution, at the student's option, shall:

1. refund the tuition and fees paid by the student for the semester in which the student withdraws;
2. grant a student who is eligible under the institution's guidelines, an incomplete grade in all courses by designating "withdrawn-military" on the student's transcript; or
3. as determined by the instructor, assign an appropriate final grade or credit to a student who has satisfactorily completed a substantial amount of coursework and who has demonstrated sufficient mastery of the course material.

**Retroactive Withdrawal**
A student may request that all grades in an academic period be retroactively removed and replaced by entries of "W" on his or her transcript. A retroactive withdrawal may be granted only when a student has experienced circumstances of such serious and compelling nature that s/he could not reasonably have been expected to satisfactorily complete the academic period or submit a petition for regular withdrawal by the deadline specified in the Academic Calendar. Such serious and compelling circumstances may include (but are not limited to) hospitalization, incarceration, debilitating mental illness, or sudden absence at the end of the semester due to family crisis. Failure to academically perform due to factors such as bad habits, poor judgment, time management issues, failed relationships, roommate conflicts, or ignorance of University policies would not generally qualify a student for retroactive withdrawal.

To withdraw retroactively from the University, the student must request this action in writing through the Office of the University Registrar via an online appeal form that will be reviewed by the Associate Registrar. The appeal must be accompanied by supporting documents which demonstrate serious and compelling reasons why action was not taken through the regular withdrawal process during the academic period in question. The time limit for submitting this appeal is the end of the next long semester following the academic period in question; requests that extend past this period will be denied.

If the retroactive administrative withdrawal is granted, the Office of the University Registrar will set all grades for the relevant term to a non-punitive mark of "W." If the student should wish to appeal a decision on retroactive withdrawal, an appeal can be made, in writing, to the University Registrar within 14 days of the date of notification. The decision of the University Registrar is final.

Class Attendance

Students are held responsible for class attendance. Excessive absences may adversely affect course grades. Every instructor is required to make clear the policy on class attendance at the beginning of each course.

If students are absent from class on approved university business (e.g., intercollegiate athletics competition/travel, field trips, student research conferences, Board of Regents meetings), faculty members should count this as an excused absence and should not penalize the student for it. Students should be allowed to make up any required course work in advance or within two weeks after their return to campus. Students are responsible for informing their instructors about the trip in advance so that the faculty members can make plans accordingly. Students need to make prior arrangements to make up labs. If students have any doubt as to whether the activity in question is considered official university business, they should contact the Office of the Provost.
Student Absences on Religious Holy Days

In accordance with Texas Education Code 51.911, Texas A&M University-Corpus Christi will excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused for observance of a religious holy day may not be penalized for that absence and must be allowed to take an exam or complete an assignment from which the student is excused within a reasonable time after the absence.

Texas Education Code, Section 51.911 defines a religious holy day as a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code. If a student and an instructor disagree that the absence is for the observance of a religious holy day, or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the Provost. The student and instructor shall abide by the decision of the Provost.

If a student's academic course work includes patient care, the University may exclude from these policies and procedures any student absence for religious holy days that may interfere with patient care.

Grades

Grades for undergraduate courses shall be reported by the symbols below, with grade points as noted:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Interpretation</th>
<th>Grade Points per Semester Hour*</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Passing</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failure; work not passed</td>
<td>0</td>
</tr>
</tbody>
</table>

[Note: Graduate students should consult the graduate catalog.]

CR* Satisfactory, but without qualitative grading. See "Alternate Grading Systems."
NC* No credit

Pass. Satisfactory, but without qualitative grading of the credit hours earned.

P* Applicable only to those courses stipulated by the PASS/NO PASS policy. Not used in graduate courses.

No pass. No credit is generated and the mark is not punitive. Applicable only to those courses stipulated by the PASS/NO PASS policy. Not used in graduate courses. Students are advised to use caution before electing the P/NP option and are encouraged to read the policy pertaining to it.

NP* No pass. No credit is generated and the mark is not punitive. Applicable only to those courses stipulated by the PASS/NO PASS policy. Not used in graduate courses. Students are advised to use caution before electing the P/NP option and are encouraged to read the policy pertaining to it.

S* Satisfactory. Applicable to specified graduate courses.

U* Unsatisfactory. Applicable to specified graduate courses.

UP* Unsatisfactory. Applicable to specified graduate courses.

Incomplete. An incomplete notation may be given to a student who is passing but has not completed a term paper, examination, or other required work for reasons beyond the student's control other than lack of time.

I* Incomplete-Military. An "IM" notation may be given to a student who is called to active military service and who consequently cannot continue attending class. In order for this notation to be given, the student must be passing the course, must have completed a significant portion of the course work, and must have the approval of the instructor.

IP* Assigned to a remedial course or a thesis/dissertation course indicating that at the conclusion of the semester the course was still in progress. This is a permanent notation that does not affect grade point average. To receive a qualitative grade, the student must register for the same course in the subsequent semester, paying the appropriate tuition and fees.

W* Course dropped or withdrawal from the University. Automatically given, regardless of the student's standing in class, when a student officially withdraws from the University or drops a course prior to the deadline as indicated in the class schedule. See "Adding or Dropping a Course" and "Withdrawal from the University" in this catalog.

WP* Withdrawal pass. Before the fall semester of 1996, this grade was assigned to a student who dropped a course or withdrew between designated dates in the semester or summer term and was passing the course at the time of the withdrawal. Grades of WP assigned before fall 1996 will remain on the transcript.
Withdrawal failure. Before fall 1996, this grade was assigned to a student who dropped a course or withdrew between designated dates in the semester or summer term and was failing the course at the time of withdrawal. Grades of WF assigned before fall 1996 will remain on the transcript.

*CR, NC, P, NP, S, U, UP, I, IM, IP, W, and WP grades are not counted in computing the GPA. A grade of WF assigned before the fall semester of 1996 is counted in computing the GPA.

The presence of a "D" preceding a qualitative grade of A-F references a developmental course and does not count toward hours earned nor grade points in computing GPA.

For a grade of W to be assigned, a student must officially withdraw from the course or University through the Office of the University Registrar. The receipt from the Office of the University Registrar should be kept as proof of withdrawal. If a student discontinues attending a class and fails to officially withdraw, and does not qualify for an "I," a qualitative grade (A-F) will be assigned.

If no grade is submitted by an instructor, a temporary notation (XX) will be placed on the student's records. In such cases, the course grade must be submitted within 30 days from the beginning of the next semester. If the instructor is not able to submit the grade within the 30 days, the dean in consultation with faculty will submit the course grade.

**Calculation of Grade Point Average**

Texas A&M University-Corpus Christi uses a 4.0 scale for calculation of Grade Point Average (GPA). GPA is determined by dividing the total number of grade points earned by the number of semester credit hours taken for a qualitative grade (A=4, B=3, C=2, D=1, F=0). The result of this division is expressed as a number carried to the fourth decimal place and rounded up to the third.

For Purposes of Undergraduate Transfer Admission

See "Transfer Admission" in the "Admissions" section.

For Purposes of Graduation with Honors

See "Graduation with Honors" in the "Undergraduate Programs" section.

For Purposes of Graduation and Academic Rank
Only grades earned at this University will be used to calculate the Texas A&M University-Corpus Christi grade point average as used in determination of academic rank and eligibility for graduation.

Grades are made available to students at the end of each grading period at http://sail.tamucc.edu.

**Change of Grade**

A change of grade (among the values A, B, C, D, F) may occur only if there has been an error in computation or recording of the grade or if a change has been ordered as a result of the grade appeal process. A grade may not be changed because of consideration of work completed following the end of the grading period for which the grade was issued. If not associated with the grade appeal process, a grade change is initiated by the instructor of record and approved by the dean of the college of record. In rare circumstances, the approval of the Provost may be required. To be valid, a grade change must be submitted to the Office of the University Registrar on or before the last day of the next regular semester following the term in which the grade was originally issued, and on the form provided for that purpose.

**Grade Appeal Process**

As stated in University Procedure 13.02.99.C0.03, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal.

A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. If the problem cannot be resolved at this level, the student may take the steps below:

1. Written appeal to department chair or area coordinator. (This step must be taken within 20 business days after the start of the next term.)
2. If no satisfactory resolution can be found, the Department Chair will refer the matter, normally within 5 business days, to the Associate Dean for a hearing by the College Grade Appeal Committee (CGAC).
3. The Associate Dean will schedule a hearing before the College Grade Appeal Committee normally within 20 business days.
4. The Committee shall hear all parties to the case and review all evidence presented. Both the faculty member and student shall be present at the same time during the formal hearing.

5. The College Grade Appeal Committee will determine the facts of the case and attempt to develop a fair and appropriate resolution to the complaint.

6. The Chair of the CGAC will present its findings and recommendations, in writing, to the Associate Dean normally within 5 business days after completion of its hearings and deliberations.

7. The Associate Dean will send written notification of the decision to the student and the faculty member involved normally within 5 business days after receiving the CGAC's findings and recommendations.

8. The decision of the Associate Dean is final.

For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C0.03, Student Grade Appeals.

For assistance and/or guidance in the grade appeal process, students may contact the Office of the Provost.

Removing the Grade of Incomplete

The notation of "I" indicates that work in a course is satisfactory but incomplete (certain work is postponed by the student for substantial reason with the prior consent of the instructor). This work must be completed by the last class day of the next regular (fall or spring) semester unless the instructor designates an earlier date for completion. If the work is not completed by the appropriate date, the qualitative grade provided by the instructor on the incomplete notation application will be submitted to the Office of the University Registrar and will replace the "I." An incomplete notation cannot remain on the student's permanent record and must be replaced by a qualitative grade (A-F) at the conclusion of the next regular semester. If the grade of "I" has not been changed at the conclusion of the next regular semester and no qualitative grade was provided on the incomplete notation application, it will be changed to a final grade of "F" by the Office of the University Registrar.

Removing Grade of Incomplete-Military (IM)

The "IM" notation may be given to a student who is called to active military service and who consequently can no longer attend class. Such a notation may be assigned if the student is passing a course but will not be able to complete a term paper, examination, or other required work for the course before the end of the semester or session because of
required active military service. Assignment of the "IM" notation requires the approval of the instructor. Normally the "IM" grade is not assigned unless the student has completed a substantial amount of course work. The remaining course work must be completed by the last day of the next regular semester (fall or spring) following the student's return from active military service. The "IM" designation will remain on the student's permanent record if the work is not completed by the appropriate date. For more information on options available to students who are called to active military service, see "Students Called to Active Duty."

Pass/No Pass Policy

Each upper-division student may take up to two academic courses (eight semester hours maximum) graded on a pass/no pass basis during a particular degree program. These courses (if passed) will count as part of the total needed to graduate but will not enter into calculation of grade point average. Designated general education requirements and specific courses required by the major/minor, including required foundation courses outside the discipline of the student's major, as approved by the college of the student's major, cannot be taken pass/no pass, unless so stated in the catalog. A course that has been recorded as P cannot be used as a component of general education requirements or of the major/minor field of study. Students will indicate to the Office of the University Registrar their intention to take a course on a pass/no pass basis before the 12th class day of a fall or spring semester or the 4th class day of a summer session or term, as shown in the class schedule. Once such a declaration is made, it cannot be changed on any account including a change of major or degree designation. The faculty member will not be informed that a student is taking the course on a pass/no pass basis. Pass/no pass grades are not used in graduate courses.

Alternate Grading Systems

Certain courses proposed by individual colleges and approved by the Faculty Senate may use the alternate grading system CR/NC when the standard system authorized for the University (A, B, C, D, F, I, IP, W) is not considered appropriate. CR/NC is a designation of the University given to certain courses, all of whose students receive one of these grades; P/NP is an option that a student may designate in any course, subject to the restrictions above.

A student may apply no more than ten credit hours earned at this university outside the standard grading system (e.g., grades of CR/NC or P/NP) toward a baccalaureate degree. No more than seven semester hours of CR/NC may be in a student's major field of study. The hours graded P (pass) or CR (credit), given in those instances where standard letter
grades are not used, will not be applied in computing grade point averages nor influence student eligibility for academic honors.

Final Examinations

Final examinations must be scheduled during the regularly scheduled examination time listed in the official class schedule. If papers or take-home examinations are assigned in lieu of a final examination, the due date must be at the regularly scheduled examination time listed in the official class schedule. If final presentations or final critiques assigned in lieu of final examinations require multiple days to complete, then the final day for the critiques/presentations must occur on the regularly scheduled exam day.

Students are not required to take more than two final examinations in any one day. Any student with three or more final examinations scheduled on the same day may request to take one of the examinations on another day during the final examination period. The process is described below.

1. The student should first try to resolve the matter with the appropriate instructor(s).
2. If the matter remains unresolved, the student should submit a request for an alternative final exam time in writing to the Office of Academic Affairs. This request must be submitted by the drop date (the last day to drop a course for the semester with an automatic grade of W as stated in the semester class schedule).
3. The Office of Academic Affairs will select which of the exams should be taken at an alternative time and formally contact the faculty member at least 15 working days before the final examination period. Preference for selection of which course would have an alternative final exam time must be based on the course with the smaller class size and, then, courses with final exam times in between other exams.
4. The faculty member will then arrange an alternative time for the student to take the final exam for the selected course. The exam may not conflict with the student's final exam schedule or require the student to take more than two final exams in one day. If students have difficulties in rescheduling the examination, they should consult with the Office of Academic Affairs. Final exams given outside the regularly scheduled time may vary in content and format at the discretion of the faculty member.

For additional information regarding this process students should refer to University Procedure 13.99.99.C0.01: Course Examinations and Study Week.

Graduation Under a Particular Catalog
A student may receive the baccalaureate degree upon satisfying the requirements of the catalog under which credit was first earned in this University or upon satisfying the requirements of the catalog of any subsequent year in which credit was earned as a student in the University. This provision is subject to the restriction that all requirements must be completed within six years of the date of the catalog chosen and that the University still offers programs and required curriculum described in the earlier catalog. A student who transfers from a public community college in Texas may choose to graduate under the University catalog in effect at the time the student first earned credit at the community college or a later catalog in effect when the student earned credit at either the community college or the University. This provision is subject to the six-year restriction stated earlier.

Certification or licensure requirements are subject to change. Students enrolled in programs leading to certification or licensure must meet all current requirements, regardless of the catalog chosen.

Application for Graduation

Students who plan to participate in a graduation exercise and/or receive a diploma and degree conferral must submit an online application for graduation by the deadline indicated in the Academic Calendar and pay the associated fee. Students are strongly advised to consult their academic advisor prior to submitting an application for graduation. The application for graduation and associated fees is not transferable to a subsequent semester. If a student does not graduate, the application will be canceled and a new application and fee must be submitted. Students participating in the graduation exercise will also be required to obtain an appropriate cap and gown.

Academic Integrity

Texas A&M University-Corpus Christi students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, which include but are not limited to illicit possession of examinations or examination materials, falsification, forgery, plagiarism or collusion in any of these behaviors.

Responsibility of the Student: It is the responsibility of the student to become educated regarding University Rules, Regulations and Policies regarding academic misconduct. This includes, but is not limited to, seeking clarification from each instructor regarding acceptable behaviors and guidelines for completing individual assignments. A failure to become educated with the University Rules, Regulations and Policies or the instructors
individuals guidelines will not excuse the student from accountability for violations of such policies.

Responsibility of the Instructor: The instructor should maintain a policy regarding academic misconduct within the course syllabus and provide clear expectations regarding behaviors that will and will not be permitted regarding the completion of in-class and out-of-class assignments. The instructor shall address all matters of suspected academic misconduct with the student in question and may choose to document and refer the matter to the Student Conduct & Community Standards. The burden of proof shall lie with the instructor when presenting cases of academic misconduct to the Student Conduct & Community Standards.

Disciplinary action for academic misconduct is first the responsibility of the faculty member assigned to the course. The faculty member is charged with assessing the gravity of any case and with recommending sanctions for any student involved.

Sanctions that may be recommended by the faculty member for individual cases of academic misconduct include one or more of the following:

- Written reprimand (an official letter of reprimand will be issued by the Student Conduct & Community Standards);
- Requirement to re-do work in question;
- Requirement to submit additional work;
- Lowering of grade on work in question;
- Assigning grade of 'F' to work in question;
- Assigning grade of 'F' for course;
- Recommendation for more severe punishment, such as suspension, dismissal from program, or expulsion from the University.

If the faculty member recommends a more severe sanction, such as dismissal from program or expulsion from the program or from the University, the matter will automatically be reviewed by Student Conduct & Community Standards and may be referred to an Academic Integrity Hearing Panel. Additionally, if the student has a history of academic misconduct, the matter will be reviewed by the Academic Integrity Hearing Panel.

The faculty member must file a report for each case of academic misconduct, including a description of the incident, the disciplinary action taken, the assignment, the instructions for the assignment, and evidence indicating misconduct, and a current syllabus for the course to the Student Conduct & Community Standards. The faculty member should also provide a copy to the chair of their department. The Student Conduct & Community Standards will maintain records of such cases for a period of five years after the student's last enrollment date.
For additional information regarding this process students should refer to University Rules and Procedures 13.02.99.C0.04: Student Academic Misconduct Cases.

Academic Records

Permanent academic records are maintained in the Office of the University Registrar. When a transcript or other document has been submitted to Texas A&M University-Corpus Christi, it becomes the property of the University and will not be returned to the student as an original.

Academic files and degree plans are maintained in the offices of the college deans. The college deans are responsible for certifying that students receiving undergraduate degrees have satisfied all college degree requirements. The Office of the University Registrar is responsible for certifying that University minimum requirements have been satisfactorily completed.

Challenge to an Academic Record

A student who wishes to challenge the accuracy of the academic record established at Texas A&M University-Corpus Christi and held in his or her behalf, must notify the Office of the University Registrar in writing and explain in detail the nature of the error. The Office of the University Registrar will study the challenge and the contents of the student's file, and consult with the appropriate academic personnel. The Office of the University Registrar will reply to the student within 30 business days.

The student has one calendar year from the date that the data becomes a fact of record to initiate a challenge. If a challenge is successful and affects the student's GPA, honors status or similar rubric, the historical record will be altered accordingly.

Application of this policy is not intended to abridge, supplant, or supersede other deadlines. The University reserves the right to correct or amend an academic record at any time that an error may be detected. In each case, the student will be given written notice of the change.

Change of Name or Address

Changes of name must be filed in the Office of the University Registrar. Address and/or telephone number changes may be processed through the Office of the University Registrar or through Student Academic Information Link (SAIL).
Student Records Policy

The University accumulates data and keeps records to enable staff and faculty to plan educational opportunities to meet the needs of individual students, to better understand students, to counsel them more effectively, and to assist them in placement in graduate education or employment after graduation.

The University maintains student records in several locations, including the Office of the University Registrar, Office of Student Financial Assistance, Business Office, offices of academic deans and faculty, Office of Student Engagement and Success, University College, College of Graduate Studies, Office of Communications and Public Affairs, Career Services, University Health Center, University Counseling Center, Disability Services, and Alumni Office. Provisions are made in these offices for students to review and challenge the accuracy of records when appropriate and upon request.

The University complies with the Family Educational Rights and Privacy Act of 1974 (FERPA) and with the Texas Public Information Act. FERPA is a federal law intended to protect the privacy of education records, to establish the rights of students to inspect and review their education records and to provide guidelines for the correction of inaccurate or misleading information through informal or formal hearings. Information in student records may be provided to parents without the written consent of the student if the eligible student is a financial dependent of his or her parents as defined under Section 152 of the Internal Revenue Code of 1954. Such requests should be submitted to the Office of the University Registrar.

Students have the right to inspect and review their education records, except for the following:

1. Financial records of the student's parents.
2. Confidential records and statements of recommendation, which were placed in the education records prior to January 1975.
3. Confidential records and statements of recommendation, which were placed in the student's education records on or after January 1, 1975, if the student has waived the right to review the letters or statements.

Education records, as defined by FERPA, do not include the following: a personal record of a University faculty or staff member that is in the sole possession of the individual who made it and that has never been revealed to any other person except the maker's temporary substitute; certain employment records; student health records; student records of personal counseling (records protected under other laws and regulations); and records maintained by a University law enforcement unit that were created by that unit for the purpose of law enforcement. (However, the University may release to an alleged victim
of a crime of violence the results of a University disciplinary proceeding concerning the alleged perpetrator of the crime.)

The University maintains two types of student education records: directory information and other student records. Directory information is considered public information and will be released by the University upon request, in accordance with existing law. This public information includes: name; student ID, permanent address; permanent telephone number; University email address; field of study; enrollment status (full-time, part-time, undergraduate, graduate, etc.); classification (fr., so., jr., sr.); dates of attendance; degrees, certificates, and other awards received (if any); the type of degree received; date of graduation; name of most recent previous institution attended; and similar information. A student who does not wish this public information to be released must complete the appropriate form and submit it to the Office of the University Registrar.

With the exception of directory information, the University will not permit the release of personally identifiable information in education records without the prior written consent of the student, except as follows:

1. To appropriate University personnel who need access to educational records to perform their legitimate educational duties.
2. To officials of other schools in which the student seeks to enroll, provided the student is notified of what is being released and is given a copy if desired.
3. To federal, state, or local officials authorized by law.
4. In connection with a student's application for, or receipt of, financial aid.
5. To organizations conducting educational studies, provided that these organizations do not release personally identifiable data.
6. To accrediting organizations.
7. To the parents who certify that a student is carried as a dependent for federal income tax purposes.
8. To appropriate persons, in an emergency, if the knowledge of such information is necessary to protect the health or safety of the student or other persons.
9. To individuals requiring such information by means of a judicial order or a lawfully issued subpoena, provided a reasonable effort is made to notify the student in advance of compliance.

The University does not maintain records of membership in organizations or of political, racial, or religious affiliations.

The acquisition and dissemination of information for records is based on a respect and concern for the privacy and protection of the individual student. However, the obligation of confidentiality may lapse when the common welfare of the community or the welfare of the individual demands revelation such as in the case of suicidal preoccupations, expressed homicidal thoughts or actions, commission of a felony, or similar
circumstances. Evaluation and interpretation of a student's records shall be done only by a professional and qualified staff person.

Policies Subject to Change

Although every effort has been made to provide complete and accurate information in this catalog, changes may occur at any time, without notice, in academic policies and regulations.

Tuition, Fees & Financial Assistance

Tuition and Fees

The Business Office website provides current tuition and fee information. Tuition and fees are subject to change.

Texas Residency

All students attending Texas A&M University-Corpus Christi who are non-residents of Texas will be charged additional tuition in accordance with State law. In general, students will be classified as Texas residents if they meet one or more of the following criteria:

1. Any individual who has resided in Texas from birth.
2. Any individual 18 years of age or over who has come from outside Texas and who is gainfully employed in Texas for a 12-month period immediately preceding registration in any institution of higher learning.

Additionally, there are certain other circumstances under which an individual may be classified as a Texas resident. Residency status will be established according to the interpretations by the Texas Higher Education Coordinating Board. The Coordinating Board provides rules on determining residency status.

Although classified as a non-resident, a member of the armed services who is assigned to duty in Texas, as well as his or her immediate family members, may register at the Texas resident fee rate.

Under State law, certain other categories of students may be eligible for tuition and fees exemptions or adjustments. Additional information is available through the Business Office.
The student is responsible for registering under the correct residency status. Students should consult with the Office of Recruitment and Admissions prior to registration to address residency questions.

A non-Texas resident seeking to change residency status must submit a Core Residency Questionnaire to the Office of Recruitment and Admissions prior to registration. Additional information about Texas Residency is available through the Office of Recruitment and Admissions.

**Financial Obligations**

Students are expected to pay all financial obligations to the University by the published deadline. Failure to meet financial obligations may result in:

- Removal from the University
- Transcripts placed on hold
- Exclusion from final exams and graduation
- Exclusion from further enrollment

Financial obligations include, but are not limited to, the following:

- Returned checks and returned check charges
- Library fines
- Lost or damaged book fines
- Replacement costs of long-overdue books
- Loss or breakage of university instructional material or equipment
- Dormitory fees
- Installment payments
- Parking fines
- Repayment of financial aid loans and emergency loans

All tuition and fee costs are due upon registration. Failure to pay may result in deregistration from classes. Registration is not completed until the University Business Office has received payment and all necessary documentation has been completed. Ultimate financial responsibility rests with the student. Payment made after the established deadline will result in a fee of $50.00. An additional fee of $100.00 will be assessed for reinstatement into classes lost as a result of non-payment. The University Business Office periodically performs audits on student accounts to verify tuition and fee charges. This may result in additional charges or refunds.

**Returned Checks**
When personal checks or online payments are returned for insufficient funds, the individual responsible for the payment will be notified. Within seven days of notification, the full amount due, plus a return check fee of $25, must be paid to the university Business Office.

Payment may be done in person or by mail and must be in the form of cash, money order, or cashier's check. The University will not accept a personal check in payment following a returned check.

Failure to submit full payment by the deadline may result in disciplinary action, which may include removal from the University, legal action as prescribed by law, and payment of additional collection fees. The University reserves the right to refuse payment in the form of personal checks from individuals who have previously had three checks returned for insufficient funds.

Returned checks written for SandDollar accounts will result in the account being deactivated until the full amount, plus returned check fees are paid.

Refund of Tuition and Fees

A student officially and completely withdrawing from the University during the semester may be eligible for a refund of applicable tuition and fees according to the following schedule:

10 Weeks or Longer Term:

100% prior to the University's first official class day of the semester
80% during the first five class days of the semester
70% during the second five class days of the semester
50% during the third five class days of the semester
25% during the fourth five class days of the semester

No refund thereafter

Less than 10 Weeks but Greater than 5 Weeks Term:

100% prior to the University's first official class day of the semester
80% during the first three class days of the semester
50% during the second three class days of the semester
No refund during the seventh class day and thereafter

5 Weeks or Less Term:
100% prior to the University's first official class day of the semester
80% during the first class day of the semester
50% during the second class day of the semester
No refund during the third class day and thereafter

The number of class days is counted from the first official class day of the semester, not the first meeting day of a particular class.

For more information, contact the Business Office.

A student dropping a course or courses who remains enrolled in other courses for the semester may be subject to a refund of applicable tuition and fees as follows:

Ten Weeks or Longer Term:
100% prior to and including 12th class day of the semester
No refund after 12th class day

Less than Ten Weeks but Greater than Five Weeks Term:
100% prior to and including 4th class day of the semester
No refund after 4th class day

Five Week Summer Term:
100% prior to and including 3rd class day of the semester
No refund after 3rd class day

2½ Half Week Summer Term:
100% prior to and including 2nd class day of the semester
No refund after 2nd class day

For more information, contact the Business Office.

The number of class days is counted from the first official class day of the semester, not the first meeting day of a particular class.

The refund process begins after a complete review of tuition and fees paid. No refunds are given on Non-Credit Admission (Auditing).

Students using the Installment Payment Plan who withdraw from the institution will have any refund calculated based on the total amount of tuition and fees due at the time of registration, not on the amount of tuition and fees paid at the time of withdrawal.

Students on financial aid may be required to return funds based on the federal financial aid timetable and rates. Students should consult with the Office of Student Financial Assistance before withdrawing.

BankMobile and Refunds

A refund will occur when a credit balance remains on each student's Business Office account after all charges are paid. A credit balance may occur due to overpayments, dropped courses, withdrawals or financial aid (loans, scholarships, grants, etc…). Refunds are issued to the students by BankMobile. A new student, upon registration, will receive in the mail, from BankMobile, a Refund Selection Kit along with refund preference instructions. BankMobile will use the Billing Address on file with the University to send this correspondence to the student. It is important that this address is current. The Refund Selection Kit will contain a personal code which is used to make your refund selection preference with BankMobile. A refund selection preference can be made at https://corpuschristi.vibeaccount.com/. The three preferences are: 1) Direct Deposit into a bank account of their choice, 2) Opening a BankMobile Vibe Account or 3) Paper Check. If the student does not make a refund selection preference, BankMobile will not be able to process the refund.

New students will begin the process of receiving their Refund Selection Kit approximately 5-9 business days after registration. If a student does not receive their Refund Selection Kit they should go to https://corpuschristi.vibeaccount.com/ and select 'Get Started' and then 'Need A Code?' or contact the Business Office at 361-825-2600.

Tuition Rebates for Certain Undergraduates
Certain undergraduate students who attempt no more than three hours in excess of the minimum number of semester credit hours required to complete their degrees may be entitled to tuition rebate of up to $1,000 after graduation.

To be eligible for rebates under this program, students must meet all of the following conditions:

1. They must have enrolled for the first time in an institution of higher education in the fall 1997 semester or later,
2. They must be requesting a rebate for work related to a first baccalaureate degree received from this University,
3. They must have been a resident of Texas, must have attempted all course work at a Texas public institution of higher education, and have been entitled to pay resident tuition at all times while pursuing the degree, and
4. They must have attempted no more than three hours in excess of the minimum number of semester credit hours required to complete the degree according to the catalog to which they were graduated. Hours attempted include transfer credits, course credit earned exclusively by examination, courses that are dropped after the official census date, for-credit developmental courses, optional internship and cooperative education courses, and repeated courses. Courses dropped for reasons that are determined by the institution to be completely beyond the control of the student will not be counted.
5. Beginning with students admitted for the first time in fall 2005, a student must also graduate in a timely manner to earn the tuition rebate. A student who wants to qualify to receive the rebate must graduate within four calendar years for a four-year degree or within five calendar years for a five-year degree if the program is determined by the Texas Higher Education Coordinating Board to require more than four years to complete.

In order to qualify for tuition rebates, students are responsible with complying with all rules related to the administration of the program. Students are responsible for enrolling only in courses that will qualify them for the rebates. Students who have transferred from other institutions of higher education are responsible for providing the University with official transcripts from all institutions attended. Students must apply for rebates on the appropriate forms prior to receiving their baccalaureate degrees and must keep the University apprised of their addresses for a specified period following graduation.

The amount of tuition to be rebated to students under this program is based on state guidelines. If a student entitled to a rebate has an outstanding balance owed to the University or to student loans, the University will apply the amount of the rebate to the balances owed. If the amount of the rebate exceeds the amount of indebtedness, the University will pay the student the remaining amount.
For more information on this program, contact the Business Office or the Office of the University Registrar or visit the College for Texans website.

Fees for Multiple Repeats of a Course

The State of Texas will not provide funds to state institutions of higher education for semester credit hours related to a course in which a student is enrolled for the third time. Therefore, as permitted by state law, the University will charge an additional fee of $100 per semester credit hour for a course in which a student registers for a third time or more. The courses counted toward the limitation include all hours attempted by the student except: Thesis, Dissertation, Individual Music Lessons, Theater Practicum, Music Performance, Ensembles, Studio Art, certain P.E. and Kinesiology courses, Independent Study (topic changes), Special Topics (topic changes), and Developmental Education (not to exceed 18 semester credit hours).

Tuition for Excessive Undergraduate Hours

The State of Texas will not provide funds to state institutions of higher education for excess semester credit hours earned by a resident undergraduate student. Therefore, as permitted by state law, the University will charge additional tuition to students who exceed the semester credit hour limit for their programs. The additional charge per semester credit hour may be billed to any student that meets these criteria. Information on excessive credit fees is available through the university Business Office. The excess hour tuition rate will not exceed the rate charged to nonresident undergraduate students. Excess semester credit hours are those which accrue after the student exceeds by 30 hours the number of semester credit hours required for the completion of the degree program in which the student is enrolled. Thus, the student may accumulate up to 30 hours beyond those required for the chosen degree program and not exceed the limitation. The limitation on excess credit hours applies only to those undergraduate students who first enter higher education in fall 1999 or later. The semester credit hours counted toward the limitation include all hours attempted by the student except:

- Semester credit hours earned by the student before receiving a baccalaureate degree that was previously awarded to the student
- Semester credit hours earned by the student by examination or under any other procedure by which credit is earned without registering for a course for which tuition is charged
- Credit for a remedial education course, a technical course, a workforce education course funded according to contact hours, or another course that does not count toward a degree program at the institution
• Semester credit hours earned by the student at a private institution or an out-of-state institution

Methods of Payment

The methods of payment that are accepted by the Business Office include cash, checks, credit/debit cards, installment payment plans and emergency loans. Installment payment plans and emergency loans are discussed below. For information on payment by check or credit/debit card, see the Business Office.

Installment Payment Plan (Fall and Spring Only)

An installment payment plan is available to most students under the provisions of Section 54.007 of the Texas Education Code. The University offers two options to pay by installments: a three-payment plan (30% prior to the start of the semester with two more payments during the semester of 35%) and a four-payment plan (25% prior to the start of the semester with three more payments during the semester of 25%). Subsequent installment payments should be made directly to the Business Office. A nonrefundable processing fee of $20.00 will be charged and a late fee of $25.00 will be added to each installment not received by the due date.

Students utilizing the installment option must execute an electronic agreement which sets forth the conditions and repayment schedule of the payment plan selected. Under the provisions of the installment payment option in the law, a student who fails to make full payment of tuition and fees, including any incidental fees, by the due date may be prohibited from registering for classes until full payment is made. A student who fails to make payment prior to the end of the semester (last class day) may be denied credit for work done that semester.

Students who register for classes during WEB Registration and wish to use an Installment Payment Plan must sign up online through the SAIL website at http://sail.tamucc.edu/. More information about Installment Payment Plans can be found on the Business Office website at http://businessoffice.tamucc.edu/faq_install.html.

Emergency Loans

Short-term emergency loans are available to students who need assistance in covering tuition and fees and books. Funds are limited and will be provided on a first-come, first-served basis to eligible applicants. Information on eligibility requirements and the application process can be found on the Business Office website at
http://businessoffice.tamucc.edu/faq_emergency.html. There is a non-refundable processing fee of $25.00 per loan. A late payment fee of $25 will be added to each loan that is not paid in full by the due date.

**Fees**

Information on current tuition and fees can be found on the Business Office website at [http://businessoffice.tamucc.edu/tuition_and_fees/index.html](http://businessoffice.tamucc.edu/tuition_and_fees/index.html)

**Fees for Proctored Exams**

Online courses may require the use of exam-proctoring involving third party charges. Exam-proctoring charges may range from $1 - $50.00 per exam. Students may be required to schedule exams at least 24 hours in advance or incur late scheduling charges. All costs for exams are the responsibility of the student. Students may also be responsible for providing web-cams to be used in test proctoring.

**Parking Fees**

All students who park their vehicles on campus lots, including the lots at the housing complexes, must obtain a permit to park in the designated areas. The University Police Department implements and enforces the parking regulations. Payments are made in the Business Office. Information on costs of parking permits can be found on the University Police Department website at [http://police.tamucc.edu/park/parkingRegulations.html](http://police.tamucc.edu/park/parkingRegulations.html).

**Designated Tuition**

Information on current tuition and fees can be found on the Business Office website at [http://businessoffice.tamucc.edu/tuition_and_fees%20/index.html](http://businessoffice.tamucc.edu/tuition_and_fees%20/index.html).

**Undergraduate Student Tuition**

Information on current tuition and fees [http://businessoffice.tamucc.edu/tuition_and_fees/index.html](http://businessoffice.tamucc.edu/tuition_and_fees/index.html).

**Hope and Lifetime Learning Tax Credits**

Financial Assistance

Programs to assist students and parents in financing an education at Texas A&M University-Corpus Christi are administered by the Office of Student Financial Assistance. Students may apply for financial assistance through scholarship, grant, work study, and loan programs.

Eligibility for the majority of financial aid programs is determined through a financial needs analysis. This analysis is made after the student completes and submits a Free Application for Federal Student Aid (FAFSA). Before an undergraduate student can be considered for financial aid, he or she must:

1. be officially admitted to the University;
2. be working toward a degree and classified by the Office of Admissions as degree-seeking;
3. be enrolled at least half-time (6 semester hours during a long semester or 3 hours during each summer term);
4. meet the deadlines set by the Office of Student Financial Assistance;
5. not be in default or owe a refund on any Title IV grant(s) or loan(s);
6. provide proof of eligibility if not a citizen of the United States;
7. provide documents that support information reported on applications for financial aid;
8. meet minimum G.P.A. requirements of a 2.0 cumulative for all undergraduate students and maintain satisfactory academic progress as required for financial aid eligibility to fulfill federal requirements.

Financial aid programs available to undergraduates include Federal Pell Grant, Federal College Work Study, Federal Supplemental Educational Opportunity Grant, Texas Public Educational Grant (resident and nonresident), A&M-Corpus Christi Grant; TEXAS Grant; Texas Be on Time Loan (Renewal Only), Federal Perkins Student Loan (Renewal Only), Federal Direct Loan programs, and various scholarships. Several grants and scholarships are offered through the Texas Higher Education Coordinating Board. Federal Direct Loans are distributed in two disbursements in accordance with Federal regulations. If the student is receiving a loan for one term, the first check will be disbursed at the beginning of the semester and the second after the midpoint of the semester. A loan that covers both fall and spring terms will result in a disbursement at the beginning of each semester. First year, first time borrowers will not receive their first loan disbursement until 30 days into the semester.
Most financial aid programs have a limited amount of funds, which must be granted on a first-completed, first-awarded basis. Therefore, students are strongly encouraged to have their financial aid files completed by February 15 for summer, by March 31 if applying for assistance for both fall and spring, or by November 1 if applying for assistance for spring only.

Application forms and detailed instructions on applying for financial aid are available through the Office of Student Financial Assistance and at the following web address: http://osfa.tamucc.edu.

Satisfactory Academic Progress Policy

The Higher Education Act of 1965, as amended, mandates that institutions of higher education establish policies to monitor the academic progress of students who apply for and/or receive federal financial assistance. Texas A&M University-Corpus Christi applies its minimum standards to all federal, state, and institutional financial aid programs in order to maintain a consistent policy for all financial aid applicants. Though this policy establishes the minimum standards for all financial aid programs at A&M-Corpus Christi, an individual aid program may have unique qualitative and/or quantitative standards specific to the program as mandated by law or the program's governing entity. Examples include Texas Grant, Texas Be On Time Loans, Academic Scholarships, and Athletic Scholarships.

To be awarded or receive any financial aid, a student must be accepted to the University in good academic standing (i.e., no conditional admittance), be enrolled in credit courses leading toward a degree or teaching certificate, and maintain satisfactory academic progress in the course of study pursued. This policy is consistently applied to all enrollment periods regardless of whether or not the student received aid.

Minimum Standards of Satisfactory Academic Progress

At the end of each academic year (spring semester), students must show satisfactory progress toward a degree or certificate based on the following elements:

1. Academic Standards
2. Maximum Frame for Degree/Certificate Completion
3. Successful Credit Hour Completion Rate

Academic Standards
Students must maintain the following cumulative grade point average to retain financial aid eligibility:

All undergraduate students = 2.0 cumulative G.P.A.
All graduate students = 3.0 cumulative G.P.A.

Learn how G.P.A. is calculated by clicking here.

**Maximum Frame (Attempted Hours) for Degree/Certificate Completion**

For financial assistance purposes, students will be limited to the following number of attempted hours to complete their degree or certification program:

**Undergraduate Degree/Certification**

180 attempted hours

Attempted hours include all transfer hours and all registered hours at A&M-Corpus Christi per semester whether or not the student earns a grade, receives credit, or received financial aid. The following are considered hours attempted, but not completed/earned:

- Grades of F or NC
- I or incomplete
- W or withdrawal from courses

The following are considered hours attempted and successfully completed/earned:

Grades of A, B, C, D, CR, and IP

**Successful Credit Hour Completion Rate**

Students must successfully complete/earn a minimum of 67% of all attempted semester credit hours. Note: All partial credit hours will be rounded down to the nearest hour.

Examples:

1. If a student attempts (registers for) 24 credit hours in an academic year, the student must complete a minimum of 16 credit hours (24 x 67% = 16) in order to meet the requirements for satisfactory academic progress for the year.
2. If at the end of the second year, a student has attempted 60 hours, the student must have completed a minimum of 40 credit hours (60 x 67% = 40) to meet the requirements for satisfactory academic progress.

**Remedial Course Work**
Students may receive financial assistance for remedial course work if acceptance to a program has been confirmed, and the remedial course work is necessary to complete the program. Students cannot receive financial assistance for remedial course work if their acceptance to a program is based on the completion of the remedial work. Remedial course work is limited to 24 semester hours.

**Review Policy**

At the end of each spring semester, the Office of Student Financial Assistance will review the progress of each financial aid recipient to determine eligibility for aid consideration for the upcoming academic year.

**Financial Assistance Suspension Policy**

If it is determined that a student does not meet the minimum satisfactory academic progress requirements, he or she will automatically be placed on financial assistance suspension and will be notified accordingly. Students on financial aid suspension are not eligible for any type of federal, state, or institutional aid.

Note: Students on scholastic suspension/dismissal or enforced withdrawal will also be placed on financial assistance suspension.

**Conditions for Reinstatement**

Students may attend the next semester/term at A&M-Corpus Christi without financial aid to reinstate eligibility. If, at the end of the semester/term, the student again meets the minimum satisfactory academic progress standards, the student may submit a written request to the Office of Student Financial Assistance to have his or her application for aid reinstated for the next and subsequent semesters/terms of the current academic year. Continued eligibility for the next academic year will be determined again at the end of the spring semester during the regular review process.

**Appeal Policy**

Students who fail to maintain satisfactory progress due to extenuating circumstances may submit an application for appeal to be reviewed by the Aid Appeals Committee. To appeal for reinstatement of financial aid eligibility, students must complete and submit the Request for Appeal form to the Office of Student Financial Assistance. A completed appeal application includes a letter and supporting documentation providing a detailed
explanation of the extenuating circumstances, such as personal injury or medical problems, illness or death of an immediate family member, etc. In addition, if a student has exceeded the maximum time frame and is appealing based on a change of major, he or she should state the reason for the change and indicate the number of hours remaining to be taken in the new major. The student's academic advisor must complete the advisor section of the application.

If the appeal is approved by the Aid Appeals Committee, financial aid will be continued as if the student is otherwise eligible. If denied, the student may request a meeting with the appeals committee. If the outcome of the meeting does not result in an approval of the appeal, the student must reinstate eligibility according to actions outlined in the previous section.

The decision of the committee is final and may include additional conditions the student must meet as deemed appropriate by the committee. All students (approved or denied) will be reviewed again for continued eligibility at the end of the academic year during the regular review process.

Refund and Repayment Policies

Students who register and then withdraw from their classes at the University will have their aid recalculated based on the number of days they attended class. If a student withdraws from all classes prior to the first class day, he or she may be required to repay any and all financial aid received. Students should consult the Satisfactory Academic Progress Policy to determine if their withdrawal will affect future aid eligibility.

Scholarships

Texas A&M University-Corpus Christi offers a variety of academic scholarships for incoming freshmen, current undergraduate, and transfer students. Current undergraduate and transfer students must have a minimum GPA of 3.0 to apply (unless otherwise noted) and plan to be at least a full-time student (12 hours per semester) if awarded.

Lists of scholarships available to students can be found in the scholarship office. The deadline to apply for undergraduate university scholarships is February 15. Applications will be reviewed and rated on the basis of GPA, transcript, community involvement, essay, resume, and other criteria. More information is available at scholarships.tamucc.edu/current.php.

The priority deadline for incoming freshmen for the next academic year is December 1. All applications received after this date will be awarded on a funds-available basis.
Information on scholarships for incoming freshmen is available online at scholarships.tamu.edu/freshmen.php. Scholarships are open to all incoming freshman students and are not restricted by college major. Decisions will be based on academic standing, class rank, test scores, and enrollment in AP classes.

A non-resident U.S. citizen or international student who is a recipient of a competitive University scholarship may be eligible for the Texas resident tuition rate. The student must have competed with other students, including Texas residents, for the scholarship. For additional information on scholarships, visit the University website for Scholarship Programs at scholarships.tamu.edu/.

Emergency Loans

Short-term emergency loans are available to students who need assistance in covering tuition and fees and school-related expenses such as books. Detailed information regarding eligibility requirements and the application process can be found in the Business Office.

Veterans Educational Benefits

Veterans Affairs Office

The mission of the Texas A&M University-Corpus Christi Veterans Affairs Office is to assist service members, veterans, and dependents in receiving entitled educational benefits and in achieving educational goals. The Veterans Affairs Office strives to assist active duty service members and veterans with the transition from military to academic life. For more information on educational programs and updates on the Post 9/11 Veterans Educational Assistance Act of 2008, please call (361) 825-2331 or visit the web site http://vets.tamu.edu.

Enrollment Certification

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at https://www.benefits.va.gov/gibill.

Certifications for veterans' educational benefits are submitted to the Department of Veterans Affairs, Muskogee, OK. Please visit the Veterans Affairs Office for information
on eligibility requirements, applications and forms, and updates on the following benefits:

- Chapter 30 Montgomery GI Bill® – Active Duty Educational Assistance Program
- Chapter 1607 Reserve Educational Assistance Program (REAP)
- Chapter 33 Post 9/11 GI Bill® Veterans Educational Assistance Act of 2008
- Chapter 1606 Montgomery GI Bill Selected Reserve
- Chapter 31 Vocational Rehabilitation and Employment Program
- Chapter 32 Post-Vietnam Era Veterans' Educational Assistance Program (VEAP)
- Chapter 35 Survivors' and Dependents' Educational Assistance Program

The applicant must provide a Certificate of Eligibility (COE) from the Dept. of Veterans Affairs showing the benefit has been awarded. A Veterans Intent to Enroll Form is required each term for certification and provides the VA Certifying Official with authorization to submit an enrollment certification on behalf of the student. Students must notify the Veterans Affairs Office of any enrollment changes, to include: added or dropped courses, withdrawals, or change of major. A degree plan from the academic advisor is required for the veteran's file. Texas A&M University-Corpus Christi does not participate in the VA Advance Payment Program.

**Hazlewood Exemption**

In accordance with the Texas Education Code, Section 54.203, Texas veterans and eligible dependents must apply for benefits under the Hazlewood Act or the Hazlewood Legacy Act each term. An exemption of tuition and fees, with the exception of the student services fee, is granted per term for Hazlewood eligible students, up to 150 cumulative credit hours. Students must submit the application, an original, certified, or notarized copy of the veteran's discharge papers (VA Form DD-214 member 4 copy), and other qualifying documentation, and a letter from the Muskogee, Oklahoma VA Regional Processing Office stating that they have exhausted federal veterans' educational benefits. The Hazlewood file must be completed, and the exemption requested by the census date per term. The number of credit hours a student is registered for on the census date of a given term is the number of Hazlewood credit hours reported for the term to the Texas Higher Education Coordinating Board.

**Training Time**

For information on enrollment status requirements for students receiving financial assistance, administered through the Office of Financial Assistance, please review that section of the catalog. The criteria for enrollment status of students receiving financial assistance and training time for Department of Veterans Affairs benefits may differ.
Please contact the Veterans Affairs Office to determine training time criteria for the various summer terms.

Academic and Student Services

- New Student Orientations
- Academic Advising Center
- Office of Academic Testing
- Center for Academic Student Achievement (CASA)
- Mary and Jeff Bell Library
- Computing Resources
- Student Services
- Student Engagement and Success (SEAS)
- Career Services
- Chancellor's Student Advisory Board (CSAB)
- Islander Housing
- Transportation Services
- Student Conduct
- Student Government Association (SGA)
- Recreational Sports
- Student Activities
- Engagement Initiatives
- Disability Services (DS)
- University Counseling Center (UCC)
- University Health Center
- Campus Security Report
- Intercollegiate Athletics
- Office of International Education
- Study Abroad
- Alumni Relations Office
- Community Outreach

The University provides a variety of academic support services that complement the academic programs and help students reach their educational goals.

New Student Orientations

Islander Launch (new student orientation) provides first-year students with information regarding academic advising and registration. Academic Advisors assist students in selecting the appropriate courses for their first semester at Texas A&M-Corpus Christi. We offer in-person and virtual opportunities to gain information, become familiar with campus resources, and learn how to register for classes in an online platform. The Islander Launch experience is offered prior to fall and spring semesters.

Academic Advising Centers

Academic advising centers are housed in University College and staffed by full-time academic advisors who are available to assist students with their educational plans, course selections, degree requirements, and other academic matters. Academic advisors support students from the time of their initial enrollment to the successful attainment of
Office of Academic Testing

The Office of Academic Testing at Texas A&M University-Corpus Christi serves the student population and the Coastal Bend community with their testing needs. For information on TExES examinations, see the "College of Education and Human Development" section of the catalog. Please visit http://testing.tamucc.edu or call (361) 825-2334 for other services provided by this office.

Center for Academic Student Achievement (CASA)

The Center for Academic Student Achievement (CASA) is committed to providing academic support services to help students reach their educational goals and to succeed in the university environment. CASA programs are designed to improve the retention and graduation rates of University students. These academic support services include tutorials, Writing Center, Supplemental Instruction, mentorship, developmental education (TSI), and student retention assistance. Students are encouraged to contact the Center for Academic Student Achievement, located in the Glasscock Student Success Center (GSSC-CASA), at 361.825.5933 or to visit our website at http://casa.tamucc.edu for hours of operation, our programs' details, and schedules of services.

CASA Services

The needs of students attending CASA are individually assessed and academic support services are recommended to aid students in reaching their academic goals. Services are available to all A&M-Corpus Christi students. In order to utilize academic support services such as tutoring and writing support, one must be enrolled at or an alumnus of A&M Corpus Christi.

First Islanders Scholars' Academy

CASA's First Islanders Scholars' Academy (FISA) is a program designed to assist first-generation students through peer and professional staff mentorship. Students will belong to a group of like-minded students and find engagement in campus resources and academic success workshops. The FISA mentoring team works one-on-one with students to track their academic progress and to build a supportive mentoring relationship to aid in navigating the University, assistance in overcoming challenges or barriers to success, and
networking opportunities with peers and colleagues. To join FISA, a voluntary academic and social program, please contact Martha Gutiérrez at Martha.Gutierrez@tamucc.edu or at 361.825.2893.

CASA Peer Mentors

The CASA Peer Mentorship Program assists first-year students in collaboration with the First Year Program. CASA peer mentors are academically successful upper-division and graduate students who are trained to help first-year students make a smooth transition while fostering habits for academic success and integration. For additional information, please call us at 361.825.5933 or email casa@tamucc.edu.

Academic Collegiate Excellence (ACE)

Academic Collegiate Excellence is a program designed to assist students who are currently on scholastic probation through the use of metacognitive learning strategies workshops and one-on-one meetings with Scholastic Performance Specialists.

Scholastic Performance Specialists work closely with students to identify and enhance learning behaviors and strategies for academic success. In an effort to increase academic student success, the program generates an individualized academic recovery plan to assist students as they work towards good academic standing. For more information on the ACE Program, please contact us 361.825.5933 or at casa@tamucc.edu.

Starfish

Hosted by CASA, Starfish Early Alert and Connect is an academic early alert system for undergraduate students at Texas A&M University-Corpus Christi. The software is designed to support faculty course progress feedback for students and to help connect students with their "Success Network" comprised of faculty, advisors, mentors and other campus support units. For additional information, please contact Nicholas.Gentry@tamucc.edu or John.Fortiscue@tamucc.edu.

Supplemental Instruction (SI)

CASA provides Supplemental Instruction (SI) that is designed to increase student performance and retention. This program targets large entry-level courses and provides regularly scheduled out-of-class, peer facilitated sessions by a highly trained Supplemental Instructor Leaders. Schedules are available online.
at http://casa.tamucc.edu. For additional information, we invite you to call us at 361.825.5933 or to email casa@tamucc.edu.

Texas Success Initiative Advising (TSI) Support

Academic Success Coaches at CASA coordinate the Texas Success Initiative Program for TAMUCC. TSI requirements are detailed under the "Texas Success Initiative (TSI)" section of the "Admission" chapter. While Academic Success Coaches support all students, conditionally admitted students, and students who have not met college-readiness in one or more content areas of the TSI assessment are their primary focus. Success Coaches work with those students to enroll in the appropriate developmental education course(s) and track progress through completion of all TSI and admission requirements. For additional information, please call the Academic Success Coaches at 361.825.2977 or email casa@tamucc.edu.

Tutorials Program

CASA's Tutorial Program, certified by the College Reading and Learning Association, provides tutorial services to students in most core courses facilitated by trained and faculty-recommended successful upper-division and graduate students. Disciplines include mathematics, science, statistics, business and accounting, among others. For schedules of tutorials, please visit http://casa.tamucc.edu. For additional information, please call us at 361.825.5933 or email casa@tamucc.edu.

The Writing Center

The CASA Writing Center supports the writing process of all University writers, from freshmen to graduate students, as well as to alumni, faculty, and staff. The Writing Center offers face-to-face and online writing consultations. We also provide faculty-requested writing workshops. Though the Writing Center does accept walk-in sessions based on consultant availability, it is strongly encouraged those seeking assistance schedule an appointment by visiting: http://casa.tamucc.edu.

Most sessions are 30 minutes in length for undergraduate writers. For additional information, please contact Kristen.Ruggles@tamucc.edu or call 361.825.3490.

Mary and Jeff Bell Library

For information on library resources and services, see "Mary and Jeff Bell Library" in the catalog section entitled "The University."
Computing Resources

For information on computing resources, see "Campus Facilities" in the catalog section entitled "The University."

Student Services

Student Engagement and Success (SEAS)

Student Engagement and Success aims to foster a healthy academic climate and professional atmosphere that promotes and encourages student leadership, learning, and growth. Services and programs are designed to meet the needs of students with varied backgrounds and interests. Music, arts, special events, and multicultural programs contribute to a positive experience on campus and promote an understanding of a diverse and changing global community.

Student Engagement and Success is made up of various departments, including Career Services, Housing, Recreational Sports, University Center, Student Activities, Student Conduct, Disability Services, University Counseling Center, and University Health Center. The Division collaborates with all departments on campus to assist students in the attainment of their personal and academic goals.

A major strength of A&M-Corpus Christi is that students participate in a variety of out-of-class activities. Activities begin with orientation and include a variety of campus organizations and sports clubs that provide a wide range of leadership experiences. Student services are designed to help students attain their desired degrees, learn healthy lifestyles, and attain employment or admission into graduate school. For additional information, see the Student Engagement and Success website. The Office of Student Engagement and Success is located in the University Center, Suite 318, (361) 825-2612.

Career Services

The Career Services staff helps students explore, select, prepare for, and actively pursue satisfying employment and careers. The following services are available:

- Career counseling, computer-assisted assessment, and vocational guidance, which help students explore career options beginning in their first semester. Students may meet with a Career Counselor to explore interests and values, with a view
toward choosing a career. For students who are experiencing difficulty choosing a major, this can be a useful process of self-exploration.

- Job search and graduate school advisement.
- Student employment services: assistance in finding on- or off-campus employment.
- Internship and co-op placement assistance for students at all levels.
- Volunteer opportunities listing.
- On-campus recruiting and Job Fairs throughout the year targeted at different majors.
- Electronic resume referral service.
- Career Resource Library.
- Career seminars, workshops, and Business Etiquette Dinner.
- Videotaped "mock" interviews with trained counselors and professionals.

Career Services is located on the third floor of the University Center in Suite 304. For information, call (361) 825-2628 or visit the website at http://career-services.tamucc.edu.

**Chancellor's Student Advisory Council (CSAC)**

The purpose of the Chancellor's Student Advisory Council of the Texas A&M University System is to provide representation for the students to the Chancellor and Texas A&M University System leadership, and to educate and stimulate student involvement in Student Engagement and Success. It is made up of two students from each system institution. Thus, the Chancellor's Student Advisory Council is the official student voice to the system leadership.

**Islander Housing**

On-campus housing is available through two communities. Miramar, the Island Campus, offers both residence hall and apartment room styles. Momentum Village is located on the Momentum Campus and offers apartments and townhomes. Living on campus will provide many rewarding experiences to supplement your academic studies and a student may apply financial aid to pay rent. Most importantly, studies have shown that students who reside on campus are more likely to graduate on time and with higher GPAs. For more information, please visit http://www.housing.tamucc.edu.

**Transportation Services**
All students and employees ride the Corpus Christi Regional Transportation Authority (RTA) buses free of charge by showing their Sanddollar ID card. Plan a trip anywhere RTA services through Google Maps by selecting the 'public transit' method of transportation (train icon). For bus route information, go to www.ccrta.org or call 361.289.2600. For paratransit transportation services, please call 361.289.5881 or go to www.ccrta.org and select Paratransit from the Rider menu. If you have questions or concerns regarding this service, you may contact the RTA at the number above or call the Office of Student Engagement and Success at 361.825.2612.

**Student Conduct**

Student Conduct & Community Standards Officers strive to protect the University's educational community and to maintain social discipline through the administration of the Student Code of Conduct. Inappropriate behavior will be investigated and adjudicated in a manner consistent with the institution's educational and community development goals. Students may view a copy of the Student Code of Conduct at http://judicialaffairs.tamucc.edu.

**Student Government Association (SGA)**

Established in 1994, the Student Government Association is a student-run, campus wide organization that provides students with a voice in the decision-making process of the University. SGA members are the link between students and the administration of TAMU-CC. SGA strives to improve communication, enhance leadership abilities, hone critical thinking skills, and successfully build relationships with staff, faculty and peers.

The Student Government Association (SGA) is composed of the Executive Branch, Legislative Branch, and the Judicial Branch. The SGA President, Vice President, and Senators are elected in the spring semester for a term of one year. Elections for freshman senators are held in September. The Judicial Branch is appointed by the SGA President and approved by the Student Senate. For more information, call (361) 825-5745, or visit us on the website at: http://sga.tamucc.edu.

**Recreational Sports**

The Recreational Sports program provides facilities, equipment, and opportunities for participation in a wide variety of sports and recreational activities for the University community. These activities are designed to accommodate all individuals and activities ranging from beginner to expert and sport activities ranging from highly competitive and structured to informal and social. Program areas of interest include intramural sports,
fitness and wellness, informal (open play) recreation, sport clubs, aquatics, outdoor
adventure, and special events.

The Dr. Jack and Susie Dugan Wellness Center (DWC) includes a gymnasium, free
weights, weight machines, cardiovascular exercise equipment (treadmills, elliptical
trainers, steppers and bikes), multi-purpose group exercise rooms, and offices for the
Recreational Sports Department and Intercollegiate Athletics Department. A 25-yard
outdoor season pool is located adjacent to DWC. Multi-purpose playing fields and tennis
courts are located on Momentum Campus and available for use.

As the largest student employer on campus, each semester Recreational Sports employs
students to work as intramural supervisors and officials, lifeguards, facility assistants and
supervisors, group exercise instructors, and personal trainers. Work study and non-work
study positions are available. No experience is necessary. Training for all positions is
conducted by the Recreational Sports Department. The Recreational Sports Department
Office is in the Dugan Wellness Center Room 107. For more information, call (361) 825-
2454 or go to http://recsports.tamucc.edu.

Student Activities

Dedicated to cultivating students of character through inclusive programming, Student
Activities promotes leadership development, campus and community engagement and
responsible citizenship that compliments the academic experience and instills Islander
pride. Located in the Involvement Center on the 2nd floor of the UC, Student Activities
is the place to get involved, with something for everyone! Interested in joining a student
organization or Fraternity/Sorority, attending a leadership conference, seeing a movie,
participating in a talent show, or serving your community? Stop by and learn about our
programs and events or visit https://studentactivities.tamucc.edu/.

Aloha Days: The Freshman Camp Experience

Aloha Days provides incoming first-year students with an optional summer camp
experience designed to aid in their successful transition to Texas A&M University-
Corpus Christi. Student leaders serve as camp counselors who facilitate activities,
discussions, games, and presentations. During Aloha Days, first-year students develop
friendships with current students and university staff, learn about the benefits and
opportunities for leadership involvement, understand the values of diversity, learn more
about themselves, and of the pride in the growing traditions, spirit, and rich heritage of
A&M-Corpus Christi. Through Aloha Days, our hope is that students will begin to find
their "anchor" and feel more at home on the Island before classes begin. For more
information call (361) 825-2707 or visit http://alohadays.tamucc.edu.
Campus Activities Board (CAB)

The Campus Activities Board (CAB) is responsible for providing a variety of social, recreational and educational programs to the campus community for free or a low price. Students develop leadership skills while budgeting, planning, marketing, and evaluating each event. For a listing of upcoming events call (361) 825-2707 or visit http://cab.tamucc.edu.

Fraternity & Sorority Life

Fraternities and sororities are value-driven student organizations based on brother/sisterhood, leadership, service and academic success. The Fraternity & Sorority Life community strives to enhance the college experience and compliment the mission of the university through engagement, service, scholarship, diversity and leadership. In addition the community strives to maintain a respectful and unified environment where members and their organizations can positively develop into responsible global citizens. For more information call (361) 825-2707 or visit http://greeklife.tamucc.edu.

Student Volunteer Connection (SVC)

The Student Volunteer Connection is a student organization that aims to get TAMU-CC students actively involved and committed to community service. Their mission is to unify the campus community and the Corpus Christi community through service. SVC makes community service opportunities more accessible to students by offering a variety of volunteer programs and events such as Islander Clean, National Hunger & Homelessness Awareness Week, and Green Week. Their Big Event is a one big day of service in which the campus community comes together to express their gratitude for the surrounding Corpus Christi Community. The Alternative Breaks program provides opportunities for students to engage in direct hands-on service and experiential learning through travel outside of the Corpus Christi community. For more information call (361) 825-2707 or visit http://svc.tamucc.edu

University Center Programs (UCP)

The UCP is designed to provide passive and active lunch time activities and entertainment to students, faculty, staff and university guests in and throughout the University Center as a way to engage students in a variety of ways. Activities and events include UCP Radio, Patio Jam, Late Night Breakfast, Study Center and other social and fun activities. For more information contact (361) 825-2707.
University Council of Student Organizations (UCSO)

The University Council of Student Organizations (UCSO) is a governing body for student organizations and includes representatives from each student organization. UCSO meets monthly to determine policy and funding for over 100 student groups that exist on campus. There are many types of organizations, including: academic, honor societies, special interest, political, faith-based, cultural, professional, and other interest groups. A current list of recognized student organizations is available in the Student Organization Center University Center 204. For more information call (361) 825-3239 or visit http://ucso.tamucc.edu.

UCSA Leads

UCSA Leads offers students the opportunity to improve leadership skills to become more marketable and global leaders. Centered on the belief that leadership is an important part of being the best version of yourself, the program works on developing awareness and personal leadership that can benefit any student regardless of positions held. UCSA Leads offers a variety of programs including Leadership Hour, Islander Leadership Conference, Weekend Leadership, Workshop To-Go and Sigma Alpha Pi, the National Society for Leadership and Success (NSLS) Honor Society. For more information call (361) 825-2707 or visit http://ucsa.tamucc.edu/ucsaleads

Waves of Welcome (WOW)

Waves of Welcome (WOW) is designed to help students become familiar with A&M-Corpus Christi and its traditions. WOW provides an opportunity for students to meet their fellow Islanders, network with faculty and staff, and connect with student leaders. By attending open houses, special programs, meetings, and other activities, students can learn more about the many resources available to help them succeed academically and get the most out of their college experience. The Waves of Welcome schedule is distributed at the beginning of the fall and spring semesters. For more information call (361) 825-2707 or visit http://wow.tamucc.edu.

Engagement Initiatives

The Office of Engagement Initiatives is dedicated to creating unique opportunities to help Islanders succeed through programming and educational outreach. The office includes I-TEAM, ICA, and the Inclusive Islander Network.
Islanders Teaching, Engaging, And Motivating (I-TEAM)

I-TEAM student leaders are dedicated to helping Islanders stay informed about substance use and all dimensions of wellness. I-TEAM's trained peer educators want each Islander to graduate and be successful, this means practicing healthy behaviors and making wise choices. Through exciting events like Party House, Islander Myth-busters, Bond-Fire, and many more, I-TEAM teaches facts about substance use, models healthy behaviors, and helps Islanders to unwind safely! Find out more and get in touch at I-TEAM's i-Engage page or call 361.825.4284.

Islander Cultural Alliance (ICA)

A&M-Corpus Christi is a multicultural campus with students, faculty, and staff of diverse backgrounds and interests. It is also a place where differences are respected, and identities are affirmed. The Islander Cultural Alliance (ICA) is a student organization that organizes and promotes multicultural learning programs on campus. Some events include programming for Hispanic Heritage Month, Black History Month, Women's History Month, LGBTQ+ celebrations, disability/ability awareness, and Asian heritage festivities. For more information visit ICA's i-Engage page or call 361.825.3925.

Inclusive Islander Network (IIN)

The Inclusive Islander Network is a group of students, faculty, and staff who have participated in training and are committed to creating an environment of inclusion and affirmation for everyone. Trainings, workshops, and round-table discussions are available on identity-based topics ranging from the basics of inclusive behavior to gender identity politics. Find out more on the IIN i-Engage page or call 361.825.3925.

Disability Services (DS)

Texas A&M University-Corpus Christi is committed to promoting equal opportunities for students with disabilities to access campus facilities, resources, and programs. Support services and reasonable academic adjustments are arranged for students with permanent or temporary disabilities through the Disability Services (DS) Office. The DS Office is located in Corpus Christi Hall 116.

Students with permanent or temporary disabilities who qualify for support under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act of 1990 must self-identify and register with the Office of Disability Services. To qualify for services students must 1) be admitted to the University 2) present appropriate and current
documentation of their disability from a qualified professional and 3) register with the Office of Disability Services each semester. Advance planning by the student with the Office of Disability Services is necessary to ensure adequate time to arrange for appropriate accommodations. It is recommended that requests for services and/or academic adjustments be made as soon as possible. Requests for services requiring extensive preparation (e.g., interpreter services, adaptive and assistive equipment, textbooks in alternate format, etc.) may need up to 30 days to process. For additional information please call (361) 825-5816 or visit the Office of Disability Services website at http://disabilityservices.tamucc.edu.

University Counseling Center (UCC)

The University Counseling Center helps students resolve problems that can interfere with meeting the demands of college life and offers a variety of services for students who want to develop skills and resources to be personally and academically successful. UCC services are funded through the Student Services fee and are available to all currently enrolled TAMUCC students at no additional charge. Counseling Center records are kept strictly confidential and are not released without the student's written permission except under certain legal conditions.

Services include brief individual counseling, academic skills counseling, psycho-educational workshops, limited psychiatry services, alcohol and other drug treatment and education, and consultation. The Counseling Center also offers a Relaxation Room which is a quiet, peaceful space for students to develop and practice relaxation skills that can enhance their academic productivity and their sense of well-being.

Students who are interested in counseling services, can call or visit the Counseling Center during walk-in hours for a brief consultation/assessment with the Counselor on Duty (COD). The role of the COD is to assist students to connect with the most appropriate services and resources. Common concerns addressed in counseling include stress, anxiety, depression, relationship issues, substance use, and identity issues. The Counseling Center is located in the Driftwood Building. Walk in hours are Monday-Friday, 9:00am-11:30am and 1:00-4:00pm. Call (361) 825-2703 or visit the website http://counseling.tamucc.edu for more information. If a student is in crisis and needs to speak to a counselor outside of regular business hours, the after-hours crisis line, (361)825-2703, is available.

University Health Center
The University Health Center, located in Sandpiper Hall, assists students in maintaining optimal health while attending A&M-Corpus Christi. Primary emphasis is on preventive health practices, health education, and the promotion of wellness. Primary health care is provided by registered nurses, family nurse practitioners, and a physician for the care of acute illnesses and minor injuries. Chronic health care needs are referred to local community providers and/or the student's primary care provider. The University Health Center provides a variety of health services such as:

- "Ask-A-Nurse-Line" at 361-825-2601
- Women's Health Clinic - Gynecological services
- Men's Health Clinic
- Administration of allergy shots - Student provides serum from allergist.
- Laboratory testing
- Preventive health care and medical resource information - Referrals for community resources
- Blood pressure screening and monitoring
- Contraception, sexually transmitted diseases (STD), HIV testing, and counseling
- Physicals, vision, and hearing screening
- Substance abuse prevention, assessment, and referral
- Immunizations and tuberculin skin testing
- Educational consultations: nutrition, lifestyle, weight management, smoking cessation, and substance abuse
- Insurance and claim assistance.

Health Insurance

In collaboration with the Texas A&M University System, a private insurance plan is available at special rates to students attending A&M-Corpus Christi. All non-insured students are strongly encouraged to consider the benefits of enrolling in a health insurance program. Information brochures regarding this health plan are available in the University Health Center or at www.tamuinsurance.com.

Campus Security Report

Click here to view the university crime log.

Intercollegiate Athletics

Texas A&M University-Corpus Christi Athletics has grown into a respected NCAA Division I program offering 16 men's and women's sports dedicated to achieving
competitive success, providing an exceptional academic and athletic experience for student-athletes, and prioritizing community service and engagement. Men's sports include basketball, baseball, tennis, cross country, and indoor and outdoor track and field. Women's sports include basketball, tennis, golf, softball, volleyball, beach volleyball, soccer, cross country, and indoor and outdoor track and field. Athletics teams at A&M-Corpus Christi are known as the "Islanders," and the official school colors are blue, green, and silver.

Texas A&M University-Corpus Christi Athletics' mission is to bring distinction to the university by winning conference championships and competing successfully on the national stage, contribute to a vibrant campus culture, and develop successful student-athlete graduates who will excel as leaders in their communities.

Having recently completed our 20th year of intercollegiate athletic competition and with a renewed commitment to success by university leadership, TAMU-CC is poised to position itself as a leader among the 13 institutions of the highly competitive Division I Southland Conference. Each year, the Southland Conference tournament champion in each sport receives an automatic bid to the NCAA Division I Championship tournament.

For more information on Islanders Athletics and to join the excitement, please call 361-825-3415 or visit www.goislanders.com.

Office of International Education

Office of International Education (OIE) provides support and services to TAMU-CC international students, scholars, faculty, departments, and schools/colleges. OIE offers a variety of services and programs, which include: (A) immigration advising and services that ensure students, scholars, and institutional compliance with federal rules and regulations and guide them through all the requirements for foreign nationals studying and working in the U.S.; (B) Assisting departments and schools/colleges in their efforts to hire international student and scholars; (C) intercultural and social activities/events that welcome and help international students and scholars transition and adjust to their new environments; (D) study abroad programs that supply the most effective and accessible means for students to develop the needed skills, experience, and knowledge for international employability, earning potential, and economic well-being. For more information, contact the Office of International Education at (361)-825-3346, visit the office in UC 226, or visit the website at http://oie.tamucc.edu/.

Study Abroad
Texas A&M University-Corpus Christi (TAMU-CC) is committed to providing access to international education opportunities for all students.

TAMU-CC is dedicated to creating an inclusive community and establishing collaborative relationships across cultures. TAMU-CC aspires to enrich and educate without exclusion and foster responsible global citizenship. The Office of International Education (OIE) through Study Abroad Programs (SAP) promotes international learning environments that embrace diversity. The mission of the Study Abroad Programs is to provide a variety of educational experiences abroad, be it through faculty-led programs, reciprocal exchange agreements, affiliation agreements, independent programs, third-party study abroad programs, or by participating in the Texas A&M University System (TAMUS) Study Abroad partnership programs. The TAMUS Transient Study Abroad Programs allow A&M System students to participate in system-wide study abroad programs.

Faculty-led Programs

These programs are credit-bearing, international study-travel courses. They are led by one or more University professors and usually last between one to five weeks. Students travel as a group to one or more international locations, where there is a mix of lectures, exercises, assignments, excursions, cultural encounters, and free time. There are certain programs that are open only to students in a particular college, while others are open to all A&M System students.

Reciprocal Exchange Agreement

A reciprocal exchange involves an agreement between two universities to exchange students. Tuition and fees are paid at the home university while studying at the host university. When a student participates in a reciprocal exchange, the student remains enrolled at the home university, allowing students to receive credit. Proficiency in the language of the host country is required; however, some programs are available in English speaking countries.

Affiliation Agreement

TAMUCC students participate in the academic programs in the international institutions and pay fees and tuition directly to the host international universities or colleges, where
they receive grades and credits. All these credits and grades can be transferred back to TAMUCC to fulfill the students' degree requirements.

Independent Programs

Students have the option to apply directly to an international university, or apply to an institute or organization, or to a sponsoring U.S. University. Graduate students may conduct research abroad coordinated by a TAMU-CC faculty member.

Third-Party Study Abroad Programs

TAMUCC students can study abroad through the third-party study abroad providers. These providers work together with TAMUCC Office of International Education to take care of the whole study abroad process from the beginning of the application to transferring the credits back to the home institution. Most of the study abroad providers have the onsite staff to advise and support students. They make the cultural, social, and educational experience easier for students by providing classes designed to immerse the new culture and planned events to assist students in getting involved with local society.

Funding for Study Abroad Programs

Students who receive federal financial aid for on-campus study may use their aid for study abroad. Financial Aid counselors work with each individual student to ascertain their eligibility and give students accurate information. The University also offers the International Education Scholarship to all students meeting the general requirements. There are prestigious national grants and scholarships specifically for study abroad including Boren Awards for International Study, Benjamin A. Gilman International Scholarship, Gilman International Scholarship, and Fulbright Scholarship.

How to get involved

For information and applications for faculty-led, reciprocal exchange, independent programs, study abroad scholarships, please visit the Study Abroad Programs website http://oie.tamucc.edu/sap.php. For more information, please contact:

Texas A&M University-Corpus Christi
Alumni Relations Office

The Texas A&M University-Corpus Christi National Alumni Association exists to strengthen and promote the interests and welfare of A&M-Corpus Christi through the lifelong commitment and support of its alumni and friends. Through a variety of programs, events, services and communications, the Alumni Association promotes positive interaction between the University and its graduates.

The Alumni Association considers all graduates from this institution during its history as members. This includes graduates from the University of Corpus Christi, Texas A&I University at Corpus Christi, Corpus Christi State University and Texas A&M University-Corpus Christi. Active membership is granted to individuals who donate to the University's Islander Fund Campaign. Gifts to the Annual Fund enhance the current academic programs on campus.

Alumni Association members receive several benefits, including membership in Islander chapters, subscription to the Islander magazine, participation in Alumni Association affinity programs, special discounts and much more.

All members of the Alumni Association are encouraged to submit updated information about their personal and professional lives as well as address and phone number corrections. Updated information allows the Alumni Association to keep in contact with its members.

The Alumni Association assists the Student Alumni Association, a student group dedicated to building strong future alumni through a variety of special events, programming, and class gifts. In addition to special events throughout the year, the Student Alumni Association raises funds for their scholarship endowment.

For additional information about the Alumni Association or alumni matters, contact the Woo Sung Lee Alumni Welcome Center at (361) 825-5787, located at 6129 Ennis Joslin Road, or go to the Alumni Association's Web site at www.IslanderAlumni.org.
Community Outreach

Texas A&M University-Corpus Christi is committed to meeting the life-long educational needs of citizens throughout South Texas. The mission of Community Outreach is to educate and serve the community by extending A&M-Corpus Christi beyond the campus.

Community Outreach accomplishes its mission by providing a wide variety of services to a diverse group of citizens and organizations. It offers continuing education, professional development, personal enrichment, test preparation, business assistance, custom training, conference and event management, and youth programs. Through the Pollution Prevention Partnership, Community Outreach delivers nationally recognized environmental education and outreach programs, including compliance assistance, health research, vehicle emissions monitoring, teacher education, and community education.

Community Outreach also supports A&M-Corpus Christi’s service mission by facilitating community engagement activities where faculty and students assist non-profits, government agencies, businesses, and other organizations.

To increase available resources, Community Outreach maintains cooperative relationships with other institutions and agencies of The Texas A&M University System, as well as a wide variety of community service organizations.

Additional information on specific Outreach programs is available at outreach.tamucc.edu.

Undergraduate Programs

This section focuses on the general requirements for the baccalaureate degree and on academic policies and regulations that apply specifically to undergraduate students. For information on core curriculum requirements, see "Core Curriculum Program" in the catalog. For information on the Texas Success Initiative, see "Admission." For information on specific majors and on college baccalaureate requirements, please refer to the chapters on specific colleges.

Bachelor's Degrees

The University offers the following undergraduate degrees: Bachelor of Applied Science, Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Science, Bachelor of Music, Bachelor of Business Administration, Bachelor of Science in Health Sciences, and Bachelor of Science in Nursing.
Degree Requirements

University Minimum Requirements
General University requirements for baccalaureate degrees are:

Total Hours
A minimum of 120 semester hours of credit must be completed successfully. Students must satisfactorily complete all degree requirements specified by the academic college in which the degree is offered. Some academic programs require more hours and a longer length of time for degree completion. Please see each academic college section for specific information on program hours and length.

Upper-division Hours
A minimum of 45 semester hours of upper-division credit (courses numbered in the 3000 and 4000 series) is required.

Grade Point Average
A minimum grade point average of 2.0 (C) on a 4 point scale in all work taken and a minimum grade point average of 2.0 in the major field of study at the University are required. Specific academic programs may require a higher grade point average in the major.

Residence Requirement
A minimum of 30 hours of upper-division course work required for graduation must be successfully completed in residence at Texas A&M University-Corpus Christi to obtain a baccalaureate degree. A minimum of 12 hours of these 30 hours must be in the major. Hours earned through credit by examination may not be used to fulfill the residence requirement. Hours earned through credit by examination at another institution will likewise not affect the residence requirement calculation.

General Education Requirement
To fulfill the general education requirement, a student must successfully complete the University core curriculum (or the equivalent as described below) and meet the foreign language requirements. In addition, all students who enter the University as full-time, first-year students must complete the First-Year Seminar requirement.

Core Curriculum Program
The 42-hour Core Curriculum Program, described in the "Core Curriculum Program" section, includes courses that satisfy the state statutory requirements for core curricula
and the state statutory requirements in history and in government or political science. (To receive a bachelor's degree, a student must have successfully completed 6 semester hours in government or political science, including consideration of the U.S. Constitution and state constitutions, with special emphasis on that of Texas. Additionally, the student must have credit for 6 semester hours in American history, of which up to 3 hours may be in Texas history.)

Undergraduate transfer students have several means of fulfilling the core curriculum requirement.

1. A student may satisfy specific core curriculum requirements by taking the approved core curriculum transfer courses that are listed in Appendix B. Courses equivalent to A&M-Corpus Christi's Core Curriculum Program courses are identified by their common course numbers.

2. If a student successfully completes a core curriculum of 42 or more semester credit hours at another regionally accredited public institution of higher education in Texas, and that core curriculum meets the specified "Foundational Component Area" requirements below, that block of courses may be transferred to the University and satisfy the core curriculum here. The student will not be required to take any additional core curriculum courses at this institution. The State of Texas has specified the following Foundational Component Area requirements:

   6 Credit Hours  Communication
   3 Credit Hours  Mathematics
   6 Credit Hours  Life and Physical Sciences
   3 Credit Hours  Language, Philosophy, and Culture
   3 Credit Hours  Creative Arts
   6 Credit Hours  American History
   6 Credit Hours  Political Science
   3 Credit Hours  Social and Behavioral Science
   6 Credit Hours  Component Area Option

3. If a student transfers from another regionally accredited public institution in Texas without having completed a 42 or more semester credit hour core curriculum, A&M-Corpus Christi will accept approved core curriculum courses from the transferring schools' core curricula as fulfillment of the equivalent requirement here.

4. A student who transfers from a regionally accredited private or out-of-state institution will receive academic credit for each of the acceptable courses that he or she has successfully completed in the core curriculum of the sending institution as long as these courses meet the state of Texas criteria for core curricula. Following receipt of credit for these courses, the Office of Admissions
will determine the equivalency of those courses to the courses in A&M-Corpus Christi's core curriculum. Core curricula completed at regionally accredited private or out-of-state institutions will be evaluated on a case by case basis. For further clarification see "Transfer Credit Policies" in the "General Academic Policies and Regulations" section of the catalog.

First-Year Seminar Requirement

All students who enter the University as full-time first-year students are required to register for First-Year Seminar, UNIV 1101 and UNIV 1102, as part of a learning community during their first two semesters. (See the "First-Year Learning Communities Program" section of the catalog.) Those who fail to complete this requirement during the first year will be required to fulfill the requirement prior to graduation.

Foreign Language Requirement

At least two high school credits in one foreign language or American Sign Language OR two semesters of study with passing grades in a single foreign language or American Sign Language at the college level are required for graduation from Texas A&M University-Corpus Christi. This requirement may be met by earning a CLEP, AP, or ACTFL score equivalent to one year of college-level foreign language study. If students decide to meet this requirement by taking two semesters at the University, an assessment test must be taken prior to registering in order to be placed in the appropriate language course. Information regarding the assessment tests and the foreign language courses that satisfy the university Foreign Language Requirement can be obtained from the College of Liberal Arts "Baccalaureate Degree Requirements" section of the university undergraduate catalog.

International students who have successfully passed the Test of English as a Foreign Language (TOEFL) with a score of 550 or higher, scored a 6.5 or higher on the International English Language Testing System (IELTS), or have successfully completed the English as a Second Language International (ESLI) course of study may elect to choose English as their second language to meet the above requirement. Additionally, international and naturalized students who have provided proof of completion of high school in a foreign language (their native language) and who have successfully completed the English Composition and Oral Communication components of the University Core Curriculum Program may choose English as their second language to meet this requirement. English is considered to be the first language for all other students.
College Degree Requirements

In addition to the University requirements, a student must meet the specific requirements as determined by the college in which the degree will be awarded. Such requirements are outlined in the college sections of the catalog.

Second Bachelor's Degree

Students wishing to earn a second bachelor's degree from Texas A&M University–Corpus Christi must complete a minimum of 144 semester hours of credit, or 24 hours more than those counted toward the bachelor's degree that requires the higher number of credit hours. All university, college, and major requirements must be met for each degree (see the information on degree requirements in this chapter and in the sections for the relevant college and major). Students must complete all degree requirements under a particular catalog (see "Graduation Under a Particular Catalog" in the "Academic Policies" section of the catalog).

As for any student intending to have a degree conferred, students seeking multiple degrees who plan to participate in a graduation exercise and/or receive a diploma must notify the Office of the University Registrar by the deadline date indicated in the Class Schedule for the semester in which they plan to have the degree or degrees awarded.

For students who have already completed a first bachelor's degree at an accredited college or university, with the approval of the Provost's Office, the core curriculum requirements for that degree may be accepted in lieu of the Texas A&M-Corpus Christi core curriculum. However, requirements associated with particular degrees, e.g., completion of the modern language requirement for a Bachelor of Arts degree, or Legislative requirements, e.g., history and government course requirements, must be included in an approved program for a second bachelor's degree.

A student receiving a subsequent bachelor's (post baccalaureate) degree must complete 30 hours in residence above and beyond the minimum number of hours required to receive the first bachelor's degree.

Academic Major

A minimum of 24 semester hours in a defined course of study must be completed for a major. Specific majors may require completion of additional hours. See the college sections of the catalog for the specific requirements of particular majors.
Double Major

Colleges may provide the opportunity for a student to earn a double major while working toward his or her first undergraduate degree. Both majors must lead to the same baccalaureate degree (e.g., BA, BS, or BBA). A student who completes the requirements for a degree with a double major will be awarded ONE degree (with both majors indicated) and will receive ONE diploma. Because only one degree is granted for the double major, students must have completed the requirements for both majors before the degree can be awarded. Students wishing to pursue a double major must satisfy the following conditions:

- Meet all university and college requirements for each major,
- Successfully complete departmental requirements in each major (if the majors are in the same college) or successfully meet the major field of study requirements for each program as determined by each college (if the majors are in different colleges).

Academic Minor

To earn an academic minor, a student must meet the requirements mandated by the college offering the minor. At least 18 semester hours will be required in the area of the minor (excluding prerequisites); the maximum number of hours will be limited to 23. At least 6 hours of upper-level courses will be included. At least 9 semester credit hours in the area of the minor must be completed in residence at Texas A&M University-Corpus Christi. The student must complete all prerequisites for required courses and must maintain a grade point average of at least 2.00 on a 4-point scale. Colleges may set higher GPA requirements.

The following rules apply regarding graduation with a minor:

1. A student may count the same course for both major and minor requirements.
2. After applying for graduation, if a student fails to complete the requirements for the minor but meets the requirements for graduation, the student will be graduated without the minor.
3. A student may graduate with more than one minor if he or she meets all the requirements.

A student who holds a bachelor's degree from the University and who wishes to complete requirements for a minor may do so by completing all course work in the minor and by fulfilling any other requirements mandated by the college offering the minor within five years of graduation. A notation indicating that all requirements for each minor have been completed will be added to the Texas A&M University-Corpus Christi transcript; the
transcript will not state that a minor has been awarded. If the requirements for a minor are satisfied following degree conferral, credits earned during the satisfaction of the minor have no effect on the GPA of the previously awarded degree.

Addition of a Major

A student who holds a bachelor's degree from the University and who wishes to complete requirements for an additional major within the same degree may do so by completing all course work in the major field with a minimum GPA of 2.00 on a 4-point scale, and by fulfilling any other requirements mandated by the college offering the major.

A notation indicating that all requirements for each major have been completed will be added to the student's transcript. The transcript will not state that a major has been awarded.

Academic Policies and Regulations

Recency of Credit

No restriction on recency of credit is made for undergraduate work. Lower-division and transfer hours applied toward the baccalaureate degree should provide those competencies necessary for entry into the upper-division level.

Correspondence and Extension Credit

No more than 15 semester hours of extension-center and correspondence study credit may be applied toward a bachelor's degree. Not more than 6 semester hours of this 15 may be in correspondence study. No more than 6 semester hours of upper-division extension and correspondence credit may be applied toward a degree. All work transferred is subject to approval, as suitable for the student's degree plan, by the student's college dean or designee.

Placement Process

New undergraduates and transfer students are placed into mathematics classes on the basis of their scores on standardized tests (SAT, ACT, STAAR, etc), their high school record, or their previous college level mathematics credits. Consult the placement link on http://math.tamucc.edu for details. Students not designated as College Ready in mathematics, must take the TSI Assessment. Students who are College Ready in
mathematics, but don't have test scores or math grades in their records, or those hoping for a higher mathematics placement may take a challenge exam offered regularly by the Department of Mathematics and Statistics. Call 825-3754 for details and to schedule taking the exam.

For brief information on the foreign language placement test, see "Foreign Language Requirement" earlier in this chapter.

**Maximum Course Load**

An undergraduate student may not register for more than 18 hours of course work in a regular semester, or more than 6 hours of course work in a single session of summer school, without the approval of the appropriate administrator:

1. For a student with 30 or more semester credit hours and a declared major, the request must be approved by the dean of the college in which the student is majoring.
2. For a student with fewer than 30 semester credit hours, or for a student with 30-59 semester hours but without a declared major, the request must be approved by the Department of Undergraduate Studies. Also, a student who is required to pass the THEA or approved alternative examination, and who has not yet done so, must have the approval of the Department of Undergraduate Studies to register for more than the maximum course load.

**Repetition of a Course**

Undergraduate students may repeat courses at the University under the following circumstances:

1. Courses specifically designated as repeatable for credit in the Undergraduate Catalog (such as variable topic courses) are calculated in the grade point average in the same manner as separate courses.
2. Undergraduate students may also repeat any undergraduate course at the University in order to replace a grade. Only the highest grade will count to calculate the Texas A&M University-Corpus Christi grade point average. This procedure will be used in the calculation of GPA from this point forward for all students. A notation will be placed on the transcript after the course to indicate that it has been repeated. In the case of repeats, grades are included in computing the A&M-Corpus Christi hours attempted and all attempts and grades will appear on the official transcript. Repeated course grades are not removed from the transcript. The repeated grade and grade points will be excluded from the
cumulative grade point average only. Except as noted above in #1, a student may not receive credit for any given course more than once. The Office of the University Registrar conducts audits of student records as needed and prior to graduation. When repeating a course more than once, the student should seek advice from his or her faculty mentor, or academic advisor, as appropriate, prior to registering for the course. Students may be charged an additional fee for each course taken for the third or more times. (See "Tuition and Fees" for details.)

3. Once a student has been awarded a degree at the University, he or she may not repeat a course for the purpose of changing the grade on the official transcript of any course taken as part of that degree.

A course taken at another institution will not replace a grade received at TAMUCC, this includes the grade of "F". The transferred work will not affect the grade point average (GPA) on the student's transcript.

**Scholastic Probation, Suspension, and Dismissal Guidelines**

For undergraduate students, a minimum GPA of 2.0 (C) on a 4.0 scale in all work taken and a minimum grade point average of 2.0 in your major field of study are required. Specific academic programs may require a higher grade point average in the major.

Scholastic Probation 1 and Removal from Probation - Undergraduate students whose cumulative Texas A&M-Corpus Christi (TAMU-CC) grade point average (GPA) falls below 2.0 after being in good standing are placed on Scholastic Probation 1. A student on Scholastic Probation 1 may enroll in no more than 16 semester hours of coursework in a long semester and must participate in the Academic Collegiate Excellence Program through the Center for Academic Student Achievement.

Students are removed from Scholastic Probation 1 after completing a semester at TAMU-CC during which a TAMU-CC cumulative grade point average of 2.0 or greater is achieved. Students whose TAMU-CC cumulative GPA is below 2.0 at the end of their semester on Scholastic Probation 1 will be placed on Scholastic Probation 2 as continued probation.

Scholastic Probation 2 and Removal from Probation 2 for Undergraduates – Undergraduate students whose semester GPA and/or TAMU-CC cumulative GPA is below a 2.0 while on Scholastic Probation 1 is placed on Scholastic Probation 2. Students are removed from Scholastic Probation 2 after completing a semester at TAMU-CC during which a TAMU-CC cumulative GPA of 2.0 or greater is achieved.
Students who earn a 2.0 semester GPA, but whose TAMU-CC cumulative GPA is not above a 2.0, will be allowed to continue Scholastic Probation 2 in the subsequent semester. Students on Scholastic Probation 2 may enroll in no more than 16 semester hours of coursework in a long semester and must participate in the Academic Collegiate Excellence Program through the Center for Academic Student Achievement.

Academic Suspension 1 and 2 – Undergraduate students on Scholastic Probation 2 who earn less than a 2.0 semester GPA and TAMU-CC cumulative GPA will be placed on Academic Suspension 1 and suspended for one long semester. Students on Academic Suspension 1 who do not attain a 2.0 TAMU-CC semester and TAMU-CC cumulative GPA are placed on Academic Suspension 2. Students suspended for the second time will be placed on Academic Suspension 2 and suspended for two long semesters and any intervening summer semesters. Students who experience extenuating circumstances may appeal using the academic reinstatement appeal procedures and can be reinstated by the Scholastic Standing Appeals and Reinstatement Committee. If no appeal is granted, enrollment for the subsequent semester will be administratively dropped. For questions regarding the appeals and reinstatement process and procedures, please visit: http://casa.tamucc.edu/appeal.html.

After a first or second suspension, students who re-enroll will be placed on Scholastic Probation 2 after sitting out the appropriate length of time, as denoted by the suspension status. Students must achieve a minimum semester GPA of 2.0 for that and all subsequent semesters until a minimum TAMU-CC cumulative GPA of 2.0 is attained. Students will remain on Scholastic Probation 2 until a cumulative TAMU-CC 2.0 GPA is attained.

Academic Dismissal - A third suspension results in dismissal from the University. In most cases, a student who is dismissed is not re-admitted to TAMU-CC. Students may petition for a review of their dismissal case after a period of four long semesters and intervening summer semesters. Re-admission is permitted only in exceptional circumstances. Students may appeal using the academic reinstatement appeal procedures and must be authorized by the dean of the college to which admission is sought. If students do not attain the required GPA (as described above) after such re-admittance, the student is dismissed and may not petition for re-admission for a period of a minimum of five calendar years.

Note: Any student who has not been enrolled at TAMU-CC for one academic year, must re-apply for re-admission to the university. Please visit the Office of Admission for more information (http://admissions.tamucc.edu/former/index.html).

Academic Progress of Students on "Probationary Admission" Status
If a first-time, first-year student is admitted on "Probationary Admission" status, certain conditions will apply. While on probationary admission status, the student must remain a part-time student, taking no more than 2 courses each semester. The student's progress will be monitored at the end of each term, with a GPA of 2.0 or better required for continued enrollment each semester while on probationary status. In addition, the student may not earn a grade of D or F in any remedial course attempted while on probationary status.

The courses the student will attempt while on probationary status will be determined by A&M-Corpus Christi placement results, THEA scores (or scores on an accepted alternative examination), and the recommendation of the assigned academic advisor. All course work while a student is on probationary status will be chosen from remedial offerings and the core curriculum. After completing 12 semester credit hours of non-remedial coursework with a GPA of 2.0 or better, and having earned no grade of D or F in any remedial course attempted, the student will become a regularly admitted student, with all the rights and responsibilities of that status.

Graduation with Honors

To be eligible to graduate with honors, a student must have completed at least 45 undergraduate semester hours at Texas A&M University-Corpus Christi. If students have not yet completed 45 undergraduate semester hours at Texas A&M University-Corpus Christi they must be enrolled in enough hours to fulfill the 45-hour requirement by the end of the term. The cumulative A&M-Corpus Christi grade point average is used to determine honors status. The cumulative grade point average is calculated on all courses taken at A&M-Corpus Christi, excluding courses taken pass/no pass or credit/no credit. A student may graduate summa cum laude with a grade point average of 3.9 or above. A student may graduate magna cum laude with a grade point average of 3.70 through 3.899. A student may graduate cum laude with a grade point average of 3.5 through 3.699. To be recognized at one of these levels at the Commencement Ceremony, students must have earned the appropriate grade point average and completed 45 undergraduate semester hours at Texas A&M University-Corpus Christi by the end of the semester immediately preceding the one in which they will graduate. This honor designation will be used in the commencement ceremony and will be recalculated once all grades are received and processed.

The Islander Impact Initiative

The Islander Impact Initiative is an effort by the University to expose students to a minimum number of high impact practices (two for transfer students and four for first-
time-in-college students) during their career at Texas A&M University-Corpus Christi. The American Association of Colleges & Universities (AAC&U) has identified a set of "effective educational practices" that research has found have a positive effect on students. These practices have been termed "high impact practices" and include: first-year seminars and experiences, common intellectual experiences, learning communities, writing-intensive courses, undergraduate research, collaborative assignments and projects, diversity and global learning, service learning and community-based learning, internships, and capstone courses and projects (AAC&U, 2008). The initiative will ensure that students are provided with a challenging, learning-centered environment that promotes innovation, creativity, and discovery.

Dean's List

All undergraduate degree-seeking students registered for a minimum of 12 semester hours at the University (excluding hours where standard letter grades are not used) who complete all work registered for and who have a 3.65 grade point average or above for a regular semester will be placed on the Dean's List.

Graduate Study by Undergraduates

1. Reservation of Work for Graduate Credit
   A senior student in the last term of undergraduate work may enroll in graduate work and reserve the course work for graduate credit provided that
   1. the student has a cumulative grade point average of 3.0 or better,
   2. the dean of the college in which the work is offered has granted written approval, and
   3. the graduate work is not used to fulfill undergraduate degree requirements unless enrolled in a 3+2 program.

2. Graduate Work for Undergraduate Credit
   A senior student in the last semester or summer session of undergraduate work may enroll in graduate work to be applied toward the baccalaureate degree provided that
   1. the student has a cumulative grade point average of 3.0 or better,
   2. the dean of the college in which the work is offered has granted written approval,
   3. the chair of the student's major department and the dean of the student's undergraduate college have granted written approval, and
   4. the student has not reserved the course work for graduate credit-unless enrolled in a 3+2 program.
Graduate credit hours used to meet the requirements of a baccalaureate degree may not be used to meet the requirements for a graduate degree.

Any exceptions to the above must be approved by the Office of the University Registrar and the Provost and Vice President for Academic Affairs.

Catalog Subject to Change

The catalog was prepared well in advance of its effective date. While every effort has been made to provide complete and accurate information regarding undergraduate programs, changes may occur at any time, without notice, in academic requirements or policies.

College of Business

Degree Programs

- Accounting, BBA
- Economics, BBA
- Finance, BBA
- General Business, BBA
- Management Information Systems, BBA
- Management, BBA
- Marketing, BBA

Certificate

- Entrepreneurship & Innovation Certificate
- International Business Certificate*

Minors

- Accounting Minor
- Business Administration Minor
- Economics Minor
- Entrepreneurship Minor
- Finance Minor
- Human Resource Management Minor
- International Business Minor
- Management Information Systems Minor
- Management Minor
- Marketing Minor

The accounting and business undergraduate and master's degree programs are accredited by the AACSB International – The Association to Advance Collegiate Schools of Business. The Bachelor of Business Administration degree program is offered on TAMU-CC's main Island Campus, online and at the Texas A&M University System RELLIS Campus in Bryan, Texas. The Master of Business Administration program is offered as an evening program on the Island Campus and online. The Master of Accountancy is offered online only.
Mission

The College of Business supports the mission of the University by focusing on the higher education needs of business students in the region. Quality programs are designed to help students advance their education in business, further their careers, pursue advanced studies, and become more productive citizens within a changing global environment. Undergraduate programs offer selected specializations built on a foundation of general education and a broad business core. The Master of Business Administration program provides more advanced general management education with selected concentrations. The college extends access and flexibility through online delivery. The Master of Accountancy program offers advanced accounting studies. The College promotes student learning and engagement and ethical behavior.

Student learning is the highest priority of the College. To that end, the College emphasizes intellectual contributions of applied scholarship and instructional development. The College supports faculty development, community service, and involvement in professional organizations resulting in service to key stakeholders. The College supports regional economic development and solicits input from its primary stakeholders through advisory councils.

Organization

The College's formal administrative units include three academic departments, the Undergraduate Student Advisory Council, the Graduate Student Advisory Council, the Business Advisory Council, the Accounting Advisory Council, and the Center for Economic Education. The College also houses the international headquarters of the Society for Advancement of Management and sponsors student chapters of Beta Gamma Sigma, Delta Sigma Pi, Human Resources Management, Management Information Systems Club, Society for Advancement of Management, Student Accounting Society, Student Finance Association, and Student Economics Association.

Permanent faculty in each of the academic departments (Accounting, Business Law & Finance, Decision Sciences & Economics, and Management & Marketing) are the principal architects of the academic programs (majors and minors) in their respective disciplines. Content of undergraduate and graduate programs is coordinated through the Curricula Management Committee.

The Center for Economic Education is one of eleven Centers that comprise the Texas Council on Economic Education, which is affiliated with the National Council on Economic Education. It is located in the College and a member of the economics faculty.
serves as its Director. Its mission is to support the economic education needs of teachers of economics topics in South Texas public and private schools.

Programs

The College offers a Bachelor of Business Administration Degree with majors in Accounting; Economics; Finance; General Business; Management with emphases in Entrepreneurship, General Management, Health Care Administration, and Human Resource Management; Management Information Systems; and Marketing. A minor in Business is available to nonbusiness majors desiring to supplement their degree with a business background. Other minors include: Accounting, Economics, Entrepreneurship, Human Resource Management, International Business, Management, Management Information Systems, Marketing, and Personal Financial Planning. (Please consult the Graduate Catalog for information concerning the Master of Business Administration, and the Master of Accountancy.)

Entry into Business Major

Students can choose a major in the College of Business when they are admitted to the University. Students changing to a major in the College of Business at a later point in their academic career must meet the following requirements:

- A minimum of an overall 2.0 cumulative GPA
- An official meeting with a College of Business Academic Advisor to develop a degree plan.

Community/Junior College Transfers*

Community and junior college students who plan to transfer to the College of Business are advised to pursue the business foundation curriculum outlined below. The appropriate course equivalency guide should be consulted to resolve questions of course transferability. All business courses normally offered by the College of Business at the junior or senior level must be completed by the student at that level. Courses acceptable for transfer by Texas A&M University-Corpus Christi will be accepted at the level at which the courses were taken, and at least 50% of the business hours required must be taken at Texas A&M University-Corpus Christi. Generally, courses from a community/junior college cannot be used to satisfy upper level requirements. Lower level transfer courses in Business Law and/or Statistics may be accepted with approval from the appropriate department chair. All business courses transferred require a grade of "C" or better and require prior approval by a College of Business academic advisor.
*Contact an academic advisor in the College of Business for specific information.

Grade Point Average for Graduation

In addition to meeting the various course requirements for a specified major in the College of Business, students must also achieve the following minimum grade point averages: (1) 2.00 for all credit course work completed at Texas A&M University-Corpus Christi, (2) 2.00 in all business courses, and (3) 2.00 in courses in their designated major. Effective fall 2012, no more than two Ds earned after fall 2007 are accepted toward graduation by business majors in business core classes, courses taken in their business major, and business elective courses. (See "Scholastic Probation, Suspension, Dismissal" in the section entitled "General Academic Policies and Regulations.")

Upper-Level Course Requirements

All business students are required to complete at least 45 hours of upper-level (junior and senior level) courses; at least 45 of these hours must be business and/or economics courses.

Student Code of Ethics

The College of Business requires its students to abide by the COB Student Code of Ethics (available online at www.cob.tamucc.edu). Its provisions and stipulations apply to all students taking courses offered by the college, regardless of whether or not they are pursuing a degree awarded by the COB. BUSI 0011, COB Student Code of Ethics and Plagiarism, a noncredit Blackboard course, is a prerequisite for all 3000 level business core courses.

Assurance of Learning/Student Learning Outcomes

To continue to improve the undergraduate curriculum and the quality of the academic programs the COB, guided by AACSB accreditation standards, has implemented a comprehensive assurance of learning system. Under this assessment program the COB has developed four learning goals with corresponding objectives for Bachelor of Business Administration (BBA) graduates and has identified a number of instruments to measure the extent to which they are being met.

Learning Goals:
- To be effective communicators
- To be competent in business practices
- To be good decision makers
- To be good citizens

**Undergraduate Courses:**

The College of Business offers undergraduate courses in the following fields:

- Accounting (ACCT)
- Business Administration (BUSI)
- Business Law (BLAW)
- Economics (ECON)
- Finance (FINA)
- Management (MGMT)
- Management Information Systems (MISY)
- Marketing (MKTG)
- Operations Management (OPSY)
- Operations Research/Management Science (ORMS)

All course descriptions are located in course descriptions.

**Certificates**

**Entrepreneurship & Innovation Certificate**

Knowing how to integrate innovation into a student's chosen profession is crucial for creating thriving communities and careers. The Entrepreneurship & Innovation Certificate Program will teach the essential skills and effective strategies for enhancing working experiences and for starting new opportunities. In classes designed to engage and inspire idea generation, students will learn how to solve problems, seize opportunities, and move from idealized dreams to tangible ventures.

The Student Will Benefit From:

- Understanding how to transform ideas into feasible commercial opportunities.
- A wider set of innovation skills that are designed to fit any profession or career path.
• Exposure to the most current practice and theory on innovation and entrepreneurship.
• Insights about the entrepreneurial process and entrepreneurial competencies needed to succeed in a highly competitive global economy.
• The joy of learning how to transform their passion into the source of their livelihood.

The Student should Enroll If:

• There is a desire to be independent.
• She or he is creative and innovative.
• There is an interest in starting their own venture or enhancing their career.
• They are leaders wishing to solve problems for the betterment of their communities.

Entrepreneurship & Innovation Requirements

Earning the Certificate Requires 7 Semester Hours:

Core Course:
• BUSI 3315 - Entrepreneurship, Creativity, & Innovation* 3 sem. hrs.

One Semester Hour Project:
• BUSI 4396 - Directed Individual Study 1-3 sem. hrs.

Entrepreneurship & Innovation Electives

One Additional Elective From the Following:

• BUSI 4320 - New Venture Creation 3 sem. hrs.
• BUSI 4390 - Current Topics in Entrepreneurship 1-3 sem. hrs.
• MGMT 3330 - Small Business Strategy* 3 sem. hrs.
• MGMT 3335 - Strategic Issues in Family Business 3 sem. hrs.
• MGMT 3360 - Social Entrepreneurship 3 sem. hrs.
• MKTG 3325 - Entrepreneurial Marketing* 3 sem. hrs.
• MKTG 4360 - Social Media Marketing* 3 sem. hrs.

*The student will receive a printed certificate upon completion of the course work. Completion of the certificate will not appear on the student's transcript. All course work will be included on the student's transcript.

Accounting, Finance, and Business Law
Bachelor of Business Administration

Accounting, BBA

Accounting Major

The accounting major is designed to provide entry-level knowledge, skills, and concepts for careers in accounting. These careers are generally divided into four broad areas, corresponding to particular employment environments: management accounting, government accounting, accounting education, and public accounting. The career can include such activities as auditing, budgeting, data processing, controlling costs, providing tax advice, meeting tax requirements, and designing and analyzing financial systems.

Professional Certification

Practicing accountants generally acquire one or more certifications available to members of the profession. The most common certification is the Certified Public Accountant (CPA), conferred by the State Board of Public Accountancy of the state in which the individual maintains his or her license. Other certifications include the Certified Management Accountant (CMA), the Certified Internal Auditor (CIA), Certified Fraud Examiner (CFE), and others.

The Texas State Board of Public Accountancy has set the minimum educational requirements for taking the CPA examination at 150 semester hours. Students aspiring to an accounting career should give serious consideration to pursuing advanced studies at the graduate level to enhance their potential for a successful accounting career. Accounting students should be aware that requirements to sit for the CPA examination in Texas may change at any time. CPA requirements are determined by the Texas State Board of Public Accountancy (TSBPA). Students should frequently visit the TSBPA website at http://www.tsbpa.state.tx.us/> and check with their advisor on a regular basis to ensure that the courses they are taking will qualify them to sit for the CPA exam.

For students who have received their undergraduate degrees, the Department of Accounting, Business Law, and Finance offers an avenue to pursue graduate studies to meet the State qualifications for professional certification through the Master of Accountancy (MAcc). This option is described in the College of Business section of the Graduate Catalog. Students are encouraged to contact the Director of Master's Programs in the College of Business for more information and answers to specific questions.
BBA Student Learning Goals and Objectives

G1. To Be Effective Communicators

O1. Students will demonstrate the ability to identify the appropriate message purpose, select appropriate organization, provide sufficient supporting details, and use effective mechanics.

O2. Students will demonstrate the ability to prepare (content, presentation and media) and deliver (verbally and nonverbally) a professional presentation.

G2. To Be Competent in Business Practices

O1. Students will demonstrate knowledge of key business theories and concepts and will apply these business theories and concepts correctly.

O2. Students demonstrate the ability to incorporate theories, concepts, and practices across multiple disciplines to produce practical answers.

O3. Students will effectively analyze data.

G3. To Be Good Decision Makers

O1. Students will demonstrate the ability to identify valid, reliable and important information applicable to the issue being studied.

O2. Students will demonstrate the ability to analyze multiple responses to issues.

O3. Students will demonstrate the ability to determine and support an appropriate decision.

G4. To Be Good Citizens

O1. Students will demonstrate the ability to identify ethical concepts.

In addition, all Accounting Majors will demonstrate knowledge of key Accounting theories and concepts, and will apply these Accounting theories and concepts correctly.

Accounting Major

Student Learning Outcome: Students will demonstrate an understanding of the principles and practices common to the major areas of accounting.

Complete the Business Foundation Curriculum in the freshman and sophomore years.
General Requirements for BBA Degree

All students seeking BBA must complete:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>B. First-Years Seminars (when applicable)* (2)</td>
<td></td>
</tr>
<tr>
<td>C. Business Core</td>
<td>45</td>
</tr>
<tr>
<td>D. Major Requirements</td>
<td>24</td>
</tr>
<tr>
<td>E. Electives</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>120 (122)</td>
</tr>
</tbody>
</table>

*Full-time, first time in college students are required to take the first-year seminars.

- UNIV 1101 First-Year Seminar I* 1 sem. hr.
- UNIV 1102 First-Year Seminar II* 1 sem. hr.

COB - University Core Curriculum Requirements

All Business majors are required to complete the following courses as part of their University Core Curriculum Program:

- ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
- MATH 1324 - Mathematics for Business and Social Sciences 3 sem. hrs. **

**Higher level mathematics course may be accepted as a substitute with approval

Total 42 sem. hrs.

Business Core Requirements

All Business Majors and Minors must complete the following course before or during their first semester enrolled in upper-division Business courses:

BUSI 0011 Cob Student Code of Ethics and Plagiarism* 0 sem. hrs.

To provide a common background in business, all students seeking the BBA are required to complete the following courses or their equivalents:
• ACCT 2301 - Financial Accounting 3 sem. hrs.
• ACCT 2302 - Managerial Accounting 3 sem. hrs.
• BLAW 3310 - Legal Environment of Business* 3 sem. hrs.
• BUSI 0088 - Graduation Requirements Review 0 sem. hrs.
• ECON 2302 - Microeconomics Principles* 3 sem. hrs.
• FINA 3310 - Financial Management* 3 sem. hrs.
• MATH 1325 - Calculus for Business & Social Sciences 3 sem. hrs. **
• MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
• MGMT 3315 - Communicating in Business* 3 sem. hrs.
• MGMT 4388 - Administrative Policy and Strategy* 3 sem. hrs.
• MISY 2305 - Computer Applications in Business* 3 sem. hrs.
• MISY 3310 - Management Information Systems Concepts^* 3 sem. hrs.
• MKTG 3310 - Principles of Marketing* 3 sem. hrs.
• OPSY 4314 - Operations Management* 3 sem. hrs.
• ORMS 3310 - Data Analysis and Statistics* 3 sem. hrs.

and an International Business course depending on the major:
• ACCT 3315 - Multinational Entities: Accounting and Consolidations* 3 sem. hrs. for Accounting Major ***
• ECON 3315 - International Economic Issues 3 sem. hrs. for Economics Major
• FINA 4315 - International Finance 3 sem. hrs. for Finance Major
• MGMT 4315 - Multinational Management* 3 sem. hrs. for Management Major
• BUSI 4310 - International Business 3 sem. hrs. for all other Majors

Note:

Course prerequisites are strictly enforced.

**Higher level mathematics course may be accepted as a substitute with approval.

***ACCT 3315 may be taken as either International Business Course or as an Accounting Elective but not both.

Total 45 sem. hrs.

Major Requirements

Accounting Major Courses (18 sem. hrs.)

• ACCT 3311 - Intermediate Accounting I* 3 sem. hrs.
*ACCT 3321 and ACCT 4311 together fulfill the Texas State Board of Public Accounting's (TSBPA) research education requirement.

Accounting Electives (6 sem. hrs.)

- ACCT 3315 - Multinational Entities: Accounting and Consolidations* 3 sem. hrs.
- ACCT 3316 - Governmental and Not-for-Profit Accounting 3 sem. hrs.
- ACCT 3317 - Oil, Gas, & Energy Accounting* 3 sem. hrs.
- ACCT 3322 - Federal Income Tax II* 3 sem. hrs.
- ACCT 3340 - Fraud Examination* 3 sem. hrs.
- ACCT 4314 - Advanced Accounting Problems* 3 sem. hrs.
- ACCT 4345 - Ethics for Texas CPA Candidates and Business Executives 3 sem. hrs.
- ACCT 4390 - Current Topics in Accounting* 3 sem. hrs.
- ACCT 4396 - Directed Individual Study 1-3 sem. hrs.
- ACCT 4398 - Accounting Internship 3 sem. hrs.

**ACCT 4345 fulfills TSBPA's ethics education requirement but it does not count toward TSBPA's requirement for 30 semester hours of upper level accounting courses.

**ACCT 3315 may be taken as either International Business Course or as an Accounting Elective but not both.

Note: MGMT 3315. see Business Core, fulfills TSBPA's communications education requirement. TSBPA requires 24 semester credit hours in business, 30 semester credit hours in upper level accounting courses, and 150 total semester hours. Students completing the Accounting BBA will have satisfied the business requirement but may need additional course work to meet the accounting education and total semester hour requirements. As of August, 1999, the Texas State Board of Public Accountancy will accept only 15 hours of online accounting courses toward the hours you need to sit for the CPA exam.

Total 24 sem. hrs.

Elective Requirements

Additional Electives Required for all Business Majors:
• Upper-level Business Elective 3 sem. hrs.
• Business Elective 3 sem. hrs.
• Non-Business Elective 3 sem. hrs.

Total 9 sem. hrs.

Pathway to the Master of Accountancy

Students who have been admitted into Master of Accountancy program and have fifteen or less student credit hours to complete the Bachelor of Business Administration degree in Accounting may enroll in graduate accounting coursework with the approval of the Director of Masters Programs.

Alternatives for Students Planning to take the CPA Examination - The 150-Hour Requirement for CPA Examination:

1. Complete a BBA degree, majoring in Accounting, and complete the Master of Accountancy (MAcc).
2. Complete a BBA degree, majoring in Accounting, and complete a Master of Business Administration (MBA). A minimum of 30 semester hours in accounting coursework is required.
3. Complete a BBA degree, majoring in Accounting, take 6 or 9 semester hours of additional accounting courses as part of the business electives, and additional coursework to satisfy the 150 total semester credits requirement.

1. Additional education requirements:
   1. Communication education requirement:
      1. MGMT 3315, Communicating in Business, or
      2. ACCT 5341, Advanced Auditing and Assurance Services, or
      3. ACCT 5381, Accounting Theory.
   2. Research education requirement:
      1. ACCT 3321, Federal Income Tax I, and ACCT 4311, Auditing Principles and Procedures, or
      2. ACCT 5371, Professional Accounting Research
   3. Ethics education requirement:
      1. ACCT 4345, Ethics for Texas CPA Candidates and Business Executives, or
      2. ACCT 5345, Ethics for Texas CPA Candidates and Business Executives
3. Note: ACCT 4345 and ACCT 5345 do not count toward the 30 semester hours in upper level accounting requirement and a student may not take both ACCT 4345 and ACCT 5345.

See the College of Business section of the Graduate Catalog for details on these programs. (An advanced degree is not currently required to meet the 150-hour standard for becoming a candidate for the CPA examination.) See the Texas State Board of Public Accountancy website for more information: https://www.tsbpa.state.tx.us.

BBA Accounting Online Completion

The accounting major is designed to provide entry-level knowledge, skills, and concepts for careers in accounting. These careers are generally divided into four broad areas, corresponding to particular employment environments: management accounting, government accounting, accounting education, and public accounting. The career can include such activities as auditing, budgeting, data processing, controlling costs, providing tax advice, meeting tax requirements, and designing and analyzing financial systems. An Online Completion format provides 60 hours of online courses. The course schedule for the Online BBA Accounting option will differ from on-campus course offerings and may not include all course options available to on-campus students.

Professional Certification

Practicing accountants generally acquire one or more certifications available to members of the profession. The most common certification is the Certified Public Accountant (CPA), conferred by the State Board of Public Accountancy of the state in which the individual maintains his or her license. Other certifications include the Certified Management Accountant (CMA), the Certified Internal Auditor (CIA), Certified Fraud Examiner (CFE), and others.

The Texas State Board of Public Accountancy has set the minimum educational requirements for taking the CPA examination at 150 semester hours. Students aspiring to an accounting career should give serious consideration to pursuing advanced studies at the graduate level to enhance their potential for a successful accounting career. Accounting students should be aware that requirements to sit for the CPA examination in Texas may change at any time. CPA requirements are determined by the Texas State Board of Public Accountancy (TSBPA). Students should frequently visit the TSBPA website at http://www.tsbpa.state.tx.us/> and check with their advisor on a regular basis to ensure that the courses they are taking will qualify them to sit for the CPA exam.
For students who have received their undergraduate degrees, the Department of Accounting, Business Law, and Finance offers an avenue to pursue graduate studies to meet the State qualifications for professional certification through the Master of Accountancy (MAcc). This option is described in the College of Business section of the Graduate Catalog. Students are encouraged to contact the Director of Master's Programs in the College of Business for more information and answers to specific questions.

BBA Student Learning Goals and Objectives

G1. To Be Effective Communicators

01. Students will demonstrate the ability to identify the appropriate message purpose, select appropriate organization, provide sufficient supporting details, and use effective mechanics.

02. Students will demonstrate the ability to prepare (content, presentation and media) and deliver (verbally and nonverbally) a professional presentation.

G2. To Be Competent in Business Practices

01. Students will demonstrate knowledge of key business theories and concepts and will apply these business theories and concepts correctly.

02. Students demonstrate the ability to incorporate theories, concepts, and practices across multiple disciplines to produce practical answers.

03. Students will effectively analyze data.

G3. To Be Good Decision Makers.

01. Students will demonstrate the ability to identify valid, reliable and important information applicable to the issue being studied.

02. Students will demonstrate the ability to analyze multiple responses to issues.

03. Students will demonstrate the ability to determine and support an appropriate decision.

G4. To Be Good Citizens

01. Students will demonstrate the ability to identify ethical concepts.

In addition, all Accounting Majors will demonstrate knowledge of key Accounting theories and concepts, and will apply these Accounting theories and concepts correctly.

Entry Requirements
Applicants who have completed 42 hours with a GPA of 2.0 or higher may be accepted into the Online Accounting BBA Completion Program. Students may transition into the upper division course sequence as they complete the University Core Curriculum and 60 hours including the following courses or their equivalents:

- ACCT 2301 - Financial Accounting 3 sem. hrs.
- ACCT 2302 - Managerial Accounting 3 sem. hrs.
- ECON 2302 - Microeconomics Principles* 3 sem. hrs.
- MISY 2305 - Computer Applications in Business* 3 sem. hrs.
- MATH 1325 - Calculus for Business & Social Sciences 3 sem. hrs.
  (Higher level mathematics course may be accepted as substitute with approval)
  Non-Business Elective 3 sem. hrs.
  All Business majors are required to complete the following courses as part of their University Core Curriculum Program:
- ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
- MATH 1324 - Mathematics for Business and Social Sciences 3 sem. hrs.
  (Higher level mathematics course may be accepted as a substitute with approval)

**General Requirements for BBA Online Completion**

All students seeking the online completion for the BBA in Accounting must complete:

<table>
<thead>
<tr>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Business Core</td>
</tr>
<tr>
<td>B. Major Requirements</td>
</tr>
<tr>
<td>C. Major Electives</td>
</tr>
<tr>
<td>D. Business Electives</td>
</tr>
<tr>
<td><strong>Total</strong> 60</td>
</tr>
</tbody>
</table>

**Business Core Requirements (all available Online)**

All Business Majors and Minors must complete the following course before or during their first semester enrolled in upper-division Business courses:

BUSI 0011 - Cob Student Code of Ethics and Plagiarism* 0 sem. hrs.
The following courses will be offered to provide the common background in business; all students seeking the BBA Online Completion are required to complete these courses or their equivalents.

- **BLAW 3310 - Legal Environment of Business** 3 sem. hrs.
- **BUSI 0088 - Graduation Requirements Review** 0 sem. hrs.
- **FINA 3310 - Financial Management** 3 sem. hrs.
- **MGMT 3312 - Behavior in Organizations** 3 sem. hrs.
- **MGMT 3315 - Communicating in Business** 3 sem. hrs.
- **MGMT 4388 - Administrative Policy and Strategy** 3 sem. hrs.
- **MISY 3310 - Management Information Systems Concepts** 3 sem. hrs.
- **MKTG 3310 - Principles of Marketing** 3 sem. hrs.
- **OPSY 4314 - Operations Management** 3 sem. hrs.
- **ORMS 3310 - Data Analysis and Statistics** 3 sem. hrs.
- **MGMT 4315 - Multinational Management** 3 sem. hrs.

Total 30 sem. hrs.

**Major Requirements (all available Online)**

- **ACCT 3311 - Intermediate Accounting I** 3 sem. hrs.
- **ACCT 3312 - Intermediate Accounting II** 3 sem. hrs.
- **ACCT 3314 - Cost Accounting** 3 sem. hrs.
- **ACCT 3321 - Federal Income Tax I** 3 sem. hrs.
- **ACCT 4355 - Accounting Information Systems** 3 sem. hrs.
- **ACCT 4311 - Auditing Principles and Procedures** 3 sem. hrs.

*ACCT 3321 and ACCT 4311 together fulfill the Texas State Board of Public Accounting's (TSBPA) research education requirement.

Total 18 sem. hrs.

**Major Electives (all available Online)**

- **ACCT 3322 - Federal Income Tax II** 3 sem. hrs.
- **ACCT 3340 - Fraud Examination** 3 sem. hrs.

Note: Additional electives may be available based upon student demand.

Total 6 sem. hrs.
Note: MGMT 3315, see Business Core, fulfills TSBPA's communications education requirement. TSBPA requires 24 semester credit hours in business, 30 semester credit hours in upper level accounting courses, and 150 total semester hours. Students completing the Accounting BBA will have satisfied the business requirement but may need additional course work to meet the accounting education and total semester hour requirements. As of August, 1999, the Texas State Board of Public Accountancy will accept only 15 hours of online accounting courses toward the hours you need to sit for the CPA exam.

Business Elective Requirements (all available Online)

The following course options will be offered to meet the requirements for Business Electives.

- BUSI 3315 - Entrepreneurship, Creativity, & Innovation* 3 sem. hrs.
- MKTG 4360 - Social Media Marketing* 3 sem. hrs.

Note: Additional electives may be made available based upon student demand.

Total 6 sem. hrs.

Finance, BBA

Finance Major

The courses required for a finance major are designed to help students prepare for careers in Corporate Financial Management, Investment Planning, Brokerage, Insurance, Commercial Banking, Real Estate and other similar fields. Core courses in finance provide students with a background in security analysis and investments, portfolio management, and financial planning and analysis. The curriculum also covers monetary policy, banking, financial markets, financial reporting, statement analysis, and risk management. Students may select finance electives in their area of interest such as insurance, real estate, accounting, or expand their knowledge in investments or financial analysis.

Complete the Business Foundation Curriculum in the freshman and sophomore years.

BBA Student Learning Goals and Objectives

G1. To Be Effective Communicators
O1. Students will demonstrate the ability to identify the appropriate message purpose, select appropriate organization, provide sufficient supporting details, and use effective mechanics.

O2. Students will demonstrate the ability to prepare (content, presentation and media) and deliver (verbally and nonverbally) a professional presentation.

G2. To Be Competent in Business Practices

O1. Students will demonstrate knowledge of key business theories and concepts and will apply these business theories and concepts correctly.

O2. Students demonstrate the ability to incorporate theories, concepts, and practices across multiple disciplines to produce practical answers.

O3. Students will effectively analyze data.

G3. To Be Good Decision Makers

O1. Students will demonstrate the ability to identify valid, reliable and important information applicable to the issue being studied.

O2. Students will demonstrate the ability to analyze multiple responses to issues.

O3. Students will demonstrate the ability to determine and support an appropriate decision.

G4. To Be Good Citizens

O1. Students will demonstrate the ability to identify ethical concepts.

In addition, all Finance Majors will demonstrate knowledge of key Finance theories and concepts, and will apply these Finance theories and concepts correctly.

General Requirements for BBA Degree

All students seeking BBA must complete:

<table>
<thead>
<tr>
<th></th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>B. First-Years Seminars (when applicable)*</td>
<td>(2)</td>
</tr>
<tr>
<td>C. Business Core</td>
<td>45</td>
</tr>
</tbody>
</table>
D. Major Requirements

24

E. Electives

9

Total 120 (122)

*Full-time, first time in college students are required to take the first-year seminars.

- UNIV 1101 First-Year Seminar I* 1 sem. hr.
- UNIV 1102 First-Year Seminar II* 1 sem. hr.

COB - University Core Curriculum Requirements

All Business majors are required to complete the following courses as part of their University Core Curriculum Program:

- ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
- MATH 1324 - Mathematics for Business and Social Sciences 3 sem. hrs. **

**Higher level mathematics course may be accepted as a substitute with approval

Total 42 sem. hrs.

Business Core Requirements

All Business Majors and Minors must complete the following course before or during their first semester enrolled in upper-division Business courses:

BUSI 0011 Cob Student Code of Ethics and Plagiarism* 0 sem. hrs.

To provide a common background in business, all students seeking the BBA are required to complete the following courses or their equivalents:

- ACCT 2301 - Financial Accounting 3 sem. hrs.
- ACCT 2302 - Managerial Accounting 3 sem. hrs.
- BLAW 3310 - Legal Environment of Business* 3 sem. hrs.
- BUSI 0088 - Graduation Requirements Review 0 sem. hrs.
- ECON 2302 - Microeconomics Principles* 3 sem. hrs.
- FINA 3310 - Financial Management* 3 sem. hrs.
- MATH 1325 - Calculus for Business & Social Sciences 3 sem. hrs. **
- MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
- MGMT 3315 - Communicating in Business* 3 sem. hrs.
- MGMT 4388 - Administrative Policy and Strategy* 3 sem. hrs.
- MISY 2305 - Computer Applications in Business* 3 sem. hrs.
- MKTG 3310 - Principles of Marketing* 3 sem. hrs.
- OPSY 4314 - Operations Management* 3 sem. hrs.
- ORMS 3310 - Data Analysis and Statistics* 3 sem. hrs.

and an International Business course depending on the major:

- ACCT 3315 - Multinational Entities: Accounting and Consolidations* 3 sem. hrs. for Accounting Major ***
- ECON 3315 - International Economic Issues 3 sem. hrs. for Economics Major
- FINA 4315 - International Finance 3 sem. hrs. for Finance Major
- MGMT 4315 - Multinational Management* 3 sem. hrs. for Management Major
- BUSI 4310 - International Business 3 sem. hrs. for all other Majors

Note:

Course prerequisites are strictly enforced.

**Higher level mathematics course may be accepted as a substitute with approval.

***ACCT 3315 may be taken as either International Business Course or as an Accounting Elective but not both.

Total 45 sem. hrs.

Major Requirements

Finance Major Courses (12 sem. hrs.)

- FINA 3320 - Intermediate Corporate Finance 3 sem. hrs.
- FINA 3331 - Investments 3 sem. hrs.
- FINA 4332 - Security Analysis and Portfolio Management 3 sem. hrs.

Finance Electives (12 sem. hrs.)

- FINA 3312 - Financial Markets and Institutions 3 sem. hrs.
- FINA 3335 - Financial Modeling 3 sem. hrs.
- FINA 3350 - Cash Management 3 sem. hrs.
- FINA 3351 - Insurance Principles 3 sem. hrs.
• FINA 3354 - Real Estate Principles* 3 sem. hrs.
• FINA 3355 - Employee Benefits and Retirement Planning 3 sem. hrs.
• FINA 4321 - Financial Institutions Management 3 sem. hrs.
• FINA 4330 - Introduction to Derivative Securities 3 sem. hrs.
• FINA 4334 - Financial Statement Analysis 3 sem. hrs.
• FINA 4390 - Current Topics in Finance 1-3 sem. hrs.
• FINA 4396 - Directed Individual Study 1-3 sem. hrs.
• FINA 4398 - Internship in Finance 3 sem. hrs.

Select one course from upper-level Finance Elective or:

• ACCT 3311 - Intermediate Accounting I* 3 sem. hrs.
• ACCT 3314 - Cost Accounting* 3 sem. hrs.
• ACCT 3316 - Governmental and Not-for-Profit Accounting 3 sem. hrs.
• ACCT 3321 - Federal Income Tax I* 3 sem. hrs.
• ECON 4310 - Introduction to Econometrics 3 sem. hrs.

Total 24 sem. hrs.

Elective Requirements

Additional Electives Required for all Business Majors:

• Upper-level Business Elective 3 sem. hrs.
• Business Elective 3 sem. hrs.
• Non-Business Elective 3 sem. hrs.

Total 9 sem. hrs.

Minor

Accounting Minor

(for Non-accounting Majors)

The minor in Accounting is designed to serve non-accounting majors who are interested in supplementing their major with an accounting dimension. A minimum of 12 hours must be taken at Texas A&M University-Corpus Christi. For additional information, contact the academic advisor in the College of Business.
Required Courses*

- ACCT 2301 - Financial Accounting 3 sem. hrs.
- ACCT 2302 - Managerial Accounting 3 sem. hrs.
- ACCT 3311 - Intermediate Accounting I* 3 sem. hrs.
- ACCT 3312 - Intermediate Accounting II* 3 sem. hrs.
- ACCT 3314 - Cost Accounting* 3 sem. hrs.
- ACCT 3321 - Federal Income Tax I* 3 sem. hrs.

Total: 18

Note:

*See course descriptions for prerequisites.

Finance Minor

For Business and Nonbusiness Majors

This minor is designed to serve business and nonbusiness students who are interested in supplementing their major with additional knowledge and skills in the area of Finance. A minimum of 12 hours must be taken at Texas A&M University-Corpus Christi. For additional information, contact the academic advisor in the College of Business.

Required Courses

- ACCT 2301 - Financial Accounting 3 sem. hrs.
- FINA 3310 - Financial Management* 3 sem. hrs. *
- FINA 3331 - Investments 3 sem. hrs. **

Designated Electives

Choice of nine credit hours (three courses) from this list:

- ACCT 3321 - Federal Income Tax I* 3 sem. hrs. ***
- FINA 3312 - Financial Markets and Institutions 3 sem. hrs.
  FINA Elective - Upper Division Finance Electives (excluding Finance Internship) 3, 6 or 9 sem. hrs.

Notes Regarding Prerequisites:
* MATH 1325 Calculus for Business & Social Sciences OR MATH 2413 Calculus I are required prerequisite for FINA 3310 Financial Management*.

** ACCT 2301 Financial Accounting, MATH 1325 Calculus for Business & Social Sciences or equivalent is required prerequisite for FINA 3331 Investments .

*** ACCT 2301 Financial Accounting and ACCT 2302 Managerial Accounting are required prerequisites for ACCT 3321 Federal Income Tax I*.

Total: 18 SCH

Other Requirements:

A minimum of 12 hours must be taken at Texas A&M University - Corpus Christi.

Decision Sciences and Economics

Bachelor of Business Administration

Economics, BBA

Economics Major

The economics major is designed to provide students with a solid foundation in the theory and applications of economics in preparation for their chosen profession. Possible career opportunities for graduates include entry-level positions as research and financial analysts in the business and government sectors; and brokerage and currency traders in the financial and banking sectors. In addition, the economics major offers an excellent preparation for graduate studies in law, economics and other business disciplines.

Student Learning Outcome: Students will demonstrate an understanding of contemporary economic theories and policy considerations in a domestic and international context.

Complete the Business Foundation Curriculum in the freshman and sophomore years.

BBA Student Learning Goals and Objectives

G1. To Be Effective Communicators
O1. Students will demonstrate the ability to identify the appropriate message purpose, select appropriate organization, provide sufficient supporting details, and use effective mechanics.

O2. Students will demonstrate the ability to prepare (content, presentation and media) and deliver (verbally and nonverbally) a professional presentation.

G2. To Be Competent in Business Practices

O1. Students will demonstrate knowledge of key business theories and concepts and will apply these business theories and concepts correctly.

O2. Students demonstrate the ability to incorporate theories, concepts, and practices across multiple disciplines to produce practical answers.

O3. Students will effectively analyze data.

G3. To Be Good Decision Makers

O1. Students will demonstrate the ability to identify valid, reliable and important information applicable to the issue being studied.

O2. Students will demonstrate the ability to analyze multiple responses to issues.

O3. Students will demonstrate the ability to determine and support an appropriate decision.

G4. To Be Good Citizens

O1. Students will demonstrate the ability to identify ethical concepts.

In addition, all Economics Majors will demonstrate the ability to identify relevant (valid, reliable, and important) information to the issue being studied.

General Requirements for BBA Degree

All students seeking BBA must complete:

Sem. Hrs.

A. Core Curriculum Program 42

B. First-Years Seminars (when applicable)*(2)
C. Business Core 45
D. Major Requirements 24
E. Electives 9

Total 120 (122)

*Full-time, first time in college students are required to take the first-year seminars.

- UNIV 1101 First-Year Seminar I* 1 sem. hr.
- UNIV 1102 First-Year Seminar II* 1 sem. hr.

**COB - University Core Curriculum Requirements**

All Business majors are required to complete the following courses as part of their University Core Curriculum Program:

- ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
- MATH 1324 - Mathematics for Business and Social Sciences 3 sem. hrs. **

**Higher level mathematics course may be accepted as a substitute with approval

Total 42 sem. hrs.

**Business Core Requirements**

All Business Majors and Minors must complete the following course before or during their first semester enrolled in upper-division Business courses:

BUSI 0011 Cob Student Code of Ethics and Plagiarism* 0 sem. hrs.

To provide a common background in business, all students seeking the BBA are required to complete the following courses or their equivalents:

- ACCT 2301 - Financial Accounting 3 sem. hrs.
- ACCT 2302 - Managerial Accounting 3 sem. hrs.
- BLAW 3310 - Legal Environment of Business* 3 sem. hrs.
- BUSI 0088 - Graduation Requirements Review 0 sem. hrs.
- ECON 2302 - Microeconomics Principles* 3 sem. hrs.
- FINA 3310 - Financial Management* 3 sem. hrs.
- MATH 1325 - Calculus for Business & Social Sciences 3 sem. hrs. **
- MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
• MGMT 3315 - Communicating in Business* 3 sem. hrs.
• MGMT 4388 - Administrative Policy and Strategy* 3 sem. hrs.
• Misy 2305 - Computer Applications in Business* 3 sem. hrs.
• Misy 3310 - Management Information Systems Concepts^* 3 sem. hrs.
• MKTG 3310 - Principles of Marketing* 3 sem. hrs.
• OPSY 4314 - Operations Management* 3 sem. hrs.
• ORMS 3310 - Data Analysis and Statistics* 3 sem. hrs.

and an International Business course depending on the major:

• ACCT 3315 - Multinational Entities: Accounting and Consolidations* 3 sem. hrs. for Accounting Major ***
• ECON 3315 - International Economic Issues 3 sem. hrs. for Economics Major
• FINA 4315 - International Finance 3 sem. hrs. for Finance Major
• MGMT 4315 - Multinational Management* 3 sem. hrs. for Management Major
• BUSI 4310 - International Business 3 sem. hrs. for all other Majors

Note:

Course prerequisites are strictly enforced.

**Higher level mathematics course may be accepted as a substitute with approval.

***ACCT 3315 may be taken as either International Business Course or as an Accounting Elective but not both.

Total 45 sem. hrs.

Major Requirements

Economics Major Courses (15 sem. hrs.)

• ECON 3310 - Intermediate Macroeconomics 3 sem. hrs.
• ECON 3311 - Intermediate Microeconomics 3 sem. hrs.
• ECON 3312 - Money and Banking 3 sem. hrs.
• ECON 3322 - Managerial Economics 3 sem. hrs.
• ECON 4085 - Economics Exit Exam* 0 sem. hrs.
• ECON 4310 - Introduction to Econometrics 3 sem. hrs.

Economics Electives (9 sem. hrs.)

• ECON 3316 - Environmental Economics 3 sem. hrs.
• ECON 3320 - Public Finance 3 sem. hrs.
• ECON 3335 - Labor Economics 3 sem. hrs.
• ECON 4325 - Economics of European Integration 3 sem. hrs.
• ECON 4388 - History of Economic Thought* 3 sem. hrs.
• ECON 4390 - Current Topics in Economics 1-3 sem. hrs.
• ECON 4396 - Directed Individual Study* 1-3 sem. hrs.
• ECON 4398 - Internship in Economics 3 sem. hrs.

Total 24 sem. hrs.

Elective Requirements

Additional Electives Required for all Business Majors:

• Upper-level Business Elective 3 sem. hrs.
• Business Elective 3 sem. hrs.
• Non-Business Elective 3 sem. hrs.

Total 9 sem. hrs.

Management Information Systems, BBA

Management Information Systems Major

The MIS program supports students and professionals in their applied use of computers. Information systems supports a variety of business activities using computer systems; it is not intended to prepare software developers.

Student Learning Outcome: Students will demonstrate an understanding of how computer systems support a variety of business activities.

Complete the Business Foundation Curriculum in the freshman and sophomore years.

BBA Student Learning Goals and Objectives

G1. To Be Effective Communicators
O1. Students will demonstrate the ability to identify the appropriate message purpose, select appropriate organization, provide sufficient supporting details, and use effective mechanics.

O2. Students will demonstrate the ability to prepare (content, presentation and media) and deliver (verbally and nonverbally) a professional presentation.

G2. To Be Competent in Business Practices

O1. Students will demonstrate knowledge of key business theories and concepts and will apply these business theories and concepts correctly.

O2. Students demonstrate the ability to incorporate theories, concepts, and practices across multiple disciplines to produce practical answers.

O3. Students will effectively analyze data.

G3. To Be Good Decision Makers

O1. Students will demonstrate the ability to identify valid, reliable and important information applicable to the issue being studied.

O2. Students will demonstrate the ability to analyze multiple responses to issues.

O3. Students will demonstrate the ability to determine and support an appropriate decision.

G4. To Be Good Citizens

O1. Students will demonstrate the ability to identify ethical concepts.

In addition, all Management Information Systems Majors will demonstrate basic knowledge of Management Information Systems theories and an understanding of how to apply concepts correctly.

General Requirements for BBA Degree

All students seeking BBA must complete:

Sem. Hrs.

A. Core Curriculum Program  42
B. First-Years Seminars (when applicable)*(2)

C. Business Core 45

D. Major Requirements 24

E. Electives 9

Total 120 (122)

*Full-time, first time in college students are required to take the first-year seminars.

- UNIV 1101 First-Year Seminar I* 1 sem. hr.
- UNIV 1102 First-Year Seminar II* 1 sem. hr.

COB - University Core Curriculum Requirements

All Business majors are required to complete the following courses as part of their University Core Curriculum Program:

- ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
- MATH 1324 - Mathematics for Business and Social Sciences 3 sem. hrs. **

  **Higher level mathematics course may be accepted as a substitute with approval

Total 42 sem. hrs.

Business Core Requirements

All Business Majors and Minors must complete the following course before or during their first semester enrolled in upper-division Business courses:

BUSI 0011 Cob Student Code of Ethics and Plagiarism* 0 sem. hrs.

To provide a common background in business, all students seeking the BBA are required to complete the following courses or their equivalents:

- ACCT 2301 - Financial Accounting 3 sem. hrs.
- ACCT 2302 - Managerial Accounting 3 sem. hrs.
- BLAW 3310 - Legal Environment of Business* 3 sem. hrs.
- BUSI 0088 - Graduation Requirements Review 0 sem. hrs.
- ECON 2302 - Microeconomics Principles* 3 sem. hrs.
- FINA 3310 - Financial Management* 3 sem. hrs.
• MATH 1325 - Calculus for Business & Social Sciences 3 sem. hrs. **
• MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
• MGMT 3315 - Communicating in Business* 3 sem. hrs.
• MGMT 4388 - Administrative Policy and Strategy* 3 sem. hrs.
• MISY 2305 - Computer Applications in Business* 3 sem. hrs.
• MISY 3310 - Management Information Systems Concepts^* 3 sem. hrs.
• MKTG 3310 - Principles of Marketing* 3 sem. hrs.
• OPSY 4314 - Operations Management* 3 sem. hrs.
• ORMS 3310 - Data Analysis and Statistics* 3 sem. hrs.

and an International Business course depending on the major:

• ACCT 3315 - Multinational Entities: Accounting and Consolidations* 3 sem. hrs.
  for Accounting Major ***
• ECON 3315 - International Economic Issues 3 sem. hrs. for Economics Major
• FINA 4315 - International Finance 3 sem. hrs. for Finance Major
• MGMT 4315 - Multinational Management* 3 sem. hrs. for Management Major
• BUSI 4310 - International Business 3 sem. hrs. for all other Majors

Note:

Course prerequisites are strictly enforced.

**Higher level mathematics course may be accepted as a substitute with approval.

***ACCT 3315 may be taken as either International Business Course or as an
Accounting Elective but not both.

Total 45 sem. hrs.

Major Requirements

MISY Major Courses (18 sem. hrs.)

• MISY 3320 - Business Data Communication and Networking I 3 sem. hrs.
• MISY 3330 - Database Management 3 sem. hrs.
• MISY 3340 - Systems Analysis and Design 3 sem. hrs.
• MISY 3350 - Business Applications Development 3 sem. hrs.
• MISY 4330 - Website Development for Business 3 sem. hrs.
• MISY 4375 - IT Project Management 3 sem. hrs.

MISY Electives (6 sem. hrs.)
• Misy 3360 - ERP Overview 3 sem. hrs.
• Misy 4310 - Business Data Communications and Networking II 3 sem. hrs.
• Misy 4340 - Electronic Commerce Management 3 sem. hrs.
• Misy 4350 - Business Intelligence and Analytics 3 sem. hrs.
• Misy 4365 - Data Warehousing and Data Mining for Business Intelligence 3 sem. hrs.
• Misy 4390 - Current Topics in Management Information Systems 1-3 sem. hrs.

Total 24 sem. hrs.

Elective Requirements

Additional Electives Required for all Business Majors:

• Upper-level Business Elective 3 sem. hrs.
• Business Elective 3 sem. hrs.
• Non-Business Elective 3 sem. hrs.

Total 9 sem. hrs.

Minor

Economics Minor

(for Business and Nonbusiness Majors)

This minor is designed to serve students who are interested in supplementing their majors with an added knowledge of economics. A minimum of twelve hours must be taken at Texas A&M University-Corpus Christi. For additional information, contact the academic advisor in the College of Business.

Required Courses* (9 sem. hrs.)

• ** ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
• ECON 2302 - Microeconomics Principles* 3 sem. hrs.
• ECON 3310 - Intermediate Macroeconomics 3 sem. hrs. OR
• ECON 3311 - Intermediate Microeconomics 3 sem. hrs.

Electives:
Select 3 of the following courses (if not already taken as required courses)

- ECON 3310 - Intermediate Macroeconomics 3 sem. hrs.
- ECON 3311 - Intermediate Microeconomics 3 sem. hrs.
- ECON 3312 - Money and Banking 3 sem. hrs.
- ECON 3315 - International Economic Issues 3 sem. hrs.
- ECON 3316 - Environmental Economics 3 sem. hrs.
- ECON 3320 - Public Finance 3 sem. hrs.
- ECON 3322 - Managerial Economics 3 sem. hrs.
- ECON 4388 - History of Economic Thought* 3 sem. hrs.
- ECON 4310 - Introduction to Econometrics 3 sem. hrs.

Total: 18

Note:

**Core Curriculum Program

Management Information Systems Minor

(for Business and Nonbusiness Majors)

This minor is designed for students who are interested in supplementing their major with applied computer knowledge. A minimum of 12 hours must be taken at Texas A&M University-Corpus Christi. For additional information contact the academic advisor in the College of Business.

Required Courses*

- MISY 2305 - Computer Applications in Business* 3 sem. hrs.
- MISY 3320 - Business Data Communication and Networking I 3 sem. hrs.
- MISY 3330 - Database Management 3 sem. hrs.
- MISY 3340 - Systems Analysis and Design 3 sem. hrs.
- Approved MISY or COSC elective 3 sem. hrs.

Total: 18

Note:

Management and Marketing
Bachelor of Business Administration

General Business, BBA

General Business Major

This program of study provides a broad-based business background for those persons who are interested in a business career but do not wish to specialize in a specific functional area. Study in the various business disciplines provides a broader competency base for those who may want to work in or to manage small businesses or selected not-for-profit organizations. This major provides a background for entry-level work in a broad range of businesses. An On Campus format provides a mix of online, face-to-face, and blended courses. An Online completion format provides 60 hours of online courses.

Complete the Business Foundation Curriculum in the freshman and sophomore years.

BBA Student Learning Goals and Objectives

G1. To Be Effective Communicators

O1. Students will demonstrate the ability to identify the appropriate message purpose, select appropriate organization, provide sufficient supporting details, and use effective mechanics.

O2. Students will demonstrate the ability to prepare (content, presentation and media) and deliver (verbally and nonverbally) a professional presentation.

G2. To Be Competent in Business Practices

O1. Students will demonstrate knowledge of key business theories and concepts and will apply these business theories and concepts correctly.

O2. Students demonstrate the ability to incorporate theories, concepts, and practices across multiple disciplines to produce practical answers.

O3. Students will effectively analyze data.

G3. To Be Good Decision Makers

O1. Students will demonstrate the ability to identify valid, reliable and important information applicable to the issue being studied.

O2. Students will demonstrate the ability to analyze multiple responses to issues.
O3. Students will demonstrate the ability to determine and support an appropriate decision.

G4. To Be Good Citizens

O1. Students will demonstrate the ability to identify ethical concepts.

In addition, all General Business Majors will demonstrate knowledge of key International Business theories and concepts, and will apply these International Business theories and concepts correctly.

General Requirements for BBA Degree

All students seeking BBA must complete:

<table>
<thead>
<tr>
<th>Category</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>B. First-Years Seminars (when applicable)*(2)</td>
<td></td>
</tr>
<tr>
<td>C. Business Core</td>
<td>45</td>
</tr>
<tr>
<td>D. Major Requirements</td>
<td>24</td>
</tr>
<tr>
<td>E. Electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120 (122)</strong></td>
</tr>
</tbody>
</table>

*Full-time, first time in college students are required to take the first-year seminars.

- UNIV 1101 First-Year Seminar I* 1 sem. hr.
- UNIV 1102 First-Year Seminar II* 1 sem. hr.

COB - University Core Curriculum Requirements

All Business majors are required to complete the following courses as part of their University Core Curriculum Program:

- ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
- MATH 1324 - Mathematics for Business and Social Sciences 3 sem. hrs. **

**Higher level mathematics course may be accepted as a substitute with approval
Total 42 sem. hrs.

Business Core Requirements

All Business Majors and Minors must complete the following course before or during their first semester enrolled in upper-division Business courses:

BUSI 0011 Cob Student Code of Ethics and Plagiarism* 0 sem. hrs.

To provide a common background in business, all students seeking the BBA are required to complete the following courses or their equivalents:

- ACCT 2301 - Financial Accounting 3 sem. hrs.
- ACCT 2302 - Managerial Accounting 3 sem. hrs.
- BLAW 3310 - Legal Environment of Business* 3 sem. hrs.
- BUSI 0088 - Graduation Requirements Review 0 sem. hrs.
- ECON 2302 - Microeconomics Principles* 3 sem. hrs.
- FINA 3310 - Financial Management* 3 sem. hrs.
- MATH 1325 - Calculus for Business & Social Sciences 3 sem. hrs. **
- MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
- MGMT 3315 - Communicating in Business* 3 sem. hrs.
- MGMT 4388 - Administrative Policy and Strategy* 3 sem. hrs.
- MISY 2305 - Computer Applications in Business* 3 sem. hrs.
- MKTG 3310 - Principles of Marketing* 3 sem. hrs.
- OPSY 4314 - Operations Management* 3 sem. hrs.
- ORMS 3310 - Data Analysis and Statistics* 3 sem. hrs.

and an International Business course depending on the major:

- ACCT 3315 - Multinational Entities: Accounting and Consolidations* 3 sem. hrs. for Accounting Major ***
- ECON 3315 - International Economic Issues 3 sem. hrs. for Economics Major
- FINA 4315 - International Finance 3 sem. hrs. for Finance Major
- MGMT 4315 - Multinational Management* 3 sem. hrs. for Management Major
- BUSI 4310 - International Business 3 sem. hrs. for all other Majors

Note:

Course prerequisites are strictly enforced.

**Higher level mathematics course may be accepted as a substitute with approval.
***ACCT 3315 may be taken as either International Business Course or as an Accounting Elective but not both.

Total 45 sem. hrs.

Major Requirements

Accounting 3 sem. hrs.

Select one of the following:

- ACCT 3311 - Intermediate Accounting I* 3 sem. hrs.
- ACCT 3314 - Cost Accounting* 3 sem. hrs.
- ACCT 3315 - Multinational Entities: Accounting and Consolidations* 3 sem. hrs.
- ACCT 3316 - Governmental and Not-for-Profit Accounting 3 sem. hrs.
- ACCT 3317 - Oil, Gas, & Energy Accounting* 3 sem. hrs.
- ACCT 3321 - Federal Income Tax I* 3 sem. hrs.
- ACCT 3340 - Fraud Examination* 3 sem. hrs.
- ACCT 4355 - Accounting Information Systems* 3 sem. hrs.

Finance 3 sem. hrs.

Select one of the following:

- FINA 3312 - Financial Markets and Institutions 3 sem. hrs.
- FINA 3320 - Intermediate Corporate Finance 3 sem. hrs.
- FINA 3331 - Investments 3 sem. hrs.
- FINA 3354 - Real Estate Principles* 3 sem. hrs.

Management 3 sem. hrs.

Select one of the following:

- MGMT 4320 - Leadership and Managerial Effectiveness* 3 sem. hrs.

Marketing 3 sem. hrs.

Select one of the following:

- MKTG 3315 - Advertising and Promotional Strategy* 3 sem. hrs.
- MKTG 3325 - Entrepreneurial Marketing* 3 sem. hrs.
- MKTG 4360 - Social Media Marketing* 3 sem. hrs.
Business Electives 3 sem. hrs.

Upper-Level Business Electives 9 sem. hrs.

Total 9 sem. hrs.

Elective Requirements

Additional Electives Required for all Business Majors:

- Upper-level Business Elective 3 sem. hrs.
- Business Elective 3 sem. hrs.
- Non-Business Elective 3 sem. hrs.

Total 9 sem. hrs.

BBA General Business Online Completion

This program of study provides a broad-based business background for those persons who are interested in a business career but do not wish to specialize in a specific functional area. Study in the various business disciplines provides a broader competency base for those who may want to work in or to manage small businesses or selected not-for-profit organizations. This major provides a background for entry-level work in a broad range of businesses. An On-Campus format provides a mix of online, face-to-face, and blended courses. An Online completion format provides 60 hours of online courses. The course schedule for the Online BBA General Business option will differ from on-campus course offerings and may not include all course options available to on-campus students.

BBA Student Learning Goals and Objectives

G1. To Be Effective Communicators

01. Students will demonstrate the ability to identify the appropriate message purpose, select appropriate organization, provide sufficient supporting details, and use effective mechanics.

02. Students will demonstrate the ability to prepare (content, presentation and media) and deliver (verbally and nonverbally) a professional presentation.

G2. To Be Competent in Business Practices
01. Students will demonstrate knowledge of key business theories and concepts and will apply these business theories and concepts correctly.

02. Students demonstrate the ability to incorporate theories, concepts, and practices across multiple disciplines to produce practical answers.

03. Students will effectively analyze data.

G3. To Be Good Decision Makers.

01. Students will demonstrate the ability to identify valid, reliable and important information applicable to the issue being studied.

02. Students will demonstrate the ability to analyze multiple responses to issues.

03. Students will demonstrate the ability to determine and support an appropriate decision.

G4. To Be Good Citizens

01. Students will demonstrate the ability identify ethical concepts.

In addition, all General Business Majors will demonstrate knowledge of key International Business theories and concepts, and will apply these International Business theories and concepts correctly.

Entry Requirements

Applicants who have completed 42 hours with a GPA of 2.0 or higher may be accepted into the Online General Business BBA Completion Program. Students may transition into the upper division course sequence as they complete the University Core Curriculum and 60 hours including the following courses or their equivalents:

- ACCT 2301 - Financial Accounting 3 sem. hrs.
- ACCT 2302 - Managerial Accounting 3 sem. hrs.
- ECON 2302 - Microeconomics Principles* 3 sem. hrs.
- MISY 2305 - Computer Applications in Business* 3 sem. hrs.
- MATH 1325 - Calculus for Business & Social Sciences 3 sem. hrs.
  (Higher level mathematics course may be accepted as substitute with approval)
- Non-Business Elective 3 sem. hrs.

All Business majors are required to complete the following courses as part of their University Core Curriculum Program:
• ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
• MATH 1324 - Mathematics for Business and Social Sciences 3 sem. hrs.
  (Higher level mathematics course may be accepted as a substitute with approval)

General Requirements for BBA Online Completion

All students seeking the online completion for the BBA in General Business must complete:

Sem. Hrs.

A. Business Core  30
B. Major Requirements 12
C. Business Electives 18

Total 60

Business Core Requirements (all available Online)

All Business Majors must complete the following course before or during their first semester enrolled in upper-division Business courses:

BUSI 0011 - Cob Student Code of Ethics and Plagiarism* 0 sem. hrs.

The following courses will be offered to provide the common background in business; all students seeking the BBA Online Completion are required to complete these courses or their equivalents.

• BLAW 3310 - Legal Environment of Business* 3 sem. hrs.
• BUSI 0088 - Graduation Requirements Review 0 sem. hrs.
• FINA 3310 - Financial Management* 3 sem. hrs.
• MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
• MGMT 3315 - Communicating in Business* 3 sem. hrs.
• MGMT 4388 - Administrative Policy and Strategy* 3 sem. hrs.
• MISY 3310 - Management Information Systems Concepts^* 3 sem. hrs.
• MKTG 3310 - Principles of Marketing* 3 sem. hrs.
• OPSY 4314 - Operations Management* 3 sem. hrs.
• ORMS 3310 - Data Analysis and Statistics* 3 sem. hrs.
• MGMT 4315 - Multinational Management* 3 sem. hrs.
Total 30 sem. hrs.

Major Requirements (all available Online)

The following courses (and/or their equivalents) will be offered to meet the Major Accounting, Finance, Management, and Marketing requirements.

- FINA 3354 - Real Estate Principles* 3 sem. hrs.
- MKTG 3315 - Advertising and Promotional Strategy* 3 sem. hrs.
- ACCT 3321 - Federal Income Tax I* 3 sem. hrs.

Total 12 sem. hrs.

Business Elective Requirements (all available Online)

The following courses will be offered to meet the requirements for Business Electives.

- BUSI 3315 - Entrepreneurship, Creativity, & Innovation* 3 sem. hrs.
- MGMT 3390 - Training and Development* 3 sem. hrs.
- MGMT 4320 - Leadership and Managerial Effectiveness* 3 sem. hrs.
- MKTG 3325 - Entrepreneurial Marketing* 3 sem. hrs.
- MKTG 3333 - Digital Marketing* 3 sem. hrs.
- MKTG 4360 - Social Media Marketing* 3 sem. hrs.

Note: Additional electives may be made available based upon student demand.

Total 18 sem. hrs.

Management, BBA

Management Major with Emphases in General Management, Health Care Administration, Human Resource Management, and Entrepreneurship

The major is designed to provide entry-level knowledge, skills, and concepts for general management, human resource management, health care positions, and entrepreneurship. Management majors take a common core of management courses. These courses provide a basic understanding of the nature of organizations, effective acquisition and utilization of human and physical resources, and the skills required to carry out the managerial functions of planning, organizing, directing, and controlling. Students who are interested
in broadening their understanding of these basic concepts may choose a general management emphasis. Those who want a more specific focus may choose an emphasis in human resource management (HRM) or health care management (HCM). An emphasis in HRM provides the student a concentration of courses focusing on human resource concepts such as staffing, labor relations, human resource problems and human resource law. The emphasis in HCM gives students the option of completing their major with courses in health care issues, health care systems, and marketing and budgeting principles for health science practitioners.

A sound background in management fundamentals, coupled with applied classroom experiences, can accelerate an individual's progress in obtaining positions of greater responsibility. Students completing the major will be better prepared to handle supervisory or managerial positions in profit, not-for-profit, and governmental organizations.

All courses in business foundation curriculum must be completed in all options.

BBA Student Learning Goals and Objectives

G1. To Be Effective Communicators

O1. Students will demonstrate the ability to identify the appropriate message purpose, select appropriate organization, provide sufficient supporting details, and use effective mechanics.

O2. Students will demonstrate the ability to prepare (content, presentation and media) and deliver (verbally and nonverbally) a professional presentation.

G2. To Be Competent in Business Practices

O1. Students will demonstrate knowledge of key business theories and concepts and will apply these business theories and concepts correctly.

O2. Students demonstrate the ability to incorporate theories, concepts, and practices across multiple disciplines to produce practical answers.

O3. Students will effectively analyze data.

G3. To Be Good Decision Makers

O1. Students will demonstrate the ability to identify valid, reliable and important information applicable to the issue being studied.

O2. Students will demonstrate the ability to analyze multiple responses to issues.
O3. Students will demonstrate the ability to determine and support an appropriate decision.

G4. To Be Good Citizens

O1. Students will demonstrate the ability to identify ethical concepts.

In addition, all Management Majors will demonstrate knowledge of key Management theories and concepts, and will apply these Management theories and concepts correctly.

General Requirements for BBA Degree

All students seeking BBA must complete:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>B. First-Years Seminars (when applicable)*</td>
<td>(2)</td>
</tr>
<tr>
<td>C. Business Core</td>
<td>45</td>
</tr>
<tr>
<td>D. Major Requirements</td>
<td>24</td>
</tr>
<tr>
<td>E. Electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120 (122)</strong></td>
</tr>
</tbody>
</table>

*Full-time, first time in college students are required to take the first-year seminars.

- UNIV 1101 First-Year Seminar I* 1 sem. hr.
- UNIV 1102 First-Year Seminar II* 1 sem. hr.

COB - University Core Curriculum Requirements

All Business majors are required to complete the following courses as part of their University Core Curriculum Program:

- ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
- MATH 1324 - Mathematics for Business and Social Sciences 3 sem. hrs. **

**Higher level mathematics course may be accepted as a substitute with approval

Total 42 sem. hrs.
Business Core Requirements

All Business Majors and Minors must complete the following course before or during their first semester enrolled in upper-division Business courses:

BUSI 0011 Cob Student Code of Ethics and Plagiarism* 0 sem. hrs.

To provide a common background in business, all students seeking the BBA are required to complete the following courses or their equivalents:

- ACCT 2301 - Financial Accounting 3 sem. hrs.
- ACCT 2302 - Managerial Accounting 3 sem. hrs.
- BLAW 3310 - Legal Environment of Business* 3 sem. hrs.
- BUSI 0088 - Graduation Requirements Review 0 sem. hrs.
- ECON 2302 - Microeconomics Principles* 3 sem. hrs.
- FINA 3310 - Financial Management* 3 sem. hrs.
- MATH 1325 - Calculus for Business & Social Sciences 3 sem. hrs. **
- MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
- MGMT 3315 - Communicating in Business* 3 sem. hrs.
- MGMT 4388 - Administrative Policy and Strategy* 3 sem. hrs.
- MISY 2305 - Computer Applications in Business* 3 sem. hrs.
- MKTG 3310 - Principles of Marketing* 3 sem. hrs.
- OPSY 4314 - Operations Management* 3 sem. hrs.
- ORMS 3310 - Data Analysis and Statistics* 3 sem. hrs.

and an International Business course depending on the major:

- ACCT 3315 - Multinational Entities: Accounting and Consolidations* 3 sem. hrs. for Accounting Major ***
- ECON 3315 - International Economic Issues 3 sem. hrs. for Economics Major
- FINA 4315 - International Finance 3 sem. hrs. for Finance Major
- MGMT 4315 - Multinational Management* 3 sem. hrs. for Management Major
- BUSI 4310 - International Business 3 sem. hrs. for all other Majors

Note:

Course prerequisites are strictly enforced.

**Higher level mathematics course may be accepted as a substitute with approval.

***ACCT 3315 may be taken as either International Business Course or as an Accounting Elective but not both.
Total 45 sem. hrs.

Major Requirements

General Management Emphasis Courses (15 sem. hrs.)

To provide a common background in Management, all students seeking the BBA with a Management Major that emphasizes General Management are required to complete the following courses or their equivalents:

- MGMT 3355 - Organization Change and Development* 3 sem. hrs.
- MGMT 4320 - Leadership and Managerial Effectiveness* 3 sem. hrs.
- MGMT 4340 - Critical Thinking and Decision Making* 3 sem. hrs.

Note: General Management Emphasis requires one additional elective. 3 Sem. hrs.

Health Care Emphasis Courses (15 sem. hrs.)

To provide a common background in Management, all students seeking the BBA with a Management Major that emphasizes Health Care are required to complete the following courses or their equivalents:

- MGMT 3355 - Organization Change and Development* 3 sem. hrs.
- MGMT 4305 - Staffing in Organizations* 3 sem. hrs.
- MGMT 4320 - Leadership and Managerial Effectiveness* 3 sem. hrs.

Health Care Emphasis Electives (9 sem. hrs.)

- Approved Course in Health Care 3 sem. hrs.
- Approved Electives in Health Care 6 sem. hrs.

Note: Possible electives in Health Care exclude HLSC 4300

Human Resource Management Emphasis Courses (15 sem. hrs.)

To provide a common background in Management, all students seeking the BBA with a Management Major that emphasizes Human Resources Management are required to complete the following courses or their equivalents:

- MGMT 3390 - Training and Development* 3 sem. hrs.
• MGMT 4305 - Staffing in Organizations* 3 sem. hrs.
• MGMT 4335 - Compensation and Appraisal Systems* 3 sem. hrs.
• MGMT 4385 - Human Resource Planning 3 sem. hrs.

Entrepreneurship Emphasis Courses (15 sem. hrs.)

To provide a common background in Management, all students seeking the BBA with a Management Major that emphasizes Entrepreneurship are required to complete the following courses or their equivalents:

• BUSI 3315 - Entrepreneurship, Creativity, & Innovation* 3 sem. hrs.
• BUSI 4320 - New Venture Creation 3 sem. hrs.
• MGMT 3330 - Small Business Strategy* 3 sem. hrs.
• MGMT 3360 - Social Entrepreneurship 3 sem. hrs.
• MKTG 3325 - Entrepreneurial Marketing* 3 sem. hrs.

Management Electives (9 sem. hrs.)

• MGMT 3320 - Concepts of Human Resource Management* 3 sem. hrs.
• MGMT 3330 - Small Business Strategy* 3 sem. hrs.
• MGMT 3335 - Strategic Issues in Family Business 3 sem. hrs.
• MGMT 3355 - Organization Change and Development* 3 sem. hrs.
• MGMT 3360 - Social Entrepreneurship 3 sem. hrs.
• MGMT 3390 - Training and Development* 3 sem. hrs.
• MGMT 4305 - Staffing in Organizations* 3 sem. hrs.
• MGMT 4310 - Managing Dysfunctional Workplace Behavior 3 sem. hrs.
• MGMT 4320 - Leadership and Managerial Effectiveness* 3 sem. hrs.
• MGMT 4330 - Business Ethics* 3 sem. hrs.
• MGMT 4335 - Compensation and Appraisal Systems* 3 sem. hrs.
• MGMT 4340 - Critical Thinking and Decision Making* 3 sem. hrs.
• MGMT 4385 - Human Resource Planning 3 sem. hrs.
• MGMT 4390 - Current Topics in Management 1-3 sem. hrs.
• MGMT 4396 - Directed Individual Study* 1-3 sem. hrs.
• MGMT 4398 - Internship in Management 3 sem. hrs.

Note: Students should choose electives that fit their interests and career aspirations. Please be aware that courses cannot be counted as part of the Core Requirements and again as a Management Elective.

Total 24 sem. hrs.

Electives Requirements:
Additional Electives Required for all Business Majors:

- Upper-level Business Elective 3 hrs.
- Business Elective 3 hrs.
- Non-Business Elective 3 hrs.

Total Additional Electives 9 hours

Total 9 sem. hrs.

BBA General Management Online Completion

The major is designed to provide entry-level knowledge, skills, and concepts for general management. Management majors take a common core of management courses. These courses provide a basic understanding of the nature of organizations, effective acquisition and utilization of human and physical resources, and the skills required to carry out the managerial functions of planning, organizing, directing, and controlling. The general management Online Completion students will broaden their understanding of these basic concepts in their advanced courses. An On-Campus format provides a mix of online, face-to-face, and blended courses. An Online completion format provides 60 hours of online courses. The course schedule for the Online BBA General Management option will differ from on-campus course offerings and may not include all course options available to on-campus students.

Student Learning Goals and Objectives

Students will demonstrate an understanding of the principles and practices common to the functional areas of business administration.

G1. To Be Effective Communicators

O1. Students will demonstrate the ability to identify the appropriate message purpose, select appropriate organization, provide sufficient supporting details, and use effective mechanics.

O2. Students will demonstrate the ability to prepare (content, presentation and media) and deliver (verbally and nonverbally) a professional presentation.

G2. To Be Competent in Business Practices

O1. Students will demonstrate knowledge of key business theories and concepts and will apply these business theories and concepts correctly.
O2. Students demonstrate the ability to incorporate theories, concepts, and practices across multiple disciplines to produce practical answers.

O3. Students will effectively analyze data.

G3. To Be Good Decision Makers.

O1. Students will demonstrate the ability to identify valid, reliable and important information applicable to the issue being studied.

O2. Students will demonstrate the ability to analyze multiple responses to issues.

O3. Students will demonstrate the ability to determine and support an appropriate decision.

G4. To Be Good Citizens

O1. Students will demonstrate the ability to identify ethical concepts.

Entry Requirements

Applicants who have completed 42 hours with a GPA of 2.0 or higher may be accepted into the Online General Management BBA Completion Program. Students may transition into the upper division course sequence as they complete the University Core Curriculum and 60 hours including the following courses or their equivalents:

- ACCT 2301 - Financial Accounting 3 sem. hrs.
- ACCT 2302 - Managerial Accounting 3 sem. hrs.
- ECON 2302 - Microeconomics Principles* 3 sem. hrs.
- MISY 2305 - Computer Applications in Business* 3 sem. hrs.
- MATH 1325 - Calculus for Business & Social Sciences 3 sem. hrs.
  (Higher level mathematics course may be accepted as substitute with approval)
- Non-Business Elective 3 sem. hrs.
  All Business majors are required to complete the following courses as part of their University Core Curriculum Program:
  - ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
  - MATH 1324 - Mathematics for Business and Social Sciences 3 sem. hrs.
    (Higher level mathematics course may be accepted as a substitute with approval)

General Requirements for BBA Online Completion

All students seeking the online completion for the BBA in Management must complete:

Sem. Hrs.
A. Business Core 30
B. Major Requirements 12
C. Major Electives 12
D. Business Electives 6

Total 60

Business Core Requirements (all available Online)

All Business Majors and Minors must complete the following course before or during their first semester enrolled in upper-division Business courses:

BUSI 0011 - Cob Student Code of Ethics and Plagiarism* 0 sem. hrs.

The following courses will be offered to provide the common background in business; all students seeking the BBA Online Completion are required to complete these courses or their equivalents.

- BLAW 3310 - Legal Environment of Business* 3 sem. hrs.
- BUSI 0088 - Graduation Requirements Review 0 sem. hrs.
- FINA 3310 - Financial Management* 3 sem. hrs.
- MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
- MGMT 3315 - Communicating in Business* 3 sem. hrs.
- MGMT 4388 - Administrative Policy and Strategy* 3 sem. hrs.
- MKTG 3310 - Principles of Marketing* 3 sem. hrs.
- OPSY 4314 - Operations Management* 3 sem. hrs.
- ORMS 3310 - Data Analysis and Statistics* 3 sem. hrs.
- MGMT 4315 - Multinational Management* 3 sem. hrs.

Total 30 sem. hrs.

Major Requirements (all available Online)

The following courses (and/or their equivalents) will be offered to meet the Major Management requirements.

- MGMT 3355 - Organization Change and Development* 3 sem. hrs.
- MGMT 4320 - Leadership and Managerial Effectiveness* 3 sem. hrs.
• MGMT 4340 - Critical Thinking and Decision Making* 3 sem. hrs.

Total 12 sem. hrs.

Major Electives (all available Online)

• MGMT 3330 - Small Business Strategy* 3 sem. hrs.
• MGMT 3390 - Training and Development* 3 sem. hrs.
• MGMT 4305 - Staffing in Organizations* 3 sem. hrs.
• MGMT 4335 - Compensation and Appraisal Systems* 3 sem. hrs.
• MGMT 4396 - Directed Individual Study* 1-3 sem. hrs.

Total 12 sem. hrs.

Business Elective Requirements (all available Online)

The following course options will be offered to meet the requirements for Business Electives.

• BUSI 3315 - Entrepreneurship, Creativity, & Innovation* 3 sem. hrs.
• MKTG 3325 - Entrepreneurial Marketing* 3 sem. hrs.
• MKTG 3333 - Digital Marketing* 3 sem. hrs.

Note: Additional electives may be made available based upon student demand.

Total 6 sem. hrs.

Marketing, BBA

Marketing Major

The marketing curriculum is designed to help students prepare for careers in fields such as retailing, distribution, marketing research, advertising, and personal selling. The program provides knowledge and competencies that facilitate acquiring and succeeding in entry-level positions and moving into marketing management positions or business ownership. Emphasis is on development of analytical skills adequate for and appropriate to professional marketing activities in a highly competitive global market place. Marketing courses stress problem solving and decision making and the development and implementation of competitive policies and strategies.

Complete the Business Foundation Curriculum in the freshman and sophomore years.

BBA Student Learning Goals and Objectives
G1. To Be Effective Communicators

O1. Students will demonstrate the ability to identify the appropriate message purpose, select appropriate organization, provide sufficient supporting details, and use effective mechanics.

O2. Students will demonstrate the ability to prepare (content, presentation and media) and deliver (verbally and nonverbally) a professional presentation.

G2. To Be Competent in Business Practices

O1. Students will demonstrate knowledge of key business theories and concepts and will apply these business theories and concepts correctly.

O2. Students demonstrate the ability to incorporate theories, concepts, and practices across multiple disciplines to produce practical answers.

O3. Students will effectively analyze data.

G3. To Be Good Decision Makers

O1. Students will demonstrate the ability to identify valid, reliable and important information applicable to the issue being studied.

O2. Students will demonstrate the ability to analyze multiple responses to issues.

O3. Students will demonstrate the ability to determine and support an appropriate decision.

G4. To Be Good Citizens

O1. Students will demonstrate the ability to identify ethical concepts.

In addition, all Marketing Majors will demonstrate knowledge of key marketing theories and concepts, and the ability to apply these theories and concepts.

General Requirements for BBA Degree

All students seeking BBA must complete:

<table>
<thead>
<tr>
<th>Sem. Hrs.</th>
<th>42</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Core Curriculum Program</td>
<td></td>
</tr>
<tr>
<td>B. First-Years Seminars (when applicable)*</td>
<td>(2)</td>
</tr>
</tbody>
</table>
C. Business Core 45
D. Major Requirements 24
E. Electives 9

Total 120 (122)

*Full-time, first time in college students are required to take the first-year seminars.

- UNIV 1101 First-Year Seminar I* 1 sem. hr.
- UNIV 1102 First-Year Seminar II* 1 sem. hr.

COB - University Core Curriculum Requirements

All Business majors are required to complete the following courses as part of their University Core Curriculum Program:

- ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
- MATH 1324 - Mathematics for Business and Social Sciences 3 sem. hrs. **
  
  **Higher level mathematics course may be accepted as a substitute with approval

Total 42 sem. hrs.

Business Core Requirements

All Business Majors and Minors must complete the following course before or during their first semester enrolled in upper-division Business courses:

BUSI 0011 Cob Student Code of Ethics and Plagiarism* 0 sem. hrs.

To provide a common background in business, all students seeking the BBA are required to complete the following courses or their equivalents:

- ACCT 2301 - Financial Accounting 3 sem. hrs.
- ACCT 2302 - Managerial Accounting 3 sem. hrs.
- BLAW 3310 - Legal Environment of Business* 3 sem. hrs.
- BUSI 0088 - Graduation Requirements Review 0 sem. hrs.
- ECON 2302 - Microeconomics Principles* 3 sem. hrs.
- FINA 3310 - Financial Management* 3 sem. hrs.
- MATH 1325 - Calculus for Business & Social Sciences 3 sem. hrs. **
- MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
- MGMT 3315 - Communicating in Business* 3 sem. hrs.
- MGMT 4388 - Administrative Policy and Strategy* 3 sem. hrs.
- MISY 2305 - Computer Applications in Business* 3 sem. hrs.
- MKTG 3310 - Principles of Marketing* 3 sem. hrs.
- OPSY 4314 - Operations Management* 3 sem. hrs.
- ORMS 3310 - Data Analysis and Statistics* 3 sem. hrs.

and an International Business course depending on the major:

- ACCT 3315 - Multinational Entities: Accounting and Consolidations* 3 sem. hrs. for Accounting Major ***
- ECON 3315 - International Economic Issues 3 sem. hrs. for Economics Major
- FINA 4315 - International Finance 3 sem. hrs. for Finance Major
- MGMT 4315 - Multinational Management* 3 sem. hrs. for Management Major
- BUSI 4310 - International Business 3 sem. hrs. for all other Majors

Note:

Course prerequisites are strictly enforced.

**Higher level mathematics course may be accepted as a substitute with approval.

***ACCT 3315 may be taken as either International Business Course or as an Accounting Elective but not both.

Total 45 sem. hrs.

Major Requirements

To provide a common background in Marketing, all students seeking the BBA with a Marketing Major are required to complete the following courses or their equivalents:

Marketing Core Requirements (15 sem. hrs.)

- MKTG 3315 - Advertising and Promotional Strategy* 3 sem. hrs.
- MKTG 3330 - Consumer Behavior* 3 sem. hrs.
- MKTG 3333 - Digital Marketing* 3 sem. hrs.
- MKTG 4320 - Marketing Research and Analytics* 3 sem. hrs.
- MKTG 4350 - Marketing Strategy* 3 sem. hrs.

Marketing Electives (9 sem. hrs.)
- MKTG 3325 - Entrepreneurial Marketing* 3 sem. hrs.
- MKTG 3340 - Retail Management 3 sem. hrs.
- MKTG 3345 - Sales Management 3 sem. hrs.
- MKTG 4310 - Distribution Systems in Marketing 3 sem. hrs.
- MKTG 4340 - International Marketing 3 sem. hrs.
- MKTG 4360 - Social Media Marketing* 3 sem. hrs.
- MKTG 4396 - Directed Individual Study 1-3 sem. hrs.
- MKTG 4398 - Internship in Marketing 3 sem. hrs.

Total 24 sem. hrs.

Electives Requirements

Additional Electives Required for all Business Majors:

- Upper-level Business Elective 3 hrs.
- Business Elective 3 hrs.
- Non-Business Elective 3 hrs.

Total 9 sem. hrs.

BBA Marketing Online Completion

The marketing curriculum is designed to help students prepare for careers in fields such as retailing, distribution, marketing research, advertising, and personal selling. The program provides knowledge and competencies that facilitate acquiring and succeeding in entry-level positions and moving into marketing management positions or business ownership. Emphasis is on development of analytical skills adequate for and appropriate to professional marketing activities in a highly competitive global market place. Marketing courses stress problem solving and decision making and the development and implementation of competitive policies and strategies. An On-Campus format provides a mix of online, face-to-face, and blended courses. An Online completion format provides 60 hours of online courses. The course schedule for the Online BBA-Marketing option will differ from on-campus course offerings and may not include all course options available to on-campus students.

BBA Student Learning Goals and Objectives

Students will demonstrate an understanding of the principles and practices common to the functional areas of business administration.
G1. To Be Effective Communicators

01. Students will demonstrate the ability to identify the appropriate message purpose, select appropriate organization, provide sufficient supporting details, and use effective mechanics.

02. Students will demonstrate the ability to prepare (content, presentation and media) and deliver (verbally and nonverbally) a professional presentation.

G2. To Be Competent in Business Practices

01. Students will demonstrate knowledge of key business theories and concepts and will apply these business theories and concepts correctly.

02. Students demonstrate the ability to incorporate theories, concepts, and practices across multiple disciplines to produce practical answers.

03. Students will effectively analyze data.

G3. To Be Good Decision Makers

01. Students will demonstrate the ability to identify valid, reliable and important information applicable to the issue being studied.

02. Students will demonstrate the ability to analyze multiple responses to issues.

03. Students will demonstrate the ability to determine and support an appropriate decision.

G4. To Be Good Citizens

01. Students will demonstrate the ability to distinguish among ethical and unethical practices, and support ethical business solutions.

In addition, all Marketing Majors will demonstrate knowledge of key marketing theories and concepts, and the ability to apply these theories and concepts.

Entry Requirements

Applicants who have completed 42 hours with a GPA of 2.0 or higher may be accepted into the Online Marketing BBA Completion Program. Students may transition into the upper division course sequence as they complete the University Core Curriculum and 60 hours including the following courses or their equivalents:
• ACCT 2301 - Financial Accounting 3 sem. hrs.
• ACCT 2302 - Managerial Accounting 3 sem. hrs.
• ECON 2302 - Microeconomics Principles* 3 sem. hrs.
• MATH 1325 - Calculus for Business & Social Sciences 3 sem. hrs.
• MISY 2305 - Computer Applications in Business* 3 sem. hrs.

Non-Business Elective 3 sem. hrs.

All Business majors are required to complete the following courses as part of their University Core Curriculum Program:
• ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
• MATH 1324 - Mathematics for Business and Social Sciences 3 sem. hrs.
  (Higher level mathematics course may be accepted as a substitute with approval)

General Requirements for BBA Online Completion

All students seeking the online completion for the BBA in Marketing must complete:

<table>
<thead>
<tr>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Business Core</td>
</tr>
<tr>
<td>B. Major Requirements</td>
</tr>
<tr>
<td>C. Major Electives</td>
</tr>
<tr>
<td>D. Business Electives</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Business Core Requirements (all available Online)

All Business Majors and Minors must complete the following course before or during their first semester enrolled in upper-division Business courses:

BUSI 0011 - Cob Student Code of Ethics and Plagiarism* 0 sem. hrs.

The following courses will be offered to provide the common background in business; all students seeking the BBA Online Completion are required to complete these courses or their equivalents.

• BLAW 3310 - Legal Environment of Business* 3 sem. hrs.
• BUSI 0088 - Graduation Requirements Review 0 sem. hrs.
• FINA 3310 - Financial Management* 3 sem. hrs.
• MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
• MGMT 3315 - Communicating in Business* 3 sem. hrs.
• MGMT 4388 - Administrative Policy and Strategy* 3 sem. hrs.
• Misy 3310 - Management Information Systems Concepts** 3 sem. hrs.
• MKTG 3310 - Principles of Marketing* 3 sem. hrs.
• OPSY 4314 - Operations Management* 3 sem. hrs.
• ORMS 3310 - Data Analysis and Statistics* 3 sem. hrs.
• MGMT 4315 - Multinational Management* 3 sem. hrs.

Total 30 sem. hrs.

Major Requirements (all available Online)

• MKTG 3315 - Advertising and Promotional Strategy* 3 sem. hrs.
• MKTG 3330 - Consumer Behavior* 3 sem. hrs.
• MKTG 3333 - Digital Marketing* 3 sem. hrs.
• MKTG 4320 - Marketing Research and Analytics* 3 sem. hrs.
• MKTG 4350 - Marketing Strategy* 3 sem. hrs.

Total 15 sem. hrs.

Major Electives (all available Online)

• MKTG 3311 - Salesmanship: Concepts and Practices* 3 sem. hrs.
• MKTG 3325 - Entrepreneurial Marketing* 3 sem. hrs.
• MKTG 4360 - Social Media Marketing* 3 sem. hrs.

Total 9 sem. hrs.

Business Elective Requirements (all available Online)

The following courses will be offered to meet the requirements for Business Electives.

• BUSI 3315 - Entrepreneurship, Creativity, & Innovation* 3 sem. hrs.
• MGMT 4320 - Leadership and Managerial Effectiveness* 3 sem. hrs.

Note: Additional electives may be made available based upon student demand.

Total 6 sem. hrs.
Minor

Business Administration Minor

(for Nonbusiness Majors)

The minor is designed to provide a foundation of business knowledge for students who want to complement a nonbusiness bachelor’s program with a planned business program. Students who select the minor must establish a record with the academic advisor in the College of Business and be certified by the Dean of the College of Business upon application for graduation. A minimum of 18 hours is required for the minor. At least 12 of these hours must be taken at Texas A&M University-Corpus Christi.

Required Courses*

- ACCT 2301 - Financial Accounting 3 sem. hrs.
- ACCT 2302 - Managerial Accounting 3 sem. hrs.
- FINA 3310 - Financial Management* 3 sem. hrs. ** or any other upper-level FINA class
- MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
- MKTG 3310 - Principles of Marketing* 3 sem. hrs.
- BLAW 3310 - Legal Environment of Business* 3 sem. hrs. ***

Total: 18

Note:

* Courses may not be applied to both a major and a minor. Refer to course descriptions for prerequisites.

** It is assumed that all students have completed ECON 2301, ACCT 2301, and ACCT 2302.

*** Substitute an upper-level business course if equivalent course was transferred from a Junior College.

Nonbusiness undergraduate students planning to enter a Master of Business Administration program are advised to take FINA 3310 and complete the Minor in Business Administration to satisfy part of the foundation requirements for the MBA.

Entrepreneurship Minor
(for Business and Nonbusiness Majors)

This minor is designed for students who wish to supplement their major with applied course work in the field of entrepreneurship and who would like to explore the possibilities of starting their own business. A minimum of 12 hours must be taken at Texas A & M University-Corpus Christi.

Required Courses*

Nonbusiness majors will take these six courses:

- BUSI 1310 - Introduction to the Business Environment 3 sem. hrs.
- FINA 1307 - Personal Finance* 3 sem. hrs.
- BUSI 3315 - Entrepreneurship, Creativity, & Innovation* 3 sem. hrs.
- MKTG 3325 - Entrepreneurial Marketing* 3 sem. hrs.
- BUSI 4310 - International Business 3 sem. hrs.
- BUSI 4320 - New Venture Creation 3 sem. hrs.

Total: 18

Note:

Business majors will take two 3 hour upper-level Marketing courses, not applied towards their major, in lieu of BUSI 1310 and BUSI 4310.

Human Resource Management Minor

(for Business and Nonbusiness Majors)

This minor is designed for students seeking to supplement their major with a human resource management dimension. A minimum of 12 hours must be taken at Texas A & M University-Corpus Christi.

Required courses*

Nonbusiness majors will take all these six courses:

- MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
- MGMT 3390 - Training and Development* 3 sem. hrs.
- MGMT 4305 - Staffing in Organizations* 3 sem. hrs.
- MGMT 4335 - Compensation and Appraisal Systems* 3 sem. hrs.
• MGMT 4385 - Human Resource Planning 3 sem. hrs.

Total: 18

Since MGMT 3312 is required for business majors as part of the business core, in addition to the other five required courses above, business majors will take one of the following electives:

• FINA 3355 - Employee Benefits and Retirement Planning 3 sem. hrs.
• MGMT 3355 - Organization Change and Development* 3 sem. hrs.
• MGMT 4315 - Multinational Management* 3 sem. hrs.
• MGMT 4320 - Leadership and Managerial Effectiveness* 3 sem. hrs.
• MGMT 4390 - Current Topics in Management 1-3 sem. hrs.

Note:

International Business Minor

(for Business and NonBusiness Majors)

This minor is designed to serve students who are interested in supplementing their major with a global dimension. A minimum of 12 hours must be taken at Texas A&M University-Corpus Christi. For additional information, contact the academic advisor in the College of Business.

Required Courses*

• ACCT 3315 - Multinational Entities: Accounting and Consolidations* 3 sem. hrs.
 OR
• ECON 3315 - International Economic Issues 3 sem. hrs.
• FINA 4315 - International Finance 3 sem. hrs.
• MGMT 4315 - Multinational Management* 3 sem. hrs.
• MKTG 4340 - International Marketing 3 sem. hrs.
• BUSI 4310 - International Business 3 sem. hrs.
• Approved upper level elective 3 sem. hrs.

Total: 18

Note:

Management Minor
This minor is designed for students seeking to supplement their major with a management dimension. A minimum of 12 hours must be taken at Texas A&M University-Corpus Christi. For additional information, contact the academic advisor in the College of Business.

Required courses*

Nonbusiness majors will take all these six courses:

- MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
- MGMT 3355 - Organization Change and Development* 3 sem. hrs.
- MGMT 4315 - Multinational Management* 3 sem. hrs.
- MGMT 4320 - Leadership and Managerial Effectiveness* 3 sem. hrs.
- MGMT 4340 - Critical Thinking and Decision Making* 3 sem. hrs.

Total: 18

Since MGMT 3312 is required for business majors as part of the business core, in addition to the other five required course above, business majors will take one of the following electives:

- MGMT 4305 - Staffing in Organizations* 3 sem. hrs.
- MGMT 4335 - Compensation and Appraisal Systems* 3 sem. hrs.
- MGMT 4390 - Current Topics in Management 1-3 sem. hrs.

Note:

Marketing Minor

(for Business and Nonbusiness Majors)

This minor is designed to serve students who are interested in supplementing their major with additional basic knowledge and skills in marketing. A minimum of 12 hours must be taken at Texas A&M University-Corpus Christi. For additional information, contact the academic advisor in the College of Business.

Required Courses*
- MKTG 3310 - Principles of Marketing* 3 sem. hrs. **
- MKTG 3315 - Advertising and Promotional Strategy* 3 sem. hrs.
- MKTG 3330 - Consumer Behavior* 3 sem. hrs.

Electives:

(Choose nine hours from the following**)

- MKTG 3320 - Basic Advertising 3 sem. hrs.
- MKTG 3340 - Retail Management 3 sem. hrs.
- MKTG 3345 - Sales Management 3 sem. hrs.
- MKTG 4310 - Distribution Systems in Marketing 3 sem. hrs.
- MKTG 4320 - Marketing Research and Analytics* 3 sem. hrs.
- MKTG 4340 - International Marketing 3 sem. hrs.
- MKTG 4350 - Marketing Strategy* 3 sem. hrs.
- MKTG 4360 - Social Media Marketing* 3 sem. hrs.

Note:

**Since MKTG 3310 is required for business majors as part of the business core, business majors will take an additional 3 hour course from the electives for the minor in marketing.

Certificates

International Business Certificate*

(for Business and Non-Business Majors)

This certificate provides students with exposure to the global dimension of business. Exploration of global ideas and issues provides students with the knowledge and skills that enhance their ability to compete in today's complex work environment.

Required Courses

Students must complete at least two of the following courses:

- ACCT 3315 - Multinational Entities: Accounting and Consolidations* 3 sem. hrs.
- ECON 3315 - International Economic Issues 3 sem. hrs.
- FINA 4315 - International Finance 3 sem. hrs.
- MGMT 4315 - Multinational Management* 3 sem. hrs.
- MKTG 4340 - International Marketing 3 sem. hrs.
- BUSI 4310 - International Business 3 sem. hrs.

Total: 6 Hours

In addition, the student must participate in a College of Business qualified international travel experience as part of their academic degree.

*The student will receive a printed certificate from the College of Business upon completion of the requirements. Completion of the certificate will not appear on the student's transcript. All course work will be included on the student's transcript.

College of Education and Human Development

Teacher Certifications

- Elementary Teacher Certification
- Grades 4-8 Mathematics Certification
- Secondary/EC-12 Teacher Certification

Degrees

- Athletic Training, BS
- Elementary Education, BS
- Kinesiology, BS

Other Programs

- Military Science Minor
- Military Science
- Education Minor
- Kinesiology Minor

"Expanding Possibilities, Creating Solutions"

Mission

The College of Education and Human Development at Texas A&M University–Corpus Christi, devoted to excellence in instruction, research, and service, prepares leaders representing diverse backgrounds and experiences, to serve the educational needs in the global community.

Catalog Subject To Change
Our programs may be required to respond to inter-catalog edition mandates for curricular and or policy changes required by outside accreditation, licensing and certification requirements. Required timelines for these responses may not allow for standard college and university-based review process. In such cases, programs will publish and disseminate information about changes on website and current student handbook addenda. Examples include Texas Education Agency (TEA), Texas Coordinating Board for Higher Education (TCBHE), Council for Accreditation of Counseling & Related Educational Programs (CACREP) and the Commission on Accreditation of Athletic Training Education (CATTE).

Undergraduate Programs

The College of Education and Human Development (COEHD) offers the Bachelor of Science in Interdisciplinary Studies degree and the Bachelor of Science Degree with majors in Kinesiology, and Athletic Training. The Bachelor of Applied Science in Childhood Development/Early Childhood degree is designed for graduates of Applied Arts and Science programs in Child Development, as well as child care providers who seek additional qualifications (see College of Liberal Arts for degree program description). Students may also receive a military commission through the Military Science program and a minor in Military Science.

Field-Based Program

The COEHD is committed to a field-based professional development program. Early in their program, students are required to spend a significant portion of their professional development courses observing and working with experienced teachers in the local school districts. Subsequent course work is taught at the school sites, with the students utilizing the setting to become actively involved in applying the concepts learned in the lectures. The field-based program culminates in the clinical teaching experience, wherein the student is assigned on a one-to-one basis with an experienced master teacher and moves from observation, through cooperative teaching, to full responsibility for a class.

Undergraduate Program General Requirements

General University degree requirements are discussed in the "Undergraduate Programs" section of this catalog. COEHD degree requirements follow:

Total Hours
A minimum of 120 semester hours of credit is required for graduation. Some curricula or combinations of fields require more. No developmental course work may be applied toward the degree.

Grade Point Average

Requirements for graduation include a minimum grade point average of 2.00 on a four-point scale on all academic work attempted, and a minimum grade point average of 2.00 in the major field(s) of study. For admission to and retention in teacher education, the GPA requirement is 2.75 on all any coursework previously attempted or on the last 60 hours attempted at a public or private institution of higher education (TEC 21.0441).

Texas Success Initiative (TSI) Requirement

Before entering the final phase of a teacher education program, the state requires that you demonstrate your critical thinking and analytical skills. The TSI test is designed to evaluate this. The required scores and exemptions are below. Please contact Certification Officer Rose Zuniga at rose.zuniga@tamucc.edu or 361-825-2433 for exemption clarifications.

<table>
<thead>
<tr>
<th>Score</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>351</td>
</tr>
<tr>
<td>Mathematics</td>
<td>340</td>
</tr>
</tbody>
</table>

Writing Multiple Choice & Essay 353 with an essay of (4)

You do not have to take the TSI Assessment test if you:

- have graduated with an associate or baccalaureate degree from an institution of higher education; or
- have transferred from a private or independent institution of higher education or an accredited out-of-state institution of higher education and have satisfactorily completed college-level coursework as determined by the receiving institution; or
- have previously attended any institution of higher education and have been determined to have met college readiness standards by that institution; or
- are student who is enrolled in a certificate program of one year or less (Level-One certificates, 42 or fewer semester credit hours or the equivalent) at a public junior college, a public technical institute, or a public state college; or
- are serving on active duty as a member of the armed forces of the United States, the Texas National Guard, or as a member of a reserve component of the armed
forces of the United States and have been serving for at least three years preceding enrollment; or
• on or after August 1, 1990, were honorably discharged, retired, or released from active duty as a member of the armed forces of the United States or the Texas National Guard or service as a member of a reserve component of the armed forces of the United States; or
• are enrolled at TAMU on a temporary basis as a non-degree-seeking or non-certificate-seeking student (must be classified as a "U0" at TAMU).

The following tests can be used to exempt you from one or more parts of the TSI Assessment:

SAT (administered prior to March 2016):
• A minimum combined critical reading and mathematics score of 1070 with a minimum score of 500 on the mathematics test for a TSI exemption in math;
• A minimum combined critical reading and mathematics score of 1070 with a minimum score of 500 on the critical reading test for a TSI exemption in both reading and writing.

SAT (administered on or after March 5, 2016):
• A minimum score of 530 on the Mathematics test for a TSI exemption in math (no combined score required);
• A minimum score of 480 on the Evidenced-Based Reading & Writing (EBRW) for a TSI exemption in both reading and writing (no combined score required).

Mixing or combining scores from the SAT administered prior to March 2016 and the SAT administered on or after March 5, 2016 is not allowable.

Students must attend college within five (5) years from the date of the SAT test in order to use the scores for an exemption.

ACT
A student must first achieve a minimum composite score of 23 with:
• At least 19 on math for an exemption in math and/or
• At least 19 on English for an exemption in reading and writing.

Students must attend college within five (5) years from the date of the test in order to use the scores for an exemption.

TAKS
• A minimum score of 2200 in math for an exemption in math and/or
• 2200 in English Language Arts–with a writing sub-score of 3–for an exemption in reading and writing.
Students must attend college within five (5) years from the date of their 11th grade exit-level Texas Assessment of Knowledge and Skills (TAKS) test in order to use the scores for an exemption.

SSTAAR End-of-Course (EOC) Assessment

- Algebra II – a minimum score of Level 2 (4000 for the 2016-17 academic year) for an exemption in mathematics
- English III – a minimum score of Level 2 (4000 for the 2016-17 academic year) for an exemption in integrated reading and writing

Students must attend college within five (5) years from the date of their STAAR End-of-Course (EOC) test in order to use the scores for an exemption.

More information is available at the TSI web site.

Degree Plans

Students interested in seeking a degree offered by the College of Education and Human Development are encouraged to see an academic advisor to discuss their interests. After consultation with the student, the academic advisor will prepare a degree plan and assign a faculty advisor who will mentor the student regarding academic and career interests. Once reviewed by the faculty advisor and the certification officer, the degree plan will be labeled "official" by the academic advisor. The degree plan will follow the student through to graduation. Students are encouraged to visit their academic and faculty advisors once a semester to audit their progress and ensure they are following their designated plan. Students may change official degree plans by seeing an academic advisor and repeating the process.

Requirements for Programs Leading to Teacher Certification

Admission to and Retention in the Teacher Education Program (Field Based Program)

Students following a degree plan leading to teacher certification must be admitted to the Teacher Education Program at Texas A&M University-Corpus Christi PRIOR to enrolling in any 4000 level EDUC courses. Applications for admission to the teacher education program may be obtained online at COEHD website.
The student expecting to enter a program leading to teacher certification should apply for admission to the Teacher Education Program and the pre-service block experience as part of the course responsibilities for EDUC 3311. This application may be accessed from COEHD Student Services and online at the COEHD website at http://education.tamucc.edu/.

In addition to the requirements listed below, students must meet any additional requirements set by the specific certification teaching fields. See catalog sections for individual teaching fields (e.g., Mathematics, English, History) for these requirements. Requirements for admission to, and retention in, the Teacher Education Program include:

1. Completion of the application process for admission to teacher education. (If denied admission, the student must reapply.)
2. A minimum grade point average of 2.75 on all academic work attempted or a 2.75 on the last 60 hours attempted.
3. Completion of the University requirement in oral communication.
4. Conduct an interview with Department of Curriculum, Instruction, and Learning Sciences faculty while enrolled in EDUC 3311.
5. Completion of EDUC 3311 with a grade of "C" or better.
6. Prerequisite Courses.
7. Thirty-nine hours of the General Education Requirements.
8. A minimum GPA of 2.75 on all academic work taken in the student's teaching field(s), area of specialization or delivery system. Teaching certificate areas (i.e., History, English, Science and others) may require above the minimum grade point average of 2.75 and may not accept grades below "C". Students are to check the catalog section that pertains to the certificate area for required GPA's.
9. Completion of a criminal background check form.
10. Completion of TB screening.
11. Pay the ASEP Technology Fee as directed.

Verified admission to teacher education from another Texas institution of higher education will be accepted, provided that the quantitative standards from such other institutions equaled or exceeded those that existed at Texas A&M University-Corpus Christi at the time the student was admitted at the other institution.

NOTE: A fingerprint-based national criminal background investigation is conducted on all applicants for initial certification by the State Board for Educator Certification in Compliance with State Statute 19 TAC SS 141.5. Applicants for the Teacher Education program will also be subject to a criminal background check by the partner school district. Districts have the right to refuse any individual access to their schools and/or students at ANY time and Texas A&M University-Corpus Christi is obligated to honor
that request. Inability to complete field requirements will preclude an individual from successfully meeting course requirements.

<table>
<thead>
<tr>
<th>Previously counted EDUC Courses</th>
<th>Currently counted EDUC Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 4312-Classroom Management, Grades 7-12</td>
<td>EDUC 4311-Classroom Management</td>
</tr>
<tr>
<td>EDUC 4313-Classroom Management, Grades 4-8</td>
<td></td>
</tr>
<tr>
<td>EDUC 4314-Classroom Management, Grades EC-6</td>
<td></td>
</tr>
<tr>
<td>EDUC 4322-Instructional Design for Special Populations, Grades 7-12</td>
<td>EDUC 4321-Instructional Design for Special Populations</td>
</tr>
<tr>
<td>EDUC 4323-Instructional Design for Special Populations, Grades 4-8</td>
<td></td>
</tr>
<tr>
<td>EDUC 4324-Instructional Design for Special Populations, Grades EC-6</td>
<td></td>
</tr>
<tr>
<td>EDUC 4606-Planning, Teaching, Assessment, and Technology for Grades 7-12 Teachers</td>
<td></td>
</tr>
<tr>
<td>EDUC 4607-Planning, Teaching, Assessment, and Technology for Grades 4-8 Teachers</td>
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</tr>
<tr>
<td>EDUC 4608-Planning, Teaching, Assessment, and Technology for Grades EC-6 Teachers</td>
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</tr>
<tr>
<td>EDUC 4392-Student Teaching, EC-Grade 6</td>
<td>EDUC 4995-Clinical Teaching</td>
</tr>
<tr>
<td>EDUC 4394-Student Teaching, EC-Grade 6</td>
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</tr>
<tr>
<td>EDUC 4692-Student Teaching, EC-Grade 6</td>
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<tr>
<td>EDUC 4693-Student Teaching, Grades 7-12</td>
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</tr>
<tr>
<td>EDUC 4694-Student Teaching, EC-Grade 6</td>
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<tr>
<td>EDUC 4992-Student Teaching, Grades 4-8</td>
<td></td>
</tr>
<tr>
<td>EDUC 4993-Student Teaching, Grades 7-12</td>
<td></td>
</tr>
</tbody>
</table>
"The following courses have been designated as direct equitable courses and are to be used interchangeably for this current catalog year and any previous catalog years: EDUC 4311 has now replaced EDUC 4312, EDUC 4313, and EDUC 4314. EDUC 4321 has now replaced EDUC 4322, EDUC 4323, and EDUC 4324. EDUC 4605 has now replaced EDUC 4606, EDUC 4607 and EDUC 4608. EDUC 4995 has now replaced the 9 hours of student teaching courses and the combined 6 hour and 3 hour student teaching courses including, EDUC 4392, EDUC 4394, EDUC 4692, EDUC 4693, EDUC 4694, EDUC 4992, EDUC 4993, and EDUC 4994."

**Admission to Clinical Teaching**

All teacher preparation programs offered by this University require appropriate professional laboratory experiences. All programs require nine semester hours of clinical teaching experiences. Students may register for clinical teaching during their senior year only after they have been granted admission in writing by the Clinical Experiences Office. Clinical teaching must be completed at Texas A&M University-Corpus Christi, unless the Director of Clinical Experiences has approved a cooperative agreement with another university and written documentation is on file in the Office of Field Experiences.

Online application for admission to clinical teaching must be made at http://te.tamucc.edu/. The deadline for submitting applications is March 1 for students seeking FALL placement; July 1 is the deadline for students seeking SPRING placement. Requirements that must be fulfilled before admission to clinical teaching can be granted include:

1. Admission to the Teacher Education Program.
2. Completion of a minimum of 100 semester hours of acceptable university work.
3. A minimum grade point average of 2.75 on all academic work attempted.
4. Completion of 80% of the required semester hours in general education including 9 semester hours of English and 3 semester hours of public speaking.
5. Completion of EDUC 3311 - School and Society, EDUC 4311 - Classroom Management, and EDUC 4605 - Planning, Teaching, Assessment and Technology, and any ECED, BIEM, SPED, READ, MATH, KINE courses with a grade of "C" or better.
6. Completion of 80% of the courses required in the student's teaching field(s), areas of specialization, or delivery system.
7. A minimum GPA of 2.75 on all academic work taken in the student's teaching field(s), area of specialization, or delivery system. Teaching certificate areas (i.e., History, English, Science and others) may require above the minimum grade point average of 2.75 and may not accept grades below "C". Students are to check the catalog section that pertains to the certificate area for required GPA's.

8. Completion at Texas A&M University-Corpus Christi of a minimum of 6 semester hours of required professional education courses at the student's level of certification, for transfer students only.

9. Completion of "Fall Experience" (beginning-of-the-year activities in the public schools) and submission of a written summary is required for ALL students seeking placement. In order to be scheduled for this, candidates should sign up in the Office of Field Experiences during the month of May PRIOR to the fall or spring semester they will student teach.

10. Concurrent enrollment in EDUC 4321, if required in your degree plan, for undergraduate or field-based students only.

11. Students must pass their content TExES test prior to clinical teaching. Clinical teaching is a Monday through Friday, all-day, all-semester assignment. The demands are equivalent to a full course load. It is strongly recommended that students consider this factor seriously before registering for additional courses concurrent with clinical teaching in addition to those mentioned above.

Program of Field Experiences

Students enrolled in degree programs that lead to teacher certification are required to complete a comprehensive program of structured laboratory experiences. These will range from classroom observations to extensive classroom involvement as the student progresses through his or her program. Courses that are designated as Field-Based will require students to spend a minimum of 51% of the course time in a school setting. Students should check with the instructor to determine the field experience requirements for specific courses.

Texas Examinations of Educator Standards (TExES)

In addition to successful completion of all courses, to be recommended for teacher certification, students must pass all appropriate TExES examinations required by the State Board for Educator Certification.

Certification programs must be completed or permission must be obtained from the program coordinator or designated person from the teaching field on the student's degree plan before permission will be granted to take certification examinations.
Recommendation for Teacher Certification

Teacher certification by the State of Texas is not automatically granted with the completion of an approved program of study. The student must first be recommended for certification by the COEHD. In order to be recommended a student must:

1. Have successfully completed the appropriate degree program.
2. Have successfully completed the appropriate approved certification program with an overall GPA of 2.75 or 2.75 on the last 60 hours of course work attempted.
3. Have completed the appropriate clinical teaching experience with a grade of "C" or better.
4. Have passed all appropriate TExES tests. In addition, students seeking certification in Bilingual Education must have passed the Bilingual Target Language Proficiency Test (BTLPT) and the Bilingual Supplemental Test. Submit an application on line for certification and an application fee to the Texas Education Agency (TEA).

Certification for Persons Holding Degrees

See "Graduate-Level Initial Teaching Certification Program" in the College of Education and Human Development section of the Graduate Catalog.

Undergraduate Courses

The College of Education and Human Development offers undergraduate courses in the following fields:

Bilingual/ESL/Multicultural (BIEM)
Early Childhood (ECED)
Health (HLTH)

Instructional Design and Educational Technology (IDET)
Kinesiology (KINE)
Military Science (MSCI)
Reading Education (READ)
Special Education (SPED)
Teacher Education (EDUC)

All course descriptions are located in course descriptions.
Curriculum, Instruction, and Learning Sciences

Bachelor of Science

Elementary Education, BS

A minimum of 120 semester hours is required for the BS degree. Degree requirements include University Core Curriculum, the elementary education major, and the professional development sequence. Certification in EC-6 Core Subjects, EC-6 Core Subjects-Bilingual, 4-8 Mathematics, EC-6 Core Subjects Early Childhood and STEM Focus or Reading, and EC-12 Special Education is available with the Bachelor of Science Degree.

Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>2. First Year Seminars (when applicable)*</td>
<td>(2)</td>
</tr>
<tr>
<td>3. Major Requirements &amp; Supporting Fields</td>
<td>53-57</td>
</tr>
<tr>
<td>4. Professional Development Requirement</td>
<td>21-25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120-128 (122-130)</strong></td>
</tr>
</tbody>
</table>

*First Year Seminars

First-Year Seminars or Electives

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

A. Core Curriculum Program Requirements

Students must complete the University's General Education requirements, which include the core curriculum. (See "General Education Requirement " in the "Undergraduate Programs " section of this catalog; see also "University Core Curriculum Programs.")

Students seeking the 4-8 Math Interdisciplinary Degree must take BIOL 1406 and CHEM
1411. Only 3 hours of BIOL 1406 will apply to the Core Curriculum Program. The one hour laboratory component will be counted in the major requirements.

B. Interdisciplinary Major Requirements (53-57 semester hours)

The Interdisciplinary major consists of an academic or delivery system specialization AND a combination of supporting fields.

1. Interdisciplinary major concentrations may be selected from one of the following areas:
   - EC-6 Core Subjects-Bilingual
   - EC-6 Early Childhood Delivery with STEM Focus
   - EC-6 Core Subjects with Reading Delivery
   - 4-8 Mathematics
   - EC-12 Special Education

2. The combination of supporting fields consists of a combination of three of the following five fields: English, Mathematics, Reading, Science, and Social Studies. A different combination of supporting fields is designated for each concentration. A minimum of 24 of the 51-54 semester hours must be in upper-division courses.

EC-6 Core Subjects-Bilingual (54 SCH)

Student Learning Outcomes

Students will:

- demonstrate a depth of knowledge of bilingual education;
- demonstrate a depth of speaking ability in Spanish;
- effectively apply the competencies of a bilingual education teacher in their clinical teaching experience.

Major Requirements

All courses in BIEM and READ must be completed with a grade of "C" or better.

- BIEM 4344 - The Bilingual Child, Culture, & the Social Studies Curriculum 3 sem. hrs.
- BIEM 4345 - Language Acquisition and Development 3 sem. hrs.
- BIEM 4349 - Linguistics for Bilingual Teachers 3 sem. hrs.
- BIEM 4356 - Content Area Studies in the Bilingual Curriculum 3 sem. hrs.
- BIEM 4360 - Foundations in Bilingualism 3 sem. hrs.
• READ 3310 - Principles and Practices of Early Reading Instruction 3 sem. hrs.
• READ 3320 - Principles and Practices of Reading Instruction 3 sem. hrs.
• READ 3351 - Diagnosis and Correction of Reading Problems 3 sem. hrs.
• SMTE 1350 - Fundamentals of Mathematics I*^ 3 sem. hrs.
• SMTE 1351 - Fundamentals of Mathematics II*^ 3 sem. hrs.
• SMTE 3315 - Foundational Approaches to the Physical Sciences 3 sem. hrs.
• SMTE 3316 - Foundational Approaches to the Life Sciences^ 3 sem. hrs.
• SMTE 3352 - Fundamentals of Mathematics III*^ 3 sem. hrs.
• EDUC 3311 - School and Society^ 3 sem. hrs.

Additional Requirements for Certification

• ECED 3324 - Child Development 3 sem. hrs.
• SPAN 2312 - Continuing Spanish 3 sem. hrs.
• SPED 4310 - Students with Exceptionalities* 3 sem. hrs.

EC-6 Core Subjects with Early Childhood Delivery with STEM Focus (57 SCH)

Student Learning Outcomes

Students will:

• provide well-designed instruction and assessment for students from a variety of backgrounds;
• develop classroom climates conducive to learning;
• apply in-depth knowledge of processes and practices associated with students' reading and literacy development;
• fulfill professional roles and responsibilities.

Major Requirements

All courses in ECED and READ must be completed with a grade of "C" or better.

• ECED 3324 - Child Development 3 sem. hrs.
• ECED 3380 - Developmentally Appropriate Practice in Early Childhood Education 3 sem. hrs.
• ECED 4330 - Health, Nutrition and Locomotor Concepts for the Young Child 3 sem. hrs.
• ECED 4340 - Communication and Aesthetics 3 sem. hrs.
• ECED 4345 - EC-6 Assessment and Evaluation 3 sem. hrs.
• ECED 4350 - EC-6 Social Studies Curriculum 3 sem. hrs.
• EDCI 4301 - STEM Mathematics 3 sem. hrs.
• EDCI 4302 - STEM Science EC-6 3 sem. hrs.
• ENGL 3360 - Current Approaches to Composition and Literature 3 sem. hrs.
• IDET 4300 - STEM Technology 3 sem. hrs.
• READ 3310 - Principles and Practices of Early Reading Instruction 3 sem. hrs.
• READ 3320 - Principles and Practices of Reading Instruction 3 sem. hrs.
• READ 3351 - Diagnosis and Correction of Reading Problems 3 sem. hrs.
• SMTE 1350 - Fundamentals of Mathematics I*^ 3 sem. hrs.
• SMTE 1351 - Fundamentals of Mathematics II*^ 3 sem. hrs.
• SMTE 3315 - Foundational Approaches to the Physical Sciences 3 sem. hrs.
• SMTE 3316 - Foundational Approaches to the Life Sciences^ 3 sem. hrs.
• SMTE 3352 - Fundamentals of Mathematics III*^ 3 sem. hrs.
• EDUC 3311 - School and Society^ 3 sem. hrs.

EC-6 Core Subjects with Reading Delivery (54 SCH)

Student Learning Outcomes

Students will:

• provide well-designed instruction and assessment for students from a variety of backgrounds;
• develop classroom climates conducive to learning;
• apply in-depth knowledge of processes and practices associated with students' reading and literacy development;
• fulfill professional roles and responsibilities.

Major Requirements

All courses in ECED and READ must be completed with a grade of "C" or better.

• READ 3310 - Principles and Practices of Early Reading Instruction 3 sem. hrs.
• READ 3320 - Principles and Practices of Reading Instruction 3 sem. hrs.
• READ 3351 - Diagnosis and Correction of Reading Problems 3 sem. hrs.
• READ 3352 - Content Area Reading for Elementary Students 3 sem. hrs.
• READ 3380 - Children's and Adolescents' Literature 3 sem. hrs.
• READ 4394 - Field Experiences in Reading 3 sem. hrs.
• SMTE 1350 - Fundamentals of Mathematics I*^ 3 sem. hrs.
• SMTE 1351 - Fundamentals of Mathematics II*^ 3 sem. hrs.
• SMTE 3315 - Foundational Approaches to the Physical Sciences 3 sem. hrs.
• SMTE 3316 - Foundational Approaches to the Life Sciences^ 3 sem. hrs.
• SMTE 3352 - Fundamentals of Mathematics III*^ 3 sem. hrs.
• ENGL 3340 - Grammar 3 sem. hrs.
- ENGL 3360 - Current Approaches to Composition and Literature 3 sem. hrs.
- EDUC 3311 - School and Society^ 3 sem. hrs.

Additional Requirements for Certification

- SPED 4345 - Behavioral Supports and Interventions for Students with Disabilities* 3 sem. hrs.
  OR
- SPED 4310 - Students with Exceptionalities* 3 sem. hrs.
- ECED 3324 - Child Development 3 sem. hrs.
- ECED 4345 - EC-6 Assessment and Evaluation 3 sem. hrs.
- ECED 4350 - EC-6 Social Studies Curriculum 3 sem. hrs.

4-8 Mathematics (53 SCH)

Student Learning Outcomes

Students will:

- establish a respectful educational environment for diverse middle level learners;
- demonstrate content knowledge by applying mathematics constructs;
- apply knowledge of curriculum standards for mathematics and their relationship to middle level learners within and across mathematical domains;
- engage middle level learners in developmentally appropriate mathematical activities and investigations;
- apply mathematical content and pedagogical knowledge to design lessons and units that facilitate student learning by incorporating a variety of strategies, including mathematics-specific instructional technologies;
- use formative and summative assessments to inform mathematics instruction.

Major Requirements

All major requirements must be completed with a grade of "C" or better.

- MATH 1316 - Trigonometry 3 sem. hrs. OR
- MATH 2312 - Precalculus 3 sem. hrs.
- MATH 2305 - Discrete Mathematics I 3 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs.
- MATH 3312 - College Geometry 3 sem. hrs.
- MATH 1442 - Statistics for Life*^ 4 sem. hrs.
- SMTE 1350 - Fundamentals of Mathematics I*^ 3 sem. hrs.
• SMTE 1351 - Fundamentals of Mathematics II*^ 3 sem. hrs.

• SMTE 3352 - Fundamentals of Mathematics III*^ 3 sem. hrs. OR
  EDCI 4301 - STEM Mathematics 3 sem. hrs.

• SMTE 4382 - Basic Mathematics From An Advanced Viewpoint 3 sem. hrs.
• READ 3320 - Principles and Practices of Reading Instruction 3 sem. hrs.
• READ 3352 - Content Area Reading for Elementary Students 3 sem. hrs.
• SMTE 3315 - Foundational Approaches to the Physical Sciences 3 sem. hrs.
• SMTE 3316 - Foundational Approaches to the Life Sciences^ 3 sem. hrs.
• SPED 4310 - Students with Exceptionalities* 3 sem. hrs.
• EDCI 3350 - Investigating Student Learning in Middle Level Mathematics (3) 3 sem. hrs.
• EDCI 4350 - Assessment in Middle Level Mathematics 3 sem. hrs.
• EDUC 3311 - School and Society^ 3 sem. hrs.

EC-12 Special Education (57 SCH)

The Special Education service delivery system in the BS program, prepares preservice special education teachers to meet the needs of students with disabilities and their families, with an emphasis on the provision of services in inclusive environments.

Student Learning Outcomes

Students will:

• demonstrate a depth of knowledge of understanding individuals with disabilities and evaluating their needs;
• demonstrate a depth of knowledge of fostering learning and development for individuals with disabilities;
• demonstrate a depth of knowledge of foundations of special education and professional roles and responsibilities of the special education teacher;
• effectively apply the competencies of a special education teacher in their clinical teaching experience.

Major Requirements

All courses in SPED and READ must be completed with a grade of "C" or better.

• SPED 4310 - Students with Exceptionalities* 3 sem. hrs.
• SPED 3325 - Strategic Instruction for Students with High-Incidence Disabilities 3 sem. hrs.
• SPED 3330 - Individualized Education Programs for Students with Disabilities 3 sem. hrs.
• SPED 3335 - Applied Learning Theory 3 sem. hrs.
• SPED 3340 - Individuals with Severe Disabilities^ 3 sem. hrs.
• SPED 4345 - Behavioral Supports and Interventions for Students with Disabilities* 3 sem. hrs.
• SPED 2397 - Special Education Field Experience 3 sem. hrs.
• READ 3320 - Principles and Practices of Reading Instruction 3 sem. hrs.
• READ 3351 - Diagnosis and Correction of Reading Problems 3 sem. hrs.

• READ 3352 - Content Area Reading for Elementary Students 3 sem. hrs. OR
• READ 3353 - Content Area Reading for Secondary Students^ 3 sem. hrs.

• SMTE 1350 - Fundamentals of Mathematics I*^ 3 sem. hrs.
• SMTE 1351 - Fundamentals of Mathematics II*^ 3 sem. hrs.
• SMTE 3315 - Foundational Approaches to the Physical Sciences 3 sem. hrs.
• SMTE 3316 - Foundational Approaches to the Life Sciences^ 3 sem. hrs.
• SMTE 3352 - Fundamentals of Mathematics III*^ 3 sem. hrs.
• EDUC 3311 - School and Society^ 3 sem. hrs.

Additional Requirements for Certification

• IDET 3310 - Technology Applications for Teachers^ 3 sem. hrs.
• READ 3310 - Principles and Practices of Early Reading Instruction 3 sem. hrs.
• READ 3380 - Children's and Adolescents' Literature 3 sem. hrs.

C. Professional Development Requirements (21-25 semester hours)

EC-6 Core Subjects with Early Childhood Delivery with STEM Focus (25 SCH)

• BIEM 4357 - Methods of Teaching English as a Second Language 3 sem. hrs.
• EDUC 4311 - Classroom Management 3 sem. hrs.
• EDUC 4605 - Planning, Teaching, Assessment and Technology 6 sem. hrs.
• IDET 3100 - Educational Technology for Preservice Teachers in Schools^ 1 sem. hrs.
• SPED 4310 - Students with Exceptionalities* 3 sem. hrs.
• EDUC 4995 - Clinical Teaching 9 sem. hrs.

EC-6 Core Subjects with a Reading Delivery System Specialization (25 SCH)

• BIEM 4357 - Methods of Teaching English as a Second Language 3 sem. hrs.
• EDUC 4311 - Classroom Management 3 sem. hrs.
- EDUC 4605 - Planning, Teaching, Assessment and Technology 6 sem. hrs.
- IDET 3100 - Educational Technology for Preservice Teachers in Schools^ 1 sem. hrs.
- EDUC 4321 - Instructional Design for Special Populations 3 sem. hrs.
- EDUC 4995 - Clinical Teaching 9 sem. hrs.

EC-6 Core Subjects-Bilingual (25 SCH)
- BIEM 4357 - Methods of Teaching English as a Second Language 3 sem. hrs.
- EDUC 4311 - Classroom Management 3 sem. hrs.
- EDUC 4321 - Instructional Design for Special Populations 3 sem. hrs.
- EDUC 4605 - Planning, Teaching, Assessment and Technology 6 sem. hrs.
- EDUC 4995 - Clinical Teaching 9 sem. hrs.
- IDET 3100 - Educational Technology for Preservice Teachers in Schools^ 1 sem. hrs.

EC-12 Special Education (21 SCH)
- EDUC 4311 - Classroom Management 3 sem. hrs.
- EDUC 4605 - Planning, Teaching, Assessment and Technology 6 sem. hrs.
- BIEM 4357 - Methods of Teaching English as a Second Language 3 sem. hrs.
- EDUC 4995 - Clinical Teaching 9 sem. hrs.

4-8 Mathematics (25 SCH)
- BIEM 4357 - Methods of Teaching English as a Second Language 3 sem. hrs.
- EDUC 4311 - Classroom Management 3 sem. hrs.
- EDUC 4321 - Instructional Design for Special Populations 3 sem. hrs.
- EDUC 4605 - Planning, Teaching, Assessment and Technology 6 sem. hrs.
- EDUC 4995 - Clinical Teaching 9 sem. hrs.
- IDET 3100 - Educational Technology for Preservice Teachers in Schools^ 1 sem. hrs.

D. Non-Certification Track to the BS Degree

The degree will be a BS Degree without certification. Students will follow the same degree plan as one of the five emphasis above (EC-6 Reading, EC-6 Bilingual, EC-6 Early childhood with STEM, EC-12 Special Education or 4-8 Mathematics) except for the last semester, during which they will choose 9 SCH of faculty advisor approved elective courses that will replace the clinical teaching component of the degree.
Teacher Certificate

Elementary Teacher Certification

Students who complete the requirements for the Bachelor of Science in Interdisciplinary Studies degree and who successfully pass the appropriate TExES tests will fulfill simultaneously all requirements for either EC- 6 Core Subjects with a Reading Specialization, EC- 6 Core Subjects-Bilingual, 4-8 Mathematics or EC-12 Special Education teacher certification.

Minor

Education Minor

The College of Education minor is designed to provide foundational and experiential knowledge of the pedagogy and professional responsibilities of teaching in grades 4-8 and 7-12. There are career avenues beyond the public or private PK-12 education setting for which integrated coursework in Education offers excellent preparation and opportunity. For example, College of Business graduates often require teaching and communication skills in the private and non-profit sectors of management and training. Others graduating with degrees in content areas like Mathematics, Chemistry, Physics, English or Sociology often seek graduate degrees in Education so that they may eventually become instructors in community colleges and professors at the university or college level. Persons who select the minor must declare the minor with a College of Education and Human Development academic advisor.

Undergraduates seeking a minor in Teacher Education may not qualify for the ASCENT program.

The minor will consist of 18 hours in education. A minimum grade point average of 2.0 ("C") on a 4-point scale is required in all courses for successful completion of the minor. The minor will consist of the following course work:

Minor Course Requirements

- EDUC 3311 - School and Society^ 3 sem. hrs.
- READ 3353 - Content Area Reading for Secondary Students^ 3 sem. hrs.
- IDET 3310 - Technology Applications for Teachers^ 3 sem. hrs.
- EDUC 4311 - Classroom Management 3 sem. hrs.
- EDUC 4605 - Planning, Teaching, Assessment and Technology 6 sem. hrs.
Students seeking a Minor in Education must take EDUC 4605 during the Fall or Spring semester only.

***Prerequisites required for the EDUC 4605 course include Criminal Background check and TB Screening; and a minimum grade point average of 2.75 on all academic work attempted in the student's teaching field(s), area of specialization or delivery system or a 2.75 on the last 60 hours attempted. Please note that many teaching certificate areas (i.e. History, English, Science and others) may require above the minimum GPA of 2.75 and may not accept grades below "C". Students are to check the undergraduate catalog section that pertains to the certificate area for required GPA's.

Kinesiology and Military Science

Bachelor of Science

Kinesiology, BS

Students seeking a BS in Kinesiology can specialize in EC-12 Physical Education Certification, Exercise Science, Pre-Allied Health, or Sport Management. All majors must take a minimum of 42 SCH in University Core Courses and a minimum of 23 SCH in Kinesiology Major Requirements.

The Bachelor of Science Degree with a major in Kinesiology coursework includes: 1) General Education Core Requirements, 2) Kinesiology Major Requirements, 3) Special Emphasis Requirements, and 4) Special Foundations Requirements. Beyond the General Education Core Requirements, students majoring in kinesiology must complete all courses in sections 2-4 above with a grade of "C" or better. Transfer credit hours into the kinesiology degree plans must adhere to the same grade standard.

Degree Requirements for Kinesiology, BS (121-126 SCH)

University Core Curriculum and other General Education Requirements (42 SCH)

See "Core Curriculum Program" in this catalog. It is recommended that Kinesiology students take the following courses when fulfilling the Life & Physical Sciences, Math, and Social Sciences requirements of the University Core Curriculum depending on specialization. Please consult your faculty mentor or academic advisor for specific details. These hours are listed in the Foundation Courses of the Degree Requirements.

If these courses are not taken in the University Core, they will still need to be completed, if required in the chosen specialization. These hours are listed in the Foundation Courses of the Degree Requirements.

- BIOL 2401 - Anatomy and Physiology I 4 sem. hrs.
• BIOL 2402 - Anatomy and Physiology II 4 sem. hrs.
• MATH 1442 - Statistics for Life* 4 sem. hrs.
• PSYC 2301 - General Psychology* 3 sem. hrs.

First-Year Seminars

Full-time, first-year students are required to take the following courses:

• UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
• UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Kinesiology Major Requirements (23 SCH)

• KINE 2313 - Foundations of Kinesiology 3 sem. hrs.
• KINE 3312 - Physiology of Exercise 3 sem. hrs.
• KINE 3112 - Physiology of Exercise Lab 1 sem. hrs.
• KINE 3337 - Sport and Exercise Psychology 3 sem. hrs.
• KINE 4311 - Measurement and Evaluation 3 sem. hrs.
• KINE 4325 - Kinetic Anatomy 3 sem. hrs.
• KINE 4327 - Biomechanics 3 sem. hrs.
• KINE 4127 - Biomechanics Lab 1 sem. hrs.
• KINE 4339 - Special Populations in Kinesiology 3 sem. hrs.

EC-12 Physical Education Certification (126 SCH)

Students seeking a certificate to teach EC-12 Physical Education must complete the Bachelor of Science Degree in Kinesiology and complete the College of Education and Human Development EC-12 Teacher Certification requirements. Information for students holding a degree and seeking certification may be obtained in the Certification Office.

Student Learning Outcomes

Students will:

• create safe, equitable, developmentally-appropriate and enjoyable movement experiences which benefit the participant and encourage life-long participation in movement;
• model a healthy, physically active lifestyle and model a life-long learner seeking opportunities to grow professionally; and
• serve the community as a knowledgeable practitioner of the kinesiology profession who meets the needs of all students in a diverse society.
Degree Requirements

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>Sem. Hrs.</th>
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</thead>
<tbody>
<tr>
<td>1. Core Curriculum Program</td>
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<tr>
<td>2. First-Year Seminars (when applicable)*</td>
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<tr>
<td>3. Kinesiology Major Requirements</td>
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<td>4. Certification Requirements</td>
<td>4. 19</td>
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<td>5. Physical Education Certification Special Emphasis</td>
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<tr>
<td>6. Physical Education Certification Special Foundations</td>
<td>6. 27</td>
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<tr>
<td><strong>Total 126 (128)</strong></td>
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</tbody>
</table>

* Transfer students with 24 or more hours are exempt from First-Year Seminar.

EC-12 Physical Education Certification Requirements (19 SCH)

- KINE 1110 - Individual/Dual/Lifetime Sports 1 sem. hrs.
- KINE 2317 - Re-inventing Games 3 sem. hrs.
- KINE 2325 - Physiological Aspects of Kinesiology 3 sem. hrs.
- KINE 2375 - Nutrition for Human Performance 3 sem. hrs.
- KINE 3338 - Motor Development/Motor Learning 3 sem. hrs.
- KINE 3339 - Elementary Physical Education Programs^ 3 sem. hrs.
- KINE 3341 - Secondary Physical Education Programs^ 3 sem. hrs.

EC-12 Physical Education Certification Special Emphasis (Five courses in a second emphasis area) minimum 15 semester hours

Students completing the EC-12 Physical Education Certification must complete five courses (a minimum of 15 semester hours) in a special emphasis area (second emphasis area) approved by their faculty mentor. Students must pass these courses with a grade of "C" or better. It is strongly recommended that students take at least one additional course beyond the required five in this discipline to better prepare for the TExES certification test taken after state issuance of initial teaching certificate in EC-12 Physical Education.

EC-12 Physical Education Certification Special Foundations (27 semester hours)

(See "College of Education and Human Development Certification Requirements" in this catalog for the EDUC courses required for teacher certification). Prior to being admitted into the Field-based block course, students pursuing EC-12 Certification must complete KINE 3339 - Elementary Physical Education Programs^ and KINE 3341 - Secondary Physical Education Programs^ . Students must have a minimum grade point average of
2.75 on all academic work taken in Kinesiology prior to being admitted into the Teacher Education Program.

Total: 126

Exercise Science Specialization (121 semester hours)

Students seeking a career in exercise science should complete the requirements for the Exercise Science Specialization of the kinesiology major. This specialization serves as an excellent program for students seeking careers as fitness trainers, exercise specialists, and strength and conditioning coaches. The Exercise Science Specialization is also an exceptional preparatory program for students pursuing graduate study in Exercise Science (e.g. exercise physiology, kinesiology, biomechanics, measurement/evaluation). Graduates with a BS in Kinesiology with an Exercise Science Specialization will demonstrate knowledge of structural kinesiology, exercise physiology, biomechanics, sport psychology, and measurement and evaluation.

Student Learning Outcomes

Students will:

- apply the principles of exercise testing and prescription to safely and effectively assess fitness status and appropriately prescribe exercise training programs;
- apply the principles of biomechanics to assess the quantity and quality of human motion;
- apply the principles of sport psychology to enhance human performance;
- apply the principles of measurement and evaluation to collect, analyze, and interpret data.

Degree Requirements

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<td>4. Exercise Science Special Emphasis Requirements</td>
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<td>5. Exercise Science Special Foundations</td>
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<td><strong>Total 121 (123)</strong></td>
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</tbody>
</table>

*Transfer students with 24 or more hours are exempt from First-Year Seminar.
Exercise Science Special Emphasis Requirements (31 semester hours)

- KINE 1106 - Weight Training 1 sem. hrs.
- KINE 2326 - Essentials of Professional Fitness Training 3 sem. hrs.
- KINE 2375 - Nutrition for Human Performance 3 sem. hrs.
- KINE 3318 - Prevention and Care of Athletic Injuries 3 sem. hrs.
- KINE 3335 - Legal Issues in Sport 3 sem. hrs.
- KINE 3338 - Motor Development/Motor Learning 3 sem. hrs.
- KINE 4340 - Exercise Testing and Prescription 3 sem. hrs.
- KINE 4693 - Professional Field Experience I 6 sem. hrs.
- KINE 4694 - Professional Field Experience II 6 sem. hrs.

Note:

To enroll in the Professional Field Experiences students must have departmental approval as well as an overall and Kinesiology GPA of 2.75.

Exercise Science Special Foundations (25 semester hours)

Students must pass these courses with a grade of "C" or better.

- CHEM 1411 - General Chemistry I* 4 sem. hrs.
- KINE 2314 - Sport Management 3 sem. hrs.
- KINE 3320 - Introduction to Therapeutic Interventions 3 sem. hrs.
- KINE 3330 - Promotion of Sport 3 sem. hrs.
- KINE 4308 - Facilities Design and Planning 3 sem. hrs.
- KINE 3366 - Managing Leisure Services 3 sem. hrs.
- KINE 4309 - Finance Management in Sport 3 sem. hrs.
- KINE 4329 - Essentials of Strength and Conditioning 3 sem. hrs.

Total: 121

Pre-Allied Health Professional Specialization (122 semester hours)

Students seeking a career in allied health fields (e.g. Cardiac Rehabilitation, Dentistry, Medicine, Occupational Therapy, and Physical Therapy) should complete the requirements of the Pre-Allied Health Professional Specialization of the kinesiology major. This specialization serves as an excellent preparatory program for students pursuing graduate study in these fields as well as post baccalaureate study in exercise science. Graduates with a BS in Kinesiology with a Pre-Allied Health Professional Specialization will demonstrate knowledge of basic kinesiology theory and principles as they relate to the fields in allied health.
Student Learning Outcomes:

Students will:

- apply the principles of exercise physiology to prescribe safe and effective strength and conditioning programs;
- apply the principles of biomechanics to assess the quantity and quality of human motion;
- apply the principles of sport psychology to enhance human performance;
- apply the principles of measurement and evaluation to collect, analyze, and interpret data.

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<tr>
<td><strong>Total</strong></td>
<td>122 (124)</td>
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</table>

*Transfer students with 24 or more hours are exempt from First-Year Seminar.

Pre-Allied Health Professional Special Emphasis Requirements (33 semester hours)

- KINE 2326 - Essentials of Professional Fitness Training 3 sem. hrs.
- KINE 2375 - Nutrition for Human Performance 3 sem. hrs.
- KINE 3318 - Prevention and Care of Athletic Injuries 3 sem. hrs.
- KINE 3320 - Introduction to Therapeutic Interventions 3 sem. hrs.
- KINE 3335 - Legal Issues in Sport 3 sem. hrs.
- KINE 3338 - Motor Development/Motor Learning 3 sem. hrs.
- KINE 4340 - Exercise Testing and Prescription^ 3 sem. hrs.
- KINE 4693 - Professional Field Experience I 6 sem. hrs.
- KINE 4694 - Professional Field Experience II 6 sem. hrs.

Note:

To enroll in the Professional Field Experiences students must have departmental approval as well as an overall and Kinesiology GPA of 2.75.
Although a 2.75 GPA is the minimum standard for the Professional Field Experiences I and II, students should take note that most allied health graduate programs are extremely competitive. A 3.5 or higher GPA is mostly needed to position themselves for acceptance. This is especially true for Physical Therapy graduate programs that a 3.7 or higher GPA is essential.

Pre-Allied Health Professional Special Foundations (minimum of 24 semester hours)

Students completing the Pre-Allied Health Professional Specialization must complete a minimum of 24 semester hours of advisor-approved courses that support the graduate degree the students will pursue. Students must pass these courses with a grade of "C" or better.

Total: 122

Sport Management Specialization (122 semester hours)

Students seeking a career in sport management should complete the requirements of the Sport Management Specialization of the kinesiology major. Careers in sport management include positions with professional teams or leagues, college athletic departments, conference offices, and amateur sports associations. Sport management graduates can also serve the sports industry through club and facility management, marketing and event promotion, and sports equipment sales and distribution. This program also prepares students for careers in recreation such as intramural directors, outdoor education teachers, camp leaders, ropes course managers, and other administrative positions in the recreational sports field. Graduates with a BS in Kinesiology with a Sport Management Specialization will be able to demonstrate theoretical and practical knowledge of sport management concepts.

Student Learning Outcomes

Students will:

- demonstrate general sport management principles;
- ethically apply legal, marketing, and finance issues to the sport industry;
- incorporate interdisciplinary knowledge to sport management concepts.

Degree Requirements

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3. Major Requirements
4. Additional Major Requirements
5. Special Emphasis Requirements
6. Special Foundations

Total 122 (124)

*Transfer students with 24 or more hours are exempt from First-Year Seminar

Sport Management Additional Major Requirements (15 SCH)

- KINE 2314 - Sport Management 3 sem. hrs.
- KINE 2325 - Physiological Aspects of Kinesiology 3 sem. hrs.
- KINE 2375 - Nutrition for Human Performance 3 sem. hrs.
- KINE 3335 - Legal Issues in Sport 3 sem. hrs.
- KINE 4309 - Finance Management in Sport 3 sem. hrs.

Sport Management Special Emphasis (24 SCH)

- KINE 2357 - Sport Officiating 3 sem. hrs. OR
- KINE 3301 - Outdoor Adventure Programs 3 sem. hrs.

- KINE 3330 - Promotion of Sport 3 sem. hrs.
- KINE 3366 - Managing Leisure Services 3 sem. hrs.
- KINE 4308 - Facilities Design and Planning 3 sem. hrs.
- KINE 4693 - Professional Field Experience I 6 sem. hrs.
- KINE 4694 - Professional Field Experience II 6 sem. hrs.

Note:

To enroll in the Professional Field Experiences students must have departmental approval as well as an overall and Kinesiology GPA of 2.75.

Sport Management Special Foundations (18 semester hours)

Students completing the Sport Management Specialization must complete a minimum of 18 semester hours of approved business and/or management-related courses. Students must pass these courses with a grade of "C" or better.

Students may choose to acquire a minor in the following: Business Administration, Marketing, Communications, or Public Relations, in lieu of the 18 required hours of
business-related courses. Students should look in the College of Business section of the catalog for the specific courses needed for the minor.

Total: 122

Bachelor of Science in Athletic Training

Athletic Training, BS

The Texas A&M University-Corpus Christi Athletic Training Program is in an accreditation transition process. Please see the website for information regarding the Athletic Training Program.

Minor

Kinesiology Minor

The department allows minors in the 3 specializations (EC-12 Physical Education Certification, Exercise Science, and Sport Management).

EC-12 PE Certification Minor (18 semester hours)

The minor is designed to serve education students that have or are pursuing a major in another teaching discipline and aspire to achieve an additional certification in Physical Education after issuance of initial teaching certificate. However, non-teaching majors who are interested in supplementing their major area of study with an added knowledge of physical education may also pursue this minor. A minimum of 12 hours must be taken at Texas A&M University-Corpus Christi. For additional information, contact an academic advisor in the College of Education and Human Development.

- KINE 2317 - Re-inventing Games 3 sem. hrs.
- KINE 2375 - Nutrition for Human Performance 3 sem. hrs.
- KINE 3338 - Motor Development/Motor Learning 3 sem. hrs.
- KINE 3339 - Elementary Physical Education Programs^ 3 sem. hrs.
- KINE 3341 - Secondary Physical Education Programs^ 3 sem. hrs.
- KINE 4339 - Special Populations in Kinesiology 3 sem. hrs.

Exercise Science Minor (20 semester hours)

The minor is designed to serve students who are interested in supplementing their major area of study with an added knowledge of exercise science. A minimum of 12 hours must
be taken at Texas A&M University-Corpus Christi. For additional information, contact an academic advisor in the College of Education and Human Development.

- KINE 2375 - Nutrition for Human Performance 3 sem. hrs.
- KINE 3337 - Sport and Exercise Psychology 3 sem. hrs.
- KINE 4325 - Kinetic Anatomy 3 sem. hrs.
- KINE 4327 - Biomechanics 3 sem. hrs.
- KINE 4127 - Biomechanics Lab 1 sem. hrs.
- KINE 4311 - Measurement and Evaluation 3 sem. hrs.
- KINE 3312 - Physiology of Exercise 3 sem. hrs.
- KINE 3112 - Physiology of Exercise Lab 1 sem. hrs.

Sport Management Minor (18 semester hours)

The minor is designed to serve students who are interested in supplementing their major area of study with an added knowledge of sport management. A minimum of 12 hours must be taken at Texas A&M University-Corpus Christi. For additional information, contact an academic advisor in the College of Education and Human Development.

- KINE 2314 - Sport Management 3 sem. hrs.
- KINE 2357 - Sport Officiating 3 sem. hrs.
  OR
- KINE 3301 - Outdoor Adventure Programs 3 sem. hrs.
- KINE 3330 - Promotion of Sport 3 sem. hrs.
- KINE 3335 - Legal Issues in Sport 3 sem. hrs.
- KINE 3366 - Managing Leisure Services 3 sem. hrs.
- KINE 4308 - Facilities Design and Planning 3 sem. hrs.

Military Science

A four-year ROTC program includes instruction for freshman and sophomore students as well as advanced students. As stated in the introduction of the College of Education and Human Development Handbook, a minor in Military Science is offered, giving the student academic credit for the leadership, critical thinking and military skills training received. At least 19 credit hours are required to receive credit for a minor.

Basic Military Science (6 semester hours)

- MSCI 1170 - Introduction to the Army 1 sem. hrs.
- MSCI 1171 - Foundations of Agile and Adaptive Leadership 1 sem. hrs.
- MSCI 2270 - Leadership and Decision Making 2 sem. hrs.
• MSCI 2271 - Army Doctrine and Team Development 2 sem. hrs.

The Advanced Military Science Program (19 semester hours)

The Advanced Military Science Program at Texas A&M University-Corpus Christi allows qualified students to earn commissions as Second Lieutenants in the active Army, the Army Reserve, or the National Guard.

Entry into the program is restricted to students who have demonstrated scholastic ability, excellent character, and leadership potential. Qualification is based on successful accomplishment of any one of the following:

1. Honorable military service.
2. Completion of the U.S. Army Cadet Command Camp (a 4 week summer compression program).
3. Completion of the first two years of the ROTC four-year program at another institution.

The two-year curriculum is centered on developing leadership and management skills. Training exercises aimed at increasing the students' confidence are practiced throughout the program.

Graduates of this program are appointed in entry management positions in the Army depending upon their preferences, academic majors, and demonstrated leadership.

• MSCI 3403 - Training Management and the Warfighting Functions 4 sem. hrs.
• MSCI 3404 - Applied Leadership in Small Unit Operations 4 sem. hrs.
• MSCI 4403 - Adaptive Leadership 4 sem. hrs.
• MSCI 4404 - Company Grade Leadership 4 sem. hrs.
• HIST 4335 - The Military and United States History 3 sem. hrs.

OR
• MSCI 3301 - American Military History 3 sem. hrs.

Military Science Minor

Requirements (19 hours)

• MSCI 3403 - Training Management and the Warfighting Functions 4 sem. hrs.
• MSCI 3103 - Adaptive Team Leadership Lab 1 sem. hrs.
• MSCI 3404 - Applied Leadership in Small Unit Operations 4 sem. hrs.
• MSCI 3104 - Applied Team Leadership Lab 1 sem. hrs.
• MSCI 4403 - Adaptive Leadership 4 sem. hrs.
• MSCI 4103 - Adaptive Leadership Lab 1 sem. hrs.
- MSCI 4404 - Company Grade Leadership 4 sem. hrs.
- MSCI 4104 - Leadership in a Complex World Lab 1 sem. hrs.
- HIST 4335 - The Military and United States History 3 sem. hrs.

**College of Liberal Arts**

**College of Liberal Arts**

### Degree Programs
- Criminal Justice, BS
- English, BA
- History, BA
- Philosophy, BA
- Political Science, BA
- Psychology, BA
- Sociology, BA
- Spanish, BA

### School of Arts, Media & Communication
- Art, BA
- Art, BFA
- Communication Studies, BA
- Graphic Design, BA
- Media Arts, BA
- Music, BA and BM
- Theatre, BA

### Minors
- Creative Writing Minor
- Criminal Justice Minor
- Literary Studies Minor
- History Minor
- Latin American Studies Minor
- Mexican American Studies Minor
- Philosophy Minor
- Political Science Minor
- Pre-Law Minor
- Psychology Minor
- Social Work Minor
- Sociology Minor
- Spanish Minor
- Technical and Professional Writing Minor
- Women, Gender, and Sexuality Studies Minor

### Teacher Certifications
- Major in English, BA with Secondary Teacher Certification in English Language Arts (Grades 7-12)
- Major in English, BA with Teacher Certification in English Language Arts (Grades 4-8)
- History Teacher Certifications
- Spanish Teaching Certification EC-12

### School of Arts, Media & Communication
- Art, BFA with Teacher Certification
- Music, BM with EC-12 Teacher Certification
- Speech Communication Teacher Certification
- Theatre Arts Teacher Certification

### Certificates
The College of Liberal Arts offers undergraduate and graduate study in the humanities, the social sciences, and the visual and performing arts. The College strives to prepare students for productive lives in a diverse multicultural world by developing intellectual and creative, communication, and critical thinking skills. It provides majors and minors in specialized subjects in the arts, humanities, and social sciences. Teaching provides advanced knowledge and skills in a setting that emphasizes interaction among students and faculty. The College seeks to develop habits of learning and a commitment to lifelong inquiry and intellectual growth.

**College of Liberal Arts:**

- Our college values learning that results from purposeful relationships within vibrant and dynamic communities.
- Our college values learning that affects the whole individual through all aspects of our humanity (from the emotive to the rational).
- Our college values learning that produces responsible citizens who engage in the communities around them.
- Our college values learning that engages in research and produces scholarship which extends knowledge and, through this, our regional, national, and global reputations.

**School of Arts, Media, and Communication (SAMC):**

The mission of the School of Arts, Media & Communication is to develop and promote collaboration, innovation, and creation among students and faculty in visual arts, music, theatre, dance, media, and communication. SAMC students engage in experiential learning, develop leadership, teamwork, and organizational skills, and apply 21st century
technology in service of expressing and understanding human experience. SAMC offers cultural enrichment and collaborative opportunities to all university students and members of the South Texas community. To support this mission, the School of Arts, Media & Communication subscribes to the highest academic, artistic, and ethical standards.

Pre-Law

Pre-law students should consult with a pre-law advisor about the proper selection of a major and of elective courses. Students may choose to minor in pre-law, but it is not a requirement to obtain pre-law advising. Advising includes providing information about law schools, admission requirements, and the Law School Admissions Test (LSAT).

Specialized Accreditation and Approval

The Texas A&M University-Corpus Christi music program is an accredited institutional member of the National Association of Schools of Music.

Baccalaureate Degree Requirements

Total Hours

A minimum of 120 semester hours of credit is required for the baccalaureate degree. Some curricula or combinations of fields require more. No remedial coursework may apply toward the degree.

Upper-Division Hours

A minimum of 45 semester hours of upper-division credit (junior- and senior-level course hours) is required for the baccalaureate degree.

Major-Study Requirements

A student must attain a minimum of 30 semester hours in the major field of study, not including any coursework taken as part of the Core Curriculum Program. At least 18 of these 30 hours must be upper-division (numbered 3000 or above) courses. Some curricula or combinations of fields require more. Specific course and major-study hour requirements for each discipline are given in the discipline course listing section of this
Minor-Study Requirements

To attain a minor in the College of Liberal Arts, a student must complete the program designed for that minor. Each minor consists of a minimum of 18 semester hours, at least 12 semester hours of which must be at the upper-division level. Some specific fields may require more. Only 6 semester hours that count towards a major may be applied to a minor. At least 9 semester hours in the minor must be taken in residence at A&M-Corpus Christi. The student must have an overall GPA of 2.0 in the minor field. Specific course and major-study hour requirements for each discipline are given in the discipline course listing section of this catalog. Please consult that section for specific requirements that must be met for each disciplinary minor. Requirements for interdisciplinary minors are listed in this section of the catalog.

Course Requirements

Students are expected to meet all course requirements indicated in the course syllabus.

Residence Requirement

The term "residence" is here defined as "coursework completed at the degree granting institution." To be granted a baccalaureate degree from A&M-Corpus Christi, a student must successfully complete at least 30 semester hours of upper-division coursework from this university. A minimum of 12 hours of these 30 must be in the major. Hours earned by credit by examination may not be used to fulfill the residence requirement. Hours earned through credit by examination at another institution will likewise not affect the residence requirement calculation.

Grade-Point Average

A minimum grade-point average of 2.0 ("C") on a 4-point scale in all work taken at this University is required for graduation. Additionally, a minimum grade-point average of 2.0 ("C") is required in all courses taken in the student's declared major field of study, and in all courses taken in any declared minor field of study for conferral of degree. Individual disciplinary fields, however, may set higher standards than the College minimum for their majors and minors.

Activity Courses
A maximum of 4 semester hours of Kinesiology activity coursework may be included as elective credit in the BA, BM, BFA and BS degree programs.

**General Education Requirement**

Students must meet the University's General Education requirements, which include the 42 hour core curriculum (see sections entitled "Undergraduate Programs" and "Core Curriculum Program") and First-Year Seminars.

**College Language Requirement**

All students majoring in degree programs offered by this college, other than the BAS, the BFA in Art, and the BM in Music, are required to take 6 college-level hours of a second language at their proficiency level determined by an assessment test, if available at the College of Liberal Arts, or obtain credit by any of the alternative means described below. Language means a language in the traditional sense; i.e., a language with a culture, such as Spanish or French. American Sign Language is accepted. Language does not include artificial or computer languages.

One may satisfy this requirement in one of two ways:

1. earning a CLEP, AP, or ACTFL test score equivalent to one year of language study at A&M-Corpus Christi;
2. successfully completing two semesters of a single foreign language at the University.

If students decide to meet this requirement by taking two semesters in Spanish at this university, an assessment test must be taken prior to registering in order to enroll in the appropriate language course. Information about the Spanish Placement Test can be obtained from the College of Liberal Arts or by visiting its web site.

All ARAB, CHIN, FREN, GERM, and SPAN courses will meet this requirement.

Foreign students who have successfully taken the Test of English as a Foreign Language (TOEFL) may elect to choose English as their second language. English is considered to be the first language for all other students.

**Degree Plan**

The degree plan is the formal statement of requirements that must be completed before a degree will be granted. When the student is prepared to declare a major program of study within a particular discipline, he or she should prepare a formal degree plan. It is
recommended that the student have decided on a major program of study and prepare a
degree plan no later than the second semester of the sophomore year. If the student is
transferring into the University at a point after the second semester of the sophomore
year, it is recommended that a degree plan be prepared during the student's first semester
of residence.

Degree plans are prepared in the CLA Academic Advising Center. The University uses
an online Degree Audit system. Any amendment must be approved by the Department
Chair and the Office of the Dean. All courses and requirements specified in the final
degree plan audit must be completed before a degree will be granted.

Interdisciplinary Minors

In order to fulfill the general objectives of Liberal Arts, the College offers a number of
interdisciplinary minors. Minors require a minimum of 18 semester hours beyond the
Core, a minimum of 12 semester hours at the upper-division level, and a minimum of 9
semester hours in residence. See alphabetized program listing for descriptions of the
following interdisciplinary minors:

- Digital Journalism
- Public Relations
- Latin American Studies
- Social Work
- Mexican American Studies
- Technical and Professional Writing
- Pre-Law
- Women, Gender, and Sexuality Studies

For a description of the Minor in Geography, please see the College of Science and
Engineering section of this catalog.

Teacher Certification Programs

Students seeking certification in secondary fields or in all levels in art, music, Spanish or
technology must major in an approved teaching field and complete all major study and related
requirements for a baccalaureate degree in that field. Students must also meet teacher
certification requirements as stipulated by the College of Education and Human
Development. Students are urged to consult the Certification Office of the College of
Education and Human Development for complete and current information about teacher
certification requirements.

Major study programs in the College of Liberal Arts offering teacher certification are:
Art
Communication
English
History
Music
Spanish
Theatre

Grades EC-12
Grades 7-12
Grades 7-12
Grades 7-12
Grades EC-12
Grades EC-12
Grades EC-12

Major study and course requirements for teacher certification are detailed in the discipline course listing sections of this catalog. For more information regarding teacher certification, please consult the College of Education and Human Development section of this catalog.

In addition to the academic specializations discussed above, teacher certification programs require the following in general education and professional development:

- Core Curriculum Program
- First-Year Seminar (if required)
- Professional Development Courses

Please see the Certification Office in the College of Education and Human Development for Professional Development courses needed for certifications.

**Grade Point Average**

A minimum grade point average of 2.75 in all academic work or last 60 hours of 2.75 attempted and no grade below "C" in education courses within the professional education block of courses is required. (See College of Education and Human Development, "Admission to Teacher Education" and "Admission to Student Teaching" for other requirements.) Specific disciplines may require a higher GPA in the field of study than a
2.75. Please refer to the specific certification discipline for GPA requirement in the subject of field.

Certification Examination

Upon satisfactory completion of all subject field and professional development courses, a student may register for the subject field certification examination, called TExES (Texas Examinations of Educator Standards). A student wishing to take the TExES prior to program completion must satisfy the following:

1. Make pre-specified acceptable scores on TExES practice tests, or departmental equivalent, and participate in practice test review and analysis session.
2. Provide official permit with signature of Program Coordinator or designated person for each teaching field on the student's certification plan.

Alteration of a Certification Plan

Any amendment to a degree plan originally filed must be approved by the student's academic advisor, the Department Chair, and the Certification Officer of the College of Education and Human Development for the degree to be granted.

Special Courses

Cross-Listed Courses

Some courses may be cross-listed by two or more disciplines. Such courses may be counted as part of the required hours for a particular major by registration for the appropriate course prefix. Cross-listed courses may not be repeated under another prefix for additional credit.

Topics Courses (1-3 sem. hrs.)

Undergraduate topics courses are offered in most areas of study in the College under the 4390 number. The subject of study varies and is announced in the Semester Schedule. These courses may be repeated for credit when topics vary.

Individual Study Courses

DIRECTED INDIVIDUAL STUDY (DIS) 4396 1-3 sem. hrs.
Directed Individual Study is a carefully planned special study on an academic topic not offered as part of the regular undergraduate curriculum. DIS is carried out as a tutorial under the direction of, and evaluated by, a regular member of the faculty of the College of Liberal Arts. Enrollment is restricted to advanced students who have demonstrated both academic ability and the capacity for independent work. Enrollment is by application only, and must be approved by the instructor and Department Chair in advance of registration. Completed applications must be received in the Dean's Office by the last class day of the semester preceding intended enrollment. Prerequisites: 1) At least 6 semester hours of classroom coursework in the field at Texas A&M University-Corpus Christi. 2) A minimum GPA of 3.0 on all work in the field at Texas A&M University-Corpus Christi. 3) At least one previous classroom course with the supervising instructor. A maximum of 6 semester hours of 4396 credit may be counted towards the baccalaureate degree.

APPLIED EXPERIENCE 4398. 3 sem. hrs.

Applied Experience is a practical work experience related to the student's major area of study and career goals. It is intended to provide an opportunity for a student to gain first-hand experience in an unfamiliar field. Consequently, Applied Experience credit may not be granted for a student's regular work assignment or for previous work experience. Registration is by application. The application must include a clearly written description of the duties and responsibilities involved in the Applied Experience project, and be signed by the student, the on-site supervisor, and the faculty supervisor. Completed applications must be received in the Dean's Office by the last class day of the semester preceding intended registration. This course is graded "credit" or "no credit." No more than three semester hours of Applied Experience credit may be counted toward the baccalaureate degree. Undergraduate Applied Experience course will include no less than one hundred hours and no more than 150 hours of work experience per semester.

WORKSHOP COURSES (1-6 sem. hrs.)

Undergraduate workshop courses are offered in many areas of study in the College ending in a 0099 series number. The subjects vary and are announced in the semester schedule. These courses may be repeated when topics vary.

Undergraduate Courses

All course descriptions are located in course descriptions.

Anthropology
Anthropology courses are offered for students in all fields of study. Anthropology courses may be counted as electives for the sociology major in consultation with a faculty advisor. These courses are intended for those without background in the discipline but are appropriate as an introduction for those intending to pursue the field elsewhere.

Course offerings can be viewed here.

Art & Design

Bachelor of Arts

Art, BA

The Bachelor of Arts degree with major study in art is a general program in art. The degree requires a minimum of 51 semester hours of art coursework. Course selections include two- and three-dimensional art, art history, design, and art electives.

The College of Liberal Arts also requires at least 6 semester hours of a second language for the Bachelor of Arts degree in Art.

The purposes of the art curriculum are:

1. To provide a general program that allows students access to a variety of art media, studio techniques, and instruction;
2. To provide students with opportunities to study past and present forms of art and to understand the function of art in society;
3. To provide courses that will help expand the knowledge and interest of non-majors in the area of art; and
4. To contribute to the cultural life of the University and the community by presenting quality art exhibitions in the Weil Gallery.

Students can major in art in either the Bachelor of Arts (BA) or the Bachelor of Fine Arts (BFA) degree programs. Students in the BFA have the option through electives to develop an emphasis beyond the general degree program in Printmaking, Graphic Design, Painting, Sculpture, Ceramics, Photography, Drawing, or Art History.

Two minors are also available. The minor in Studio Art is 21 semester hours and will allow a student to concentrate in one studio area. The minor in Art History is 18 semester hours. Interested students should contact the department academic advisor.

Student Learning Outcomes

Students will have:
• knowledge in a variety of art media, studio techniques, and art history;
• the ability to clearly articulate the principles and theories of contemporary art as it applies to their creative interests;
• a working knowledge of visual problem solving and critical thinking.

Degree Requirements

<table>
<thead>
<tr>
<th></th>
<th>Sem. Hrs.</th>
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<tbody>
<tr>
<td>1. Core Curriculum Program</td>
<td>42</td>
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<tr>
<td>2. First-Year Seminars (when applicable)*</td>
<td>(2)</td>
</tr>
<tr>
<td>3. Major Requirements</td>
<td>57</td>
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<tr>
<td>4. University Electives</td>
<td>13-15</td>
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<tr>
<td>5. Foreign Language Requirements</td>
<td>6</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
</tr>
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</table>

*First Year Seminars

First-Year Seminars or Electives

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Course Requirements

- ARTS 1303 - Art History Survey I 3 sem. hrs.
- ARTS 1304 - Art History Survey II 3 sem. hrs.
- ARTS 1311 - Design I 3 sem. hrs.
- ARTS 1312 - Design II 3 sem. hrs.
- ARTS 1316 - Drawing I 3 sem. hrs.
- ARTS 1317 - Drawing II 3 sem. hrs.
- ARTS 2311 - Design III: Color 3 sem. hrs.
- ARTS 2326 - Sculpture I 3 sem. hrs.
- ARTS 2346 - Ceramics I 3 sem. hrs.
- ARTS 2316 - Painting I 3 sem. hrs.
- ARTS 2333 - Printmaking I 3 sem. hrs.
- ARTS 2356 - Photography I 3 sem. hrs.
From: 3 hrs.

- ARTS 2323 - Drawing III 3 sem. hrs.
- GRDS 1301 - Foundations of Graphic Design 3 sem. hrs.

Art History:

From: 3 hrs.

- ARTS 3352 - Modern Art 3 sem. hrs.
- ARTS 3353 - Contemporary Art, 1945 to the Present 3 sem. hrs.

From: 3 hrs.

- ARTS 3350 - Art of the United States 3 sem. hrs.
- ARTS 4350 - Pre-Columbian Art of Mesoamerica 3 sem. hrs.
- ARTS 4352 - Modern Art of Mexico 3 sem. hrs.
- ARTS 4390 - Topics in Art History 3 sem. hrs.

Art Electives (upper division): 12 hrs.

Note:

All students graduating with a Bachelor of Arts Degree in Art Studio are required to submit an exit portfolio. The portfolio consists of a CD-R (no DVD or CD-RW disks) with 6 .jpg images that best represent their most successful coursework during their educational careers in the Department of Art. A one page written summary of their learning experience is also required.

These portfolios are due to the Department of Art office (CA 105) by the last class day of the semester in which students plan to graduate.

Graphic Design, BA

Graphic Design is a creative and inspiring process that combines art and technology to communicate ideas and information visually from client to audience. Rooted in traditional art and design foundations, the focus of the Graphic Design curriculum is to educate and inform students of the impact design can make through the exploration of diverse problem-solving methodologies, innovative investigations, and creative research in all forms of visual communication. Through their studio work, Graphic Design majors will address issues stressing social and cultural awareness, integration of new technology,
and sustainable practices while being prepared to enter into the evolving creative industry.

Student Learning Outcomes

Students will:

- Demonstrate mastery of client-focused, visual communication and problem-solving methodologies;
- Demonstrate proficiency in professional skills and use of technology in preparation for professional practice;
- Demonstrate advanced critical thinking in analyzing discipline history, theory, criticism and practices;
- Be prepared for professional positions in the field of visual communications or for graduate school.

Degree Requirements

<table>
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<tr>
<th>Sem. Hrs.</th>
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<tbody>
<tr>
<td>1. Core Curriculum Program</td>
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<tr>
<td>2. First-Year Seminars (when applicable)*</td>
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<tr>
<td>3. Required Courses</td>
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<td>4. University Electives</td>
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<td>5. Foreign Language Requirements</td>
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<td>6</td>
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<td>Total</td>
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*First Year Seminars

First-Year Seminars or Electives

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.
Note:

Transfer students with 24 or more hours are exempt from First-Year Seminar.

University Core Curriculum (42 hours)

Please see Core Curriculum Program for more details.

Note: ARTS 1303 needs to be taken as part of the University Core or the student will be required to take 57 SCH in the Major Required Courses.

Required Program Reviews:

Graphic Design Majors will undergo two formal portfolio and performance reviews. Students that intend to major in Graphic Design and meet all eligibility requirements for the reviews must participate. Students are eligible for the Lower Level Review (LL Review) after completing two specified GRDS foundational program courses. Students who do not pass the Lower Level review will be advised to repeat one or both of the specified foundational courses. After passing the LL Review, all students intending to graduate with a BA in Graphic Design must pass the Upper-Level Admission Portfolio Review (UL Review) with the completion of seven total specified GRDS program courses to be allowed to continue upper-level coursework in the program. Students will not be permitted to enroll in the remaining 3000 - 4000-level Graphic Design Degree Program courses until they have passed the UL Review and have been formally advised to advance. Students denied advancement into upper-level courses in the Graphic Design program after their first UL Review will be allowed only one additional attempt by resubmitting their revised portfolio for review. Discerning advancement through the Graphic Design Degree Program ensures elevated professionalism of program graduates.

Required Courses (54 hours)

- ARTS 1304 - Art History Survey II 3 sem. hrs.
- ARTS 1311 - Design I 3 sem. hrs.
- ARTS 1316 - Drawing I 3 sem. hrs.
- ARTS 2311 - Design III: Color 3 sem. hrs.
- ARTS 2356 - Photography I 3 sem. hrs.
- GRDS 1301 - Foundations of Graphic Design 3 sem. hrs.
- GRDS 1302 - Typography I 3 sem. hrs.

Lower Level Program Review
- GRDS 2301 - Historical Perspectives of Graphic Design 3 sem. hrs.
- GRDS 2302 - Design Studio I 3 sem. hrs.
- GRDS 3301 - Typography II 3 sem. hrs.
- GRDS 3303 - Design for Good 3 sem. hrs.
- GRDS 3305 - Packaging Design 3 sem. hrs.

**Upper Level Program Review**

- GRDS 3302 - Design Studio II 3 sem. hrs.
- GRDS 3310 - Corporate Identity 3 sem. hrs.
- GRDS 4304 - Emerging Technologies 3 sem. hrs.
- GRDS 4306 - Publication and Editorial Design 3 sem. hrs.
- GRDS 4309 - Design in Advertising 3 sem. hrs.
- GRDS 4310 - Portfolio and Professional Practices 3 sem. hrs.

**Bachelor of Fine Arts**

**Art, BFA**

The curriculum for the Bachelor of Fine Arts degree is designed to provide professional development at the undergraduate level in the visual arts, through in-depth study in studio art. The degree requires a minimum of 75 semester hours in art, at least 36 of which must be in upper-division coursework.

Admission to the BFA is by special application. Such application can be made upon completion of 30 semester hours of art coursework, and must be made before completion of 48 semester hours of art coursework. A portfolio consisting of ten to fifteen works representing a variety of media must be submitted in addition to the application form. Copies of specific BFA admission policies and instructions for submitting an application to the BFA program are available from the Department of Art website (http://cla.tamu.edu/art/Current%20Students.html). Completed BFA applications should be submitted to the office of the Department Chair.

The purposes of the art curriculum are:

1. To provide a general program that allows students access to a variety of art media, studio techniques, and instruction;
2. To provide students with opportunities to study past and present forms of art and to understand the function of art in society;
3. To provide courses that will help expand the knowledge and interest of non-majors in the area of art; and
4. To contribute to the cultural life of the University and the community by presenting quality art exhibitions in the Weil Gallery.

Students can major in art in either the Bachelor of Arts (BA) or the Bachelor of Fine Arts (BFA) degree programs. Students in the BFA have the option through electives to develop an emphasis beyond the general degree program in Printmaking, Painting, Sculpture, Ceramics, Photography, Drawing, Graphic Design, or Art History.

The Bachelor of Fine Arts leading to all-level Teacher Certification is available.

Two minors are also available. The minor in Studio Art is 21 semester hours and will allow a student to concentrate in one studio area. The minor in Art History is 18 semester hours. Interested students should contact the department academic advisor.

Student Learning Outcomes

Students will have:

- A comprehensive level of professional development in the visual arts in preparation for specific careers;
- proficiency in studio processes and the understanding of conceptual theories and histories as evidenced in their graduating senior exhibitions;
- demonstrated expertise in their specific area of concentration.

Degree Requirements

<table>
<thead>
<tr>
<th>Sem. Hrs.</th>
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<tr>
<td>42</td>
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<td>75</td>
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<td>3</td>
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</tbody>
</table>

Total 120 (122)

*First Year Seminars

First-Year Seminars or Electives

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.
Course Requirements

- ARTS 1303 - Art History Survey I 3 sem. hrs.
- ARTS 1304 - Art History Survey II 3 sem. hrs.
- ARTS 1311 - Design I 3 sem. hrs.
- ARTS 1312 - Design II 3 sem. hrs.
- ARTS 1316 - Drawing I 3 sem. hrs.
- ARTS 1317 - Drawing II 3 sem. hrs.
- ARTS 2311 - Design III: Color 3 sem. hrs.
- ARTS 2316 - Painting I 3 sem. hrs.
- ARTS 2323 - Drawing III 3 sem. hrs.
- ARTS 2326 - Sculpture I 3 sem. hrs.
- ARTS 2333 - Printmaking I 3 sem. hrs.
- ARTS 2346 - Ceramics I 3 sem. hrs.
- ARTS 2356 - Photography I 3 sem. hrs.
- ARTS 3301 - Life Drawing 3 sem. hrs.
- ARTS 3302 - Intermediate Printmaking 3 sem. hrs.
- ARTS 3303 - Intermediate Painting 3 sem. hrs.
- ARTS 3304 - Intermediate Sculpture 3 sem. hrs.
- ARTS 3324 - Intermediate Ceramics 3 sem. hrs.
- GRDS 1301 - Foundations of Graphic Design 3 sem. hrs.

Art History:

- ARTS 3352 - Modern Art 3 sem. hrs.
- ARTS 3353 - Contemporary Art, 1945 to the Present 3 sem. hrs.

From: 3 hrs.

- ARTS 3350 - Art of the United States 3 sem. hrs.
- ARTS 4350 - Pre-Columbian Art of Mesoamerica 3 sem. hrs.
- ARTS 4352 - Modern Art of Mexico 3 sem. hrs.
- ARTS 4390 - Topics in Art History 3 sem. hrs.

Art Electives (upper division): 9 hrs.

Note:

A senior project is required of the BFA art major during the final semester as an undergraduate student. The student, with minimum assistance from the supervising faculty member, is expected to organize an exhibition of his or her work completed while
a student at Texas A&M University-Corpus Christi. The student must be registered in a related course with the faculty advisor during the semester in which the project is presented. Students in the BFA art program are expected to spend one additional hour per week in the studio for each semester hour of studio enrollment.

**Art, BFA with Teacher Certification**

The curriculum for the Bachelor of Fine Arts degree leading to teacher certification is also designed to provide professional development at the undergraduate level for the prospective teacher in the visual arts, through in-depth study in studio art. The degree requires a minimum of 60 semester hours in art, at least 30 of which must be in upper-division coursework.

Admission to the BFA leading to teacher certification is by special application. Such application can be made upon completion of 30 semester hours of Art coursework, and must be made before completion of 48 semester hours of Art coursework. A portfolio consisting of ten to fifteen works representing a variety of media must be submitted in addition to the application form. Copies of specific admission policies and instructions for submitting an application to the program are available from the Department of Art website (cla.tamucc.edu/art_currentstudents.html). Completed applications should be submitted to the office of the Department Chair.

The purposes of the art curriculum are:

1. To provide a general program that allows students access to a variety of art media, studio techniques, and instruction;
2. To provide students with opportunities to study past and present forms of art and to understand the function of art in society;
3. To provide courses that will help expand the knowledge and interest of non-majors in the area of art; and
4. To contribute to the cultural life of the University and the community by presenting quality art exhibitions in the Weil Gallery.

Two minors are also available. The minor in Studio Art is 21 semester hours and will allow a student to concentrate in one studio area. The minor in Art History is 18 semester hours. Interested students should contact the department academic advisor.

**Student Learning Outcomes**

- demonstrate competencies in studio art;
- be able to successfully pass the test for State Board for Educator Certification enabling them to teach K-12 within the State of Texas;
• have the ability to articulate principles and theories of contemporary art as it applies to the teaching/learning environment.

Degree Requirements

Sem. Hrs.

1. Core Curriculum Program 42
2. First-Year Seminars (when applicable) (2)
3. Major Requirements 60
4. Professional Development Requirements 24
5. Teacher Certification Requirements 3

Total 129 (131)

Full-time, first-year students are required to take the following courses:

• UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
• UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Course Requirements

• ARTS 1303 - Art History Survey I 3 sem. hrs.
• ARTS 1304 - Art History Survey II 3 sem. hrs.
• ARTS 1311 - Design I 3 sem. hrs.
• ARTS 1312 - Design II 3 sem. hrs.
• ARTS 1316 - Drawing I 3 sem. hrs.
• ARTS 1317 - Drawing II 3 sem. hrs.

Art Activities:

• ARTS 3316 - Art Activities I 3 sem. hrs.
• ARTS 3322 - Art Activities II 3 sem. hrs.
  (All art coursework above must be completed prior to enrollment in ARTS 3316 and ARTS 3322. Both of these courses must be successfully completed prior to student teaching.)
• ARTS 2311 - Design III: Color 3 sem. hrs.
• ARTS 2316 - Painting I 3 sem. hrs.
• ARTS 2323 - Drawing III 3 sem. hrs.
• ARTS 2326 - Sculpture I 3 sem. hrs.
• ARTS 3301 - Life Drawing 3 sem. hrs.
• ARTS 2333 - Printmaking I 3 sem. hrs.
• ARTS 2346 - Ceramics I 3 sem. hrs.

From: 3 hrs.

• ARTS 3304 - Intermediate Sculpture 3 sem. hrs.
• ARTS 3324 - Intermediate Ceramics 3 sem. hrs.

From: 6 hrs.

• ARTS 3302 - Intermediate Printmaking 3 sem. hrs.
• ARTS 3303 - Intermediate Painting 3 sem. hrs.
• GRDS 1301 - Foundations of Graphic Design 3 sem. hrs.

Art History:

From: 3 hrs.

• ARTS 3352 - Modern Art 3 sem. hrs.
• ARTS 3353 - Contemporary Art, 1945 to the Present 3 sem. hrs.

From: 3 hrs.

• ARTS 3350 - Art of the United States 3 sem. hrs.
• ARTS 4350 - Pre-Columbian Art of Mesoamerica 3 sem. hrs.
• ARTS 4352 - Modern Art of Mexico 3 sem. hrs.
• ARTS 4390 - Topics in Art History 3 sem. hrs.

Note:

Students in the program are expected to spend one additional hour per week in the studio for each upper division semester hour of studio enrollment.

Other Certification Requirements

For information on required professional development courses and other teacher certification requirements, please see the College of Education and Human Development section of this catalog. Students should also consult the Certification Office of the College of Education and Human Development for complete and current information about teacher certification requirements.
To qualify to take the TExES (Texas Examinations of Educator Standards) in the field of Art, students must meet the following criteria:

1. Make pre-specified acceptable scores on TExES practice tests, or departmental equivalent, and participate in practice test review and analysis session.
2. Provide official permit with signature of Program Coordinator or designated person for each teaching field on the student's certification plan.

Students must also qualify to take the Professional Development TExES.

Minor

Art History Minor

Lower Division

- ARTS 1303 - Art History Survey I 3 sem. hrs.
- ARTS 1304 - Art History Survey II 3 sem. hrs.

Upper Division

Select four courses from: 12 hrs.

- ARTS 3350 - Art of the United States 3 sem. hrs.
- ARTS 3352 - Modern Art 3 sem. hrs.
- ARTS 3353 - Contemporary Art, 1945 to the Present 3 sem. hrs.
- ARTS 4350 - Pre-Columbian Art of Mesoamerica 3 sem. hrs.
- ARTS 4352 - Modern Art of Mexico 3 sem. hrs.
- ARTS 4390 - Topics in Art History 3 sem. hrs.

Studio Art Minor

Lower Division

- ARTS 1316 - Drawing I 3 sem. hrs.

3 hours From:

- ARTS 1311 - Design I 3 sem. hrs.
- ARTS 1312 - Design II 3 sem. hrs.

Designated Electives:
Select five, four of which must be upper level. Students will be able to concentrate in one studio area with this minor. Advanced studio courses with 4300 numbers may be taken three times for credit.

- ARTS 2311 - Design III: Color 3 sem. hrs.
- ARTS 2316 - Painting I 3 sem. hrs.
- ARTS 2323 - Drawing III 3 sem. hrs.
- ARTS 2326 - Sculpture I 3 sem. hrs.
- ARTS 2333 - Printmaking I 3 sem. hrs.
- ARTS 2346 - Ceramics I 3 sem. hrs.
- ARTS 2356 - Photography I 3 sem. hrs.
- ARTS 2367 - Watercolor 3 sem. hrs.
- ARTS 3301 - Life Drawing 3 sem. hrs.
- ARTS 3302 - Intermediate Printmaking 3 sem. hrs.
- ARTS 3303 - Intermediate Painting 3 sem. hrs.
- ARTS 3304 - Intermediate Sculpture 3 sem. hrs.
- ARTS 3324 - Intermediate Ceramics 3 sem. hrs.
- ARTS 3365 - Photography II 3 sem. hrs.
- ARTS 4301 - Advanced Drawing 3 sem. hrs.
- ARTS 4302 - Advanced Printmaking 3 sem. hrs.
- ARTS 4303 - Advanced Painting 3 sem. hrs.
- ARTS 4304 - Advanced Sculpture 3 sem. hrs.
- ARTS 4324 - Advanced Ceramics 3 sem. hrs.
- ARTS 4365 - Advanced Photography 3 sem. hrs.
- ARTS 4391 - Topics in Studio Art 3 sem. hrs.
- ARTS 4396 - Directed Individual Study 1-3 sem. hrs.
- GRDS 1301 - Foundations of Graphic Design 3 sem. hrs.
- GRDS 1302 - Typography I 3 sem. hrs.
- GRDS 4310 - Portfolio and Professional Practices 3 sem. hrs.

Communication and Media

Bachelor of Arts

Communication Studies, BA

The mission of the Department of Communication & Media is to develop students who are effective and ethical communicators with the creative, critical, and collaborative skills necessary to succeed in a diverse global environment. The focus of the program is to enhance students' knowledge and practical skills in various areas of human...
communication including organizational leadership, public relations, and relational communication. It is critical for all Communication majors to meet with their academic advisor prior to registering each semester.

### Student Learning Outcomes:

Students will:

- Gather, evaluate, and synthesize information to build and defend arguments.
- Demonstrate communication competence in dyadic, small group, and presentational contexts.
- Employ discipline specific knowledge in applied communication situations.

### Degree Requirements

**Communication Studies**

<table>
<thead>
<tr>
<th></th>
<th>Sem. Hrs.</th>
</tr>
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<tbody>
<tr>
<td>1. Core Curriculum Program</td>
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<tr>
<td>2. First-Year Seminars (when applicable)(2)</td>
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<td>3. Major Requirements</td>
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<td>4. Electives</td>
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<td>5. Foreign Language Requirements</td>
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</table>

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Communication Studies Core Courses (Students will be required to complete each of the courses in the 21 hour core)

- COMM 1318 - Interpersonal Communication*^ 3 sem. hrs.
- COMM 2333 - Small Group Communication 3 sem. hrs.
• COMM 2335 - Presentational Communication 3 sem. hrs.
• COMM 3310 - Communication Theory 3 sem. hrs.
• COMM 4325 - Research Methods 3 sem. hrs.
• COMM 4345 - Intercultural Communication 3 sem. hrs.
• COMM 4380 - Senior Seminar in Communication Studies 3 sem. hrs.

Communication Studies Prescribed Electives:

Students will select 18 hours of major electives from the courses that appear below. No more than 6 hours of MEDA courses may be taken to fulfill these elective hours.

• COMM 2330 - Introduction to Public Relations 3 sem. hrs.
• COMM 3311 - Nonverbal Communication 3 sem. hrs.
• COMM 1321 - Business and Professional Communication 3 sem. hrs.
• COMM 3325 - Relational Communication 3 sem. hrs.
• COMM 3330 - Persuasion 3 sem. hrs.
• COMM 3350 - Leadership 3 sem. hrs.
• COMM 4314 - Gender Communication 3 sem. hrs.
• COMM 4331 - Public Relations Campaigns 3 sem. hrs.
• COMM 4335 - Crisis Communication 3 sem. hrs.
• COMM 4350 - Organizational Communication 3 sem. hrs.
• COMM 4360 - International Leadership 3 sem. hrs.
• COMM 4390 - Topics in Communication Studies 3 sem. hrs.
• COMM 4399 - Communication Internship 3 sem. hrs.*
• MEDA 1307 - Media and Society 3 sem. hrs.
• MEDA 1380 - Introduction to Media Production 3 sem. hrs.
• MEDA 2350 - Media Performance 3 sem. hrs.
• MEDA 3380 - New Media and Communication*^ 3 sem. hrs.

Note:

*Only 3 semester hours of Internship credit may be counted toward the major.

Media Arts, BA

The program in Media Arts focuses on allowing students to cultivate the creative and critical skills necessary to actively engage in the media industry in a variety of capacities. Media Arts majors select an emphasis in either Media Production or Media Studies to fulfill their coursework.

Student Learning Outcomes
Students will:

- Understand and apply production skills in the creation of audiovisual media
- Understand and apply critical theories and research methods related to media studies through effective written communication
- Demonstrate a general understanding of the media industry and paths to transition from academic coursework to industry positions or advanced degrees
- Create advanced projects that demonstrate effective communication strategies in media production OR media studies

Degree Requirements

<table>
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<tr>
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<td>E. Foreign Language Requirements</td>
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</table>

*First Year Seminars

First-Year Seminars or Electives

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Media Core Courses

(12 semester hours, required for all majors)

- MEDA 1307 - Media and Society 3 sem. hrs.
- MEDA 1380 - Introduction to Media Production 3 sem. hrs.
- MEDA 2366 - Media Forms 3 sem. hrs.
- MEDA 2367 - Media Industries 3 sem. hrs.
Media Studies Emphasis

(27 semester hours beyond core)

Media Studies Requirements:

- MEDA 3310 - Media Theory and Research 3 sem. hrs.
- MEDA 3380 - New Media and Communication*^ 3 sem. hrs.
- MEDA 4381 - Senior Seminar in Media Studies 3 sem. hrs.

Select one of the following courses:

- MEDA 2311 - Media Writing 3 sem. hrs.
- MEDA 2350 - Media Performance 3 sem. hrs.
- MEDA 3360 - Screenplay Writing 3 sem. hrs.

Select one of the following courses:

- MEDA 3301 - Television Criticism 3 sem. hrs.
- MEDA 3302 - Film Criticism 3 sem. hrs.

Media Studies Electives:

(12 semester hours, select four of the following courses not already taken to fulfill other requirements).

- MEDA 1315 - Editing 3 sem. hrs.
- MEDA 2311 - Media Writing 3 sem. hrs.
- MEDA 2313 - Intermediate Production: Documentary 3 sem. hrs.
- MEDA 2316 - Intermediate Production: Narrative 3 sem. hrs.
- MEDA 2350 - Media Performance 3 sem. hrs.
- MEDA 3301 - Television Criticism 3 sem. hrs.
- MEDA 3302 - Film Criticism 3 sem. hrs.
- MEDA 3303 - Documentary Studies 3 sem. hrs.
- MEDA 3351 - Screen Comedy 3 sem. hrs.
- MEDA 3360 - Screenplay Writing 3 sem. hrs.
- MEDA 4305 - Interpreting and Making the Visual Culture of Hollywood 3 sem. hrs.
- MEDA 4340 - Advertising Criticism 3 sem. hrs.
- MEDA 4341 - First Amendment and Ethical Issues in the Media 3 sem. hrs.
- MEDA 4342 - Global Media and International Communication 3 sem. hrs.
- MEDA 4390 - Topics in Media Arts 3 sem. hrs.
• MEDA 4396 - Directed Individual Study 1-3 sem. hrs.
• MEDA 4399 - Media Arts Internship 3 sem. hrs.

Media Production Emphasis

(33 semester hours beyond core)

Media Production Requirements:

• MEDA 1315 - Editing 3 sem. hrs.
• MEDA 2313 - Intermediate Production: Documentary 3 sem. hrs.
• MEDA 2316 - Intermediate Production: Narrative 3 sem. hrs.
• MEDA 3317 - Advanced Postproduction 3 sem. hrs.

Select one of the following courses for capstone:

• MEDA 4310 - Advanced Production: Documentary 3 sem. hrs.
• MEDA 4312 - Advanced Production: Narrative 3 sem. hrs.

Media Production Electives

(18 semester hours, select six of the following from courses not already taken to fulfill other requirements, with the exception of MEDA 4310 Advanced Production: Documentary, MEDA 4312 Advanced Production: Narrative, and MEDA 3360 Screenplay Writing -- which each may each be repeated once for credit. Five of the selected courses must be applied courses and are indicated below with an asterisk).

• ARTS 2356 - Photography I 3 sem. hrs.
  *
• ARTS 3365 - Photography II 3 sem. hrs.
  *
• GRDS 1301 - Foundations of Graphic Design 3 sem. hrs.
  *
• GRDS 1302 - Typography I 3 sem. hrs.
  *
• GRDS 2302 - Design Studio I 3 sem. hrs.
  *
• GRDS 3308 - Copywriting 3 sem. hrs.
  *
• MEDA 3301 - Television Criticism 3 sem. hrs.
• MEDA 3302 - Film Criticism 3 sem. hrs.
• MEDA 3303 - Documentary Studies 3 sem. hrs.
• MEDA 3314 - Television Production 3 sem. hrs.
Teacher Certificate

Speech Communication Teacher Certification

Requirements for the secondary certification plan in Speech Communication are as follows:

Degree Requirements

Sem. Hrs.

1. Core Curriculum Program
2. First-Year Seminars (when applicable)
3. Major Requirements 42
4. Professional Development
5. Teacher Certification Requirements (2)
6. University Electives 30
7. Foreign Language Requirements
   24
   3
   13-15
   6
   Total 120

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Required Courses:

- MEDA 1307 - Media and Society 3 sem. hrs.
- COMM 1318 - Interpersonal Communication** 3 sem. hrs.
- COMM 2333 - Small Group Communication 3 sem. hrs.
- COMM 2335 - Presentational Communication 3 sem. hrs.
- COMM 3311 - Nonverbal Communication 3 sem. hrs.
- COMM 3330 - Persuasion 3 sem. hrs.
- COMM 3335 - UIL Debate and Speech 3 sem. hrs.
- MEDA 4341 - First Amendment and Ethical Issues in the Media 3 sem. hrs.
- COMM 4345 - Intercultural Communication 3 sem. hrs.
- THEA 4323 - Oral Interpretation of Children's Literature 3 sem. hrs.

Total: 30

Note:

Students choosing Speech Communication as a teaching field must also satisfy the requirements for the major in Communication Studies. All students seeking certification in Speech Communication should select a faculty advisor in the Communication Studies area to help them select appropriate courses.

Other Certification Requirements
For information on required professional development courses and other teacher certification requirements, please see the College of Education section of this catalog. Students should also consult the Certification Office of the College of Education for complete and current information about teacher certification requirements.

To qualify to take the TExES (Texas Examinations of Educator Standards) in the field of Communication, students must meet the following criteria:

1. Make pre-specified acceptable scores on TExES practice tests, or departmental equivalent, and participate in practice test review and analysis session.
2. Provide official permit with signature of Program Coordinator or designated person for each teaching field on the student's certification plan.

Students must also qualify to take the Professional Development TExES.

Minor

Communication Studies Minor

Degree Requirements

The minor in Communication Studies consists of 18 semester hours of Communication Studies coursework. Four courses are required: COMM 1318 Interpersonal Communication*^ OR COMM 2333 Small Group Communication, COMM 2335 Presentational Communication, COMM 3310 - Communication Theory, and COMM 4345 Intercultural Communication. Additionally, students pursuing the minor must take either six hours of electives.

Select the remaining two courses from the following electives:

- COMM 3311 - Nonverbal Communication 3 sem. hrs.
- COMM 1321 - Business and Professional Communication 3 sem. hrs.
- COMM 3325 - Relational Communication 3 sem. hrs.
- COMM 3330 - Persuasion 3 sem. hrs.
- COMM 3350 - Leadership 3 sem. hrs.
- COMM 4314 - Gender Communication 3 sem. hrs.
- COMM 4325 - Research Methods 3 sem. hrs.
- COMM 4335 - Crisis Communication 3 sem. hrs.
- COMM 4350 - Organizational Communication 3 sem. hrs.
- COMM 4360 - International Leadership 3 sem. hrs.
- COMM 4390 - Topics in Communication Studies 3 sem. hrs.
- COMM 4399 - Communication Internship 3 sem. hrs.
- MEDA 3380 - New Media and Communication^ 3 sem. hrs.

**Digital Journalism Minor**

The Digital Journalism minor will prepare TAMU-CC students for jobs within the ever-changing field of journalism. Within the core, students will learn the history and development of mass media within the United States, newswriting, legal, and ethical issues surrounding journalism and interviewing skills. Through elective credits, students will have the opportunity to take courses in the supporting areas of graphic design, web development, photography, video production, and media consumption.

**Digital Journalism Core (9 hours)**

- MEDA 1307 - Media and Society 3 sem. hrs.
- MEDA 2311 - Media Writing 3 sem. hrs.
- MEDA 4341 - First Amendment and Ethical Issues in the Media 3 sem. hrs.

**Designated Electives (Choose 12 hours minimum)**

- MEDA 2315 - News Reporting 3 sem. hrs.
- MEDA 2350 - Media Performance 3 sem. hrs.
- MEDA 2313 - Intermediate Production: Documentary 3 sem. hrs.
- MEDA 1315 - Editing 3 sem. hrs.
- MEDA 3318 - Editing & Layout 3 sem. hrs.
- MEDA 3340 - Photojournalism 3 sem. hrs.
- MEDA 3361 - Sports Writing 3 sem. hrs.
- MEDA 4342 - Global Media and International Communication 3 sem. hrs.
- MEDA 4343 - News Publication 3 sem. hrs.
- MEDA 4390 - Topics in Media Arts 3 sem. hrs.
- MEDA 4399 - Media Arts Internship 3 sem. hrs.

**Public Relations Minor**

Public Relations (PR) is a strategic communication process that builds mutually beneficial relationships between organizations and their publics. PR strategy has evolved alongside technological advances, and organizations are now required to connect with diverse publics using a variety of platforms. The core courses in the public relations minor provide students with a diverse skill set in public relations writing, research, strategy, and crisis communication. Students should utilize electives to gain skills in supplemental areas such as production, digital journalism, marketing, and persuasion.
The minor consists of 21 semester hours, which include 5 core courses. At least 15 hours for the minor must be upper division.

Students who select this minor must consult with the Faculty Adviser to the Public Relations Minor prior to completing 6 semester hours of coursework listed in the program. The minor declaration must be filed with the Advisor in the College of Liberal Arts.

Students must complete the following required courses: (15 hours)

- COMM 2330 - Introduction to Public Relations 3 sem. hrs.
- COMM 4331 - Public Relations Campaigns 3 sem. hrs.
- COMM 4335 - Crisis Communication 3 sem. hrs.
- COMM 4394 - Professional PR Portfolio 3 sem. hrs.
- MEDA 2350 - Media Performance 3 sem. hrs.

Students may select from the following courses: (6 hours)

(Elective selection must be approved by the Faculty Adviser to the Public Relations Minor)

- COMM 3330 - Persuasion 3 sem. hrs.
- COMM 4350 - Organizational Communication 3 sem. hrs.
- COMM 4399 - Communication Internship 3 sem. hrs.
- MEDA 1315 - Editing 3 sem. hrs.
- MEDA 2316 - Intermediate Production: Narrative 3 sem. hrs.
- MEDA 3318 - Editing & Layout 3 sem. hrs.
- MEDA 3340 - Photojournalism 3 sem. hrs.
- MEDA 3361 - Sports Writing 3 sem. hrs.
- MEDA 3380 - New Media and Communication* 3 sem. hrs.
- MEDA 4341 - First Amendment and Ethical Issues in the Media 3 sem. hrs.
- MEDA 4342 - Global Media and International Communication 3 sem. hrs.
- MKTG 3310 - Principles of Marketing* 3 sem. hrs.
- MKTG 3330 - Consumer Behavior* 3 sem. hrs.

English

Bachelor of Arts

English, BA
Grounded in our academic tradition as an Hispanic Serving Institution, the undergraduate English Program at Texas A&M University-Corpus Christi invites students to engage with texts and employ language-related skills to connect with others both locally and globally. We encourage students to explore and integrate three disciplines of English Studies in their work, through the study of literature, applied linguistics, and writing. We challenge students to analyze, think critically about, and compose texts across genres, language varieties, and traditions for communities across cultural and geographic boundaries. In our courses and community events, students develop the advanced critical and creative literacies and language-related skills that prepare them for their future as active and ethical members of diverse communities.

English majors will choose an emphasis in Literary Studies or Writing Studies. The Literary Studies emphasis provides students with the skills to interpret and write about texts, including literary and filmic, within a range of historical and cultural contexts. The Writing Studies emphasis allows students to develop their abilities to use writing in a variety of contexts and for a variety of purposes, and to develop an understanding of how writing operates in the world, through studies in rhetoric, literacy, and writing. Both tracks give students skills as critical thinkers and communicators that will prepare them for a variety of different career paths, including law, business, teaching, and the sciences, as well as for graduate study.*

*Students can also earn certificates in TESOL and Writing for Non-Profits. The coursework necessary for both can be found under the "Certificates" section of the catalog.

Student Learning Outcomes:

At the end of the program, students will be able to:

- Analyze the characteristics of language in terms of literary or discourse genres, conventions, and linguistic features.
- Apply effective and appropriate literary/rhetorical/linguistic methods and strategies in writing and/or in analyzing texts (spoken, written, and multimodal).
- Demonstrate understanding of literary/rhetorical traditions, as well as the historical and cultural contexts important to those traditions.
- Demonstrate foundational understanding of language systems, language development, and language in use.
- Apply and/or integrate appropriate critical terms and theoretical concepts and perspectives in writing and analyzing texts.
• Demonstrate ability to choose and use appropriate strategies to produce texts in a variety of genres to most effectively achieve specific purposes with specific audiences.
• Demonstrate the ability to locate, select, assess, and analyze information sources, both print and digital, and to integrate and document appropriately those sources in their own work.
• Demonstrate understanding of community and social relations, diverse, multicultural histories; and what it means to live in a global society.

The undergraduate English program offers a major in English, curricula for secondary English certification, minors in Literary Studies and Creative Writing and certificates in Writing for Non-Profits and TESOL. It also participates in the interdisciplinary minors of Technical and Professional Writing and Women and Gender Studies (see descriptions under "Interdisciplinary Minors"). Upper-level courses in writing studies, linguistics, and literature may satisfy requirements for other disciplines and serve as electives for non-majors who wish to improve their analytic, writing, and technical skills and to broaden their experiences in the liberal arts.

Degree Requirements

Literary Studies Emphasis or Writing Studies Emphasis: Sem. Hrs.

<table>
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<tr>
<th>Component</th>
<th>Sem. Hrs.</th>
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<td>Supporting Coursework**</td>
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<td>Foreign Language Requirements</td>
<td>21</td>
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<td>Total 120 (122)</td>
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</tbody>
</table>

*First-Year Seminars or Electives

**All English majors not seeking secondary teaching certification must successfully complete one semester of either HIST 2311 Western Civilization I or HIST 2312 Western Civilization II.

Literary Studies Emphasis (48 semester hours):

Literary Studies Core (12 semester hours)
• ENGL 2370 - Introduction to Literary Studies 3 sem. hrs.
• ENGL 4305 - Major Authors 3 sem. hrs.
• ENGL 4351 - Senior Capstone: Literature and Writing 3 sem. hrs.
• ENGL 4380 - Critical Approaches to Literature and Culture 3 sem. hrs.

In addition to the requirements listed above, students will also select courses from the following clusters:

Literary History (9 hours)

• ENGL 3341 - British Literature before 1800 3 sem. hrs.
• ENGL 3345 - British Literature since 1800 3 sem. hrs.
• ENGL 3354 - American Literatures before 1900 3 sem. hrs.
• ENGL 3355 - American Literatures since 1900 3 sem. hrs.
• ENGL 4390 - Topics in Literary Studies 3 sem. hrs.

Conventions, Forms, and Genres (6 hours)

• ENGL 3323 - Young Adult Fiction 3 sem. hrs.
• ENGL 3325 - Interdisciplinary Approaches to Literature 3 sem. hrs.
• ENGL 3348 - Drama 3 sem. hrs.
• ENGL 3349 - Poetry 3 sem. hrs.
• ENGL 4340 - The Novel 3 sem. hrs.
• ENGL 4362 - Texts and Contexts 3 sem. hrs. (when applicable)
• ENGL 4390 - Topics in Literary Studies 3 sem. hrs.
  (when applicable)

Literary and Cultural Studies (6 hours)

• ENGL 3321 - Film and Literature 3 sem. hrs.
• ENGL 3330 - Current Events and Literature 3 sem. hrs.
• ENGL 4300 - Technologies and Cultures of the Book 3 sem. hrs.
• ENGL 4360 - Gender, Sexuality and Literature 3 sem. hrs.
• ENGL 4361 - Race and Ethnicity in Literature 3 sem. hrs.
• ENGL 4362 - Texts and Contexts 3 sem. hrs. (when applicable)
• ENGL 4390 - Topics in Literary Studies 3 sem. hrs.
  (when applicable)

Linguistics (6 hours, must include ENGL 3339):

• ENGL 3339 - Introduction to Linguistics 3 sem. hrs.
• ENGL 3340 - Grammar 3 sem. hrs.
• ENGL 3365 - Second Language Acquisition 3 sem. hrs.
• ENGL 3366 - Language in Society 3 sem. hrs.
• ENGL 3369 - Topics in Linguistics 3 sem. hrs.

Writing Studies (9 hours)

• Choose from any 3000- and 4000-level Writing Studies courses listed in the catalog except capstone.

Writing Studies Emphasis (48 semester hours)

Writing Studies Core (15 Semester hours):

• ENGL 2303 - Introduction to Writing Studies 3 sem. hrs.
• ENGL 3301 - Technical and Professional Writing 3 sem. hrs.
• ENGL 3302 - Techniques of Creative Writing 3 sem. hrs.
• ENGL 3363 - Foundations of Rhetoric 3 sem. hrs.
• ENGL 4352 - Capstone in Writing Studies 3 sem. hrs.

In addition to the requirements listed above, students will also select six courses (18 hours) from the following:

Note: Two courses (6 hours) must be at the 3000 level, and two courses (6 hours) must be at the 4000 level.

• ENGL 2371 - Exploring Social Media 3 sem. hrs.
• ENGL 3360 - Current Approaches to Composition and Literature 3 sem. hrs.
• ENGL 3361 - Strategies and Genres of Advanced Writing 3 sem. hrs.
• ENGL 3362 - Creative Writing Workshop: Survey and Practice of Genres 3 sem. hrs.
• ENGL 3364 - Strategies of Writing Creative Nonfiction 3 sem. hrs.
• ENGL 3378 - Document Design and Publishing 3 sem. hrs.
• ENGL 3379 - Writing for the Web 3 sem. hrs.
• ENGL 3380 - Visual Rhetoric 3 sem. hrs.
• ENGL 4320 - Professional Writing Workshop 3 sem. hrs.
• ENGL 4321 - Grants and Proposals 3 sem. hrs.
• ENGL 4322 - Writing in the Nonprofit Agencies 3 sem. hrs.
• ENGL 4325 - Writing Across Cultures and Contexts 3 sem. hrs.
• ENGL 4335 - Creative Writing Studio: Development of Craft 3 sem. hrs.
• ENGL 4345 - Rhetorics, Literacies, and Writing 3 sem. hrs.
• ENGL 4350 - Studies in Poetics: Theory, Form, and Practice 3 sem. hrs.
• ENGL 4385 - Studies in Creative Writing 3 sem. hrs.
• ENGL 4391 - Topics in Writing Studies 3 sem. hrs.
• ENGL 4398 - Applied Experience 3 sem. hrs.

Linguistics (6 hours, must include ENGL 3339)

• ENGL 3339 - Introduction to Linguistics 3 sem. hrs.
• ENGL 3340 - Grammar 3 sem. hrs.
• ENGL 3365 - Second Language Acquisition 3 sem. hrs.
• ENGL 3366 - Language in Society 3 sem. hrs.
• ENGL 3369 - Topics in Linguistics 3 sem. hrs.

Literary Studies (9 hours):

• 1 course from Conventions, Forms, and Genres
• 1 course from Literary History
• 1 course from Literary and Cultural Studies

Major in English, BA with Secondary Teacher Certification in English Language Arts (Grades 7-12)

Admission and Retention Requirements for English Certification

For admission to and retention in Teacher Education in the field of English, students must achieve and sustain a 3.0 GPA in all English coursework. To qualify to take the English TExES examination, students must meet the following criteria:

1. Have at least a 2.5 GPA on all college coursework (lower and upper level).
2. Have completed one English TExES Review Workshop at Texas A&M University-Corpus Christi.

Students who meet the above criteria must request permission to take the TExES certification exam via the College of Education and Human Development's TExES Approval/Request System (TAR) at <http://tar.tamucc.edu>. The English TExES Coordinator will approve all students who meet the above criteria. In addition, it is strongly recommended that students take two English TExES Review Workshops before they take the exam.

Students may choose either a Literary Studies or a Writing Studies Emphasis.
Students returning to the University to complete certification must see the English TExES coordinator to identify any course deficiencies in the student’s teaching field. All criteria outlined in the plan must be met before the student will be permitted to take the English TExES.

Students seeking certification must also qualify to take the Professional Development TExES. For information, see the College of Education and Human Development section of this catalog.

Degree Requirements for Literary or Writing Studies Emphasis

Sem. Hrs.

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<thead>
<tr>
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<td>4. Professional Development</td>
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<tr>
<td>6. Foreign Language Requirements</td>
<td>9</td>
</tr>
</tbody>
</table>

Total 120 (122)

Literary Studies Emphasis (39 hours)

Literary Studies Core (18 hours)

- ENGL 2370 - Introduction to Literary Studies 3 sem. hrs.
- ENGL 3340 - Grammar 3 sem. hrs.
- ENGL 3360 - Current Approaches to Composition and Literature 3 sem. hrs.
- ENGL 4351 - Senior Capstone: Literature and Writing 3 sem. hrs.
- ENGL 4380 - Critical Approaches to Literature and Culture 3 sem. hrs.

In addition to the requirements listed above, students will also select courses from the following clusters:

Conventions, Forms, and Genres (3 hours):
• ENGL 3323 - Young Adult Fiction 3 sem. hrs.
• ENGL 3325 - Interdisciplinary Approaches to Literature 3 sem. hrs.
• ENGL 3348 - Drama 3 sem. hrs.
• ENGL 3349 - Poetry 3 sem. hrs.
• ENGL 4340 - The Novel 3 sem. hrs.
• ENGL 4362 - Texts and Contexts 3 sem. hrs. *
• ENGL 4390 - Topics in Literary Studies 3 sem. hrs.

Literary History (9 hours):
• ENGL 3341 - British Literature before 1800 3 sem. hrs.
• ENGL 3345 - British Literature since 1800 3 sem. hrs.
• ENGL 3354 - American Literatures before 1900 3 sem. hrs.
• ENGL 3355 - American Literatures since 1900 3 sem. hrs.
• ENGL 4390 - Topics in Literary Studies 3 sem. hrs.

Literary and Cultural Studies (3 hours)
• ENGL 3321 - Film and Literature 3 sem. hrs.
• ENGL 4300 - Technologies and Cultures of the Book 3 sem. hrs.
• ENGL 4360 - Gender, Sexuality and Literature 3 sem. hrs.
• ENGL 4361 - Race and Ethnicity in Literature 3 sem. hrs.
• ENGL 4362 - Texts and Contexts 3 sem. hrs.
• ENGL 4390 - Topics in Literary Studies 3 sem. hrs.

Writing Studies (6 hours):
• ENGL 3361 - Strategies and Genres of Advanced Writing 3 sem. hrs. (required)

Choose one (3 hours)
• ENGL 3302 - Techniques of Creative Writing 3 sem. hrs.
• ENGL 3362 - Creative Writing Workshop: Survey and Practice of Genres 3 sem. hrs.
• ENGL 3364 - Strategies of Writing Creative Nonfiction 3 sem. hrs.
• ENGL 3378 - Document Design and Publishing 3 sem. hrs.
• ENGL 3379 - Writing for the Web 3 sem. hrs.
• ENGL 4321 - Grants and Proposals 3 sem. hrs.

Note:
*When topic is approved for cluster—see S.A.I.L. or advisor for further information.

Writing Studies Emphasis (39 hours)

Writing Studies Core (24 hours)

- ENGL 3301 - Technical and Professional Writing 3 sem. hrs.
- ENGL 3302 - Techniques of Creative Writing 3 sem. hrs.
- ENGL 2303 - Introduction to Writing Studies 3 sem. hrs.
- ENGL 3323 - Young Adult Fiction 3 sem. hrs.
- ENGL 3340 - Grammar 3 sem. hrs.
- ENGL 3360 - Current Approaches to Composition and Literature 3 sem. hrs.
- ENGL 3363 - Foundations of Rhetoric 3 sem. hrs.
- ENGL 4352 - Capstone in Writing Studies 3 sem. hrs.

Writing Studies Electives 3000-level (3 hours)

- ENGL 3361 - Strategies and Genres of Advanced Writing 3 sem. hrs.
- ENGL 3362 - Creative Writing Workshop: Survey and Practice of Genres 3 sem. hrs.
- ENGL 3364 - Strategies of Writing Creative Nonfiction 3 sem. hrs.
- ENGL 3378 - Document Design and Publishing 3 sem. hrs.
- ENGL 3379 - Writing for the Web 3 sem. hrs.
- ENGL 3380 - Visual Rhetoric 3 sem. hrs.

Writing Studies Electives 4000-level (3 hours)

- ENGL 4320 - Professional Writing Workshop 3 sem. hrs.
- ENGL 4321 - Grants and Proposals 3 sem. hrs.
- ENGL 4322 - Writing in the Nonprofit Agencies 3 sem. hrs.
- ENGL 4325 - Writing Across Cultures and Contexts 3 sem. hrs.
- ENGL 4335 - Creative Writing Studio: Development of Craft 3 sem. hrs.
- ENGL 4345 - Rhetorics, Literacies, and Writing 3 sem. hrs.
- ENGL 4350 - Studies in Poetics: Theory, Form, and Practice 3 sem. hrs.
- ENGL 4385 - Studies in Creative Writing 3 sem. hrs.
- ENGL 4391 - Topics in Writing Studies 3 sem. hrs.
- ENGL 4398 - Applied Experience 3 sem. hrs.

Literary Studies (9 hours)

- 1 course from Conventions, Forms, and Genres 3 sem. hrs.
• 1 course from Literary History 3 sem. hrs.
• 1 course from Literary and Cultural Studies 3 sem. hrs.

Other Certification Coursework Requirements:

• READ 3351 - Diagnosis and Correction of Reading Problems 3 sem. hrs.
• READ 3353 - Content Area Reading for Secondary Students 3 sem. hrs.
• READ 3355 - Teaching Reading in the Secondary School 3 sem. hrs.

Total beyond Core Curriculum Program: 48 hrs

Note:

Students seeking teacher certification in English Language Arts (7-12) must take the courses listed above in addition to the Core Curriculum Program curriculum and all professional development courses. Please see the College of Education and Human Development for the list of professional development requirements.

Major in English, BA with Teacher Certification in English Language Arts (Grades 4-8)

Admission and Retention Requirements for English Certification

For admission to and retention in Teacher Education in the field of English, students must achieve and sustain a 3.0 GPA in all English coursework. To qualify to take the English TExES examination, students must meet the following criteria:

1. Have at least a 2.5 GPA on all college coursework (lower and upper level).
2. Have completed one English TExES Review Workshop at Texas A&M University-Corpus Christi. This workshop must be taken in the semester prior to the term the student takes the TExES.

Students who meet the above criteria must request permission to take the TExES certification exam via the College of Education and Human Development's TExES Approval/Request System (TAR) at <http://tar.tamucc.edu>. The English TExES Coordinator will approve all students who meet the above criteria. In addition, it is strongly recommended that students take a second English TExES Review Workshop in the semester that they take the exam.
There is no difference between a Literary Studies or Writing Studies emphasis for this certification.

Students returning to the University to complete certification must see the English TExES coordinator to identify any course deficiencies in the student's teaching field. All criteria outlined in the plan must be met before the student will be permitted to take the English TExES.

Students seeking certification must also qualify to take the Professional Development TExES. For information, see the College of Education and Human Development section of this catalog.

Degree Requirements

## Sem. Hrs.

1. Core Curriculum Program 42
2. First-Year Seminars (when applicable) (2)
3. Major Requirements 30
4. Professional Development
5. Teacher Certification Requirements 24
6. Foreign Language Requirements 18
   
   Total 120 (122)

### English Program Requirements:

- ENGL 2370 - Introduction to Literary Studies 3 sem. hrs.
- ENGL 3340 - Grammar 3 sem. hrs.
- ENGL 3360 - Current Approaches to Composition and Literature 3 sem. hrs.
- ENGL 3361 - Strategies and Genres of Advanced Writing 3 sem. hrs.
- ENGL 3330 - Current Events and Literature 3 sem. hrs.
  or ENGL 3323 Young Adult Fiction 3 sem. hrs.
- ENGL 4370 - Oral Interpretation of Children's Literature 3 sem. hrs.
In addition to the requirements listed above, students will also select courses from the following clusters:

Creative Writing (3 hours)

- ENGL 3302 - Techniques of Creative Writing 3 sem. hrs.
- ENGL 3362 - Creative Writing Workshop: Survey and Practice of Genres 3 sem. hrs.
- ENGL 3364 - Strategies of Writing Creative Nonfiction 3 sem. hrs.

Writing Studies (3 hours):

- ENGL 3378 - Document Design and Publishing 3 sem. hrs.
- ENGL 3379 - Writing for the Web 3 sem. hrs.
- ENGL 4321 - Grants and Proposals 3 sem. hrs.
- ENGL 4322 - Writing in the Nonprofit Agencies 3 sem. hrs.

Conventions and Genres (3 hours)

- ENGL 3325 - Interdisciplinary Approaches to Literature 3 sem. hrs.
- ENGL 3348 - Drama 3 sem. hrs.
- ENGL 3349 - Poetry 3 sem. hrs.
- ENGL 4340 - The Novel 3 sem. hrs.

Literary and Cultural Studies (3 hours)

- ENGL 3330 - Current Events and Literature 3 sem. hrs.
- ENGL 4360 - Gender, Sexuality and Literature 3 sem. hrs.
- ENGL 4361 - Race and Ethnicity in Literature 3 sem. hrs.

Total English hours beyond Core Curriculum Program: 30 hrs

Note:

*When topic is approved for cluster - see S.A.I.L. or advisor for further information.

Other Certification Coursework Requirements:

- READ 3320 - Principles and Practices of Reading Instruction 3 sem. hrs.
- READ 3351 - Diagnosis and Correction of Reading Problems 3 sem. hrs.
- SMTE 1350 - Fundamentals of Mathematics I 3 sem. hrs.
- SMTE 1351 - Fundamentals of Mathematics II\(^{\wedge}\) 3 sem. hrs.
- SMTE 3315 - Foundational Approaches to the Physical Sciences 3 sem. hrs.
- SMTE 3316 - Foundational Approaches to the Life Sciences\(^{\wedge}\) 3 sem. hrs.

Total hours beyond Core Curriculum Program: 48 hrs

Note:

Students seeking teacher certification in English Language Arts (4-8) must take the courses listed above in addition to the Core Curriculum Program curriculum and all professional development courses. Please see the College of Education and Human Development for the list of professional development requirements.

Minor

Creative Writing Minor

This minor is for students who have a desire to develop their creative writing skills (mainly in short fiction and poetry) through the imaginative consideration of literature, including published American literature and their own and their peers' writing. Students of all majors are welcome. The minor consists of 18 semester hours and includes four core courses. Prerequisite courses for the minor are ENGL 1302 - Writing and Rhetoric\(^{\wedge}\), and core curriculum literature (ENGL 2316, ENGL 2332, ENGL 2333, or SPAN 2315, SPAN 3304, SPAN 3305, SPAN 3320 and SPAN 3325) passed with a C or better. Student may take individual courses in the minor as long as they have met the prerequisites.

Students who select this minor must consult with an Academic Advisor in the College of Liberal Arts prior to completing 6 hours of coursework listed for the program. Students are also encouraged to discuss the program with faculty members who teach the courses. The minor plan must be filed with an Academic Advisor in the College of Liberal Arts and certified prior to application for graduation by the Dean of the College in which the major study degree will be awarded. In order to graduate with a minor in Creative Writing, students must maintain an overall grade point average of 2.0 in courses in the minor.

Core Courses in Creative Writing (12 semester hours)

- ENGL 2303 - Introduction to Writing Studies 3 sem. hrs.
- ENGL 3302 - Techniques of Creative Writing 3 sem. hrs.
- ENGL 3362 - Creative Writing Workshop: Survey and Practice of Genres 3 sem. hrs.
- ENGL 3364 - Strategies of Writing Creative Nonfiction 3 sem. hrs.

6 hrs from Creative Writing Electives

- ENGL 4335 - Creative Writing Studio: Development of Craft 3 sem. hrs.
- ENGL 4350 - Studies in Poetics: Theory, Form, and Practice 3 sem. hrs.
- ENGL 4385 - Studies in Creative Writing 3 sem. hrs.
- ENGL 4391 - Topics in Writing Studies 3 sem. hrs.
  (when topic is creative writing)

Literary Studies Minor

The minor in Literary Studies consists of 18 semester hours of English coursework in addition to the core requirements in English, and must include ENGL 2370, two 3000-level courses, two 4000-level courses, and one elective 3000—4000-level course all in Literary Studies.

Technical and Professional Writing Minor

This interdisciplinary and flexible minor provides students in all majors with writing experiences, including problem-solving, communications (both online and face-to-face), team work, sensitivity to diversity, and ethical decision making, that will enhance their education and prepare them to meet the demands of professional life, whatever their chosen career path. Students, in consultation with advisors, will design the series of minor courses to meet their needs and goals.

Students who select this minor must maintain an overall grade point average of 2.0 in courses in the minor. Students who select this minor must consult with an academic advisor in the College of Liberal Arts prior to completing 6 hours of coursework listed for the program.

The minor consists of 18 semester hours. Students are required to take:

- ENGL 3301 - Technical and Professional Writing 3 sem. hrs.

9 hours from the following courses:

- ENGL 3378 - Document Design and Publishing 3 sem. hrs.
- ENGL 3379 - Writing for the Web 3 sem. hrs.
- ENGL 4320 - Professional Writing Workshop 3 sem. hrs.
- ENGL 4321 - Grants and Proposals 3 sem. hrs.
- ENGL 4322 - Writing in the Nonprofit Agencies 3 sem. hrs.
- ENGL 4324 - Editing & Style 3 sem. hrs.
- ENGL 4398 - Applied Experience 3 sem. hrs.

The remaining 6 hours will be chosen from ENGL courses not taken in the above sequence or from courses relevant to technical and professional writing listed below.

- MEDA 1380 - Introduction to Media Production 3 sem. hrs.
- MEDA 1315 - Editing 3 sem. hrs.
- MEDA 3380 - New Media and Communication*^ 3 sem. hrs.
- COMM 4345 - Intercultural Communication 3 sem. hrs.
- ARTS 2356 - Photography I 3 sem. hrs.
- GRDS 1301 - Foundations of Graphic Design 3 sem. hrs. (For Non-Majors, Spring)
- ARTS 3365 - Photography II 3 sem. hrs.
- SPAN 3316 - Spanish for the Professions 3 sem. hrs.

Certificates

Advanced TESOL Certificate

The Advanced TESOL (Teachers of English to Speakers of Other Languages) Certificate provides a pathway for students to acquire and further develop skills needed for teaching English internationally or teaching English to adult second language learners in the U.S. The certificate consists of 16 semester hours of five core courses plus one credit of guided independent tutoring work.

Students must have at least an overall GPA of 2.75 in the six courses. All courses must be passed with a C or better. Students must have completed ENGL 1302 - Writing and Rhetoric, and Core Curriculum Language, Philosophy, and Culture requirements (ENGL 2316, ENGL 2332, ENGL 2333, PHIL 1301, PHIL 2306, or SPAN 3307, SPAN 3308, SPAN 3309, or SPAN 3310) with a C or better. Students must pursue the certificate in conjunction with their bachelor's degree; the certificate will be awarded upon completion of their degree. Students already holding a Bachelor's degree may also pursue a TESOL certificate. This certificate will
appear on transcripts. Non-degree seeking students pursuing this certificate will be eligible for financial aid.

Required Courses (13 semester hours)

- ENGL 3167 - English as a Second/Foreign Language Tutoring 1 sem. hrs.
- ENGL 3339 - Introduction to Linguistics 3 sem. hrs.
- ENGL 3340 - Grammar 3 sem. hrs.
- ENGL 3365 - Second Language Acquisition 3 sem. hrs.
- ENGL 3367 - TESOL Seminar 3 sem. hrs.

In addition, students choose one remaining course from the following

- ENGL 3366 - Language in Society 3 sem. hrs.
- ENGL 3369 - Topics in Linguistics 3 sem. hrs.
- ENGL 4399 - TESOL Practicum 3 sem. hrs.

TESOL Certificate

The TESOL (Teachers of English to Speakers of Other Languages) Certificate provides a pathway for students to acquire skills needed for teaching English internationally or teaching English to adult second language learners in the U.S. The certificate consists of 12 semester hours of four core courses. Students must have at least an overall GPA of 2.75 in the four courses. All courses must be passed with a C or better. Students must have completed ENGL 1302 - Writing and Rhetoric and core curriculum Language Philosophy and Culture requirements (ENGL 2332, ENGL 2333, PHIL 1301, PHIL 2306, SPAN 3307, SPAN 3308, SPAN 3309, or SPAN 3310) with a C or better. Students must pursue the certificate in conjunction with their bachelor's degree; the certificate will be awarded upon completion of their degree. Students already holding a bachelor's degree may also pursue a TESOL certificate.

Required Courses (12 semester hours)

- ENGL 3339 - Introduction to Linguistics 3 sem. hrs.
- ENGL 3340 - Grammar 3 sem. hrs.
- ENGL 3365 - Second Language Acquisition 3 sem. hrs.
- ENGL 3367 - TESOL Seminar 3 sem. hrs.

Writing for Non-Profits
The Writing for Non-Profits Certificate is available to students in all majors and disciplines who wish to develop or enhance their skills to obtain employment in hospital research and development departments, corporate writing departments, military installations, and non-profit agencies. Students completing this program will develop a portfolio, suitable for presentation to an employer, that will demonstrate the ability to adjust to real world expectations and engage a setting that is less controlled and less predictable than the classroom.

Student Learning Outcomes:

Upon completion of this certificate, students will:

- Demonstrate competence with the kinds of writing most commonly used in nonprofit agencies.
- Acquire experience working in conjunction with leaders/administrators of nonprofit agencies.
- Create a portfolio of professional work to present to their employers and to prospective employers.*

*Every semester, each student will store his/her projects in an e-portfolio. With each additional course, each student will continue to build the e-portfolio.

Required Courses (16 hours):

- ENGL 3301 - Technical and Professional Writing 3 sem. hrs. **
- ENGL 3378 - Document Design and Publishing 3 sem. hrs.
- ENGL 3379 - Writing for the Web 3 sem. hrs.
- ENGL 4123 - Nonprofit Writing Project 1 sem. hrs.
- ENGL 4321 - Grants and Proposals 3 sem. hrs.
  ** May be completed online.
- ENGL 4322 - Writing in the Nonprofit Agencies 3 sem. hrs.

Humanities

Bachelor of Arts

History, BA

The history curriculum offers courses that provide all University students with the opportunity to deepen their understanding and appreciation of the development of the United States, Latin America, Asia, and Europe. These courses also assist students in refining their reading, listening, critical thinking, writing, communication, and research
skills. The history curriculum offers integrated perspectives on political, social, economic, cultural, and military factors, which have shaped the city, the state, the nation, the region, Asia, Europe, and Latin America.

The history major is designed for students seeking a greater understanding of the past, teaching certification for grades 4-8 and secondary education, or preparation for careers in public history and graduate-level studies in the humanities and law. Drawing upon the holdings of the Special Collections and Archives Department as well as other library resources, the program also offers graduate courses for students enrolled in the Master of Arts in History program.

Students majoring in history choose one of two tracks, Historical Studies or Public History. With minor exceptions, both tracks share a common core but have different emphases in their upper-division electives. Both require a minimum of 33 semester hours of history coursework, at least 27 of which must be at the upper-division level. Six additional hours of lower-division United States history are required as part of the Core Curriculum Program. The College of Liberal Arts also requires students in history to take at least 6 hours of a second language. Students planning to pursue graduate study should elect additional courses which help achieve proficiency in foreign languages and/or statistics.

Student Learning Outcomes

Students will:

- think critically, read analytically, and write clearly;
- conduct independent research, handle primary sources, and construct an original historical thesis;
- and understand the social, economic, cultural, and political dimensions of historical development.

Degree Requirements

<table>
<thead>
<tr>
<th></th>
<th>Sem. Hrs.</th>
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<tbody>
<tr>
<td>1. Core Curriculum Program</td>
<td>42</td>
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<tr>
<td>2. First-Year Seminars (when applicable)*</td>
<td>(2)</td>
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<tr>
<td>3. Major Requirements</td>
<td></td>
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<tr>
<td>4. Electives</td>
<td>33</td>
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<tr>
<td>5. Foreign Language Requirements</td>
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</tbody>
</table>
*First Year Seminars or Electives

Historical Studies Track

University (History) Core Requirements: (6 hours):

- HIST 1301 - U.S. History to 1865* 3 sem. hrs.
- HIST 1302 - U.S. History Since 1865* 3 sem. hrs.
- HIST 2301 - Texas History 3 sem. hrs.

Major Requirements: (6 hours):

- HIST 3385 - The Art and Practice of History 3 sem. hrs.
- HIST 4385 - Historical Research and Writing 3 sem. hrs.

Lower-division Surveys (6 hours):

- HIST 2311 - Western Civilization I 3 sem. hrs.
- HIST 2312 - Western Civilization II 3 sem. hrs.
- HIST 2322 - World History Since 1500 3 sem. hrs.

Upper-division Surveys (3 hours):

- HIST 3303 - Colonial Latin America 3 sem. hrs.
- HIST 3304 - Modern Latin America 3 sem. hrs.
- HIST 3340 - Modern Asia 3 sem. hrs.
- HIST 4336 - Mexican American History 3 sem. hrs.

U.S. History (6 hours):

- HIST 3320 - Colonial and Revolutionary U.S. 3 sem. hrs.
- HIST 3321 - The Early American Republic 3 sem. hrs.
- HIST 3323 - Civil War and Reconstruction 3 sem. hrs.
- HIST 3324 - U.S. Gilded Age and Progressive Era 3 sem. hrs.
- HIST 3325 - Emergence of Modern U.S. 3 sem. hrs.
- HIST 3326 - U.S. Since 2nd World War 3 sem. hrs.
- HIST 3335 - The U.S. Urban Experience 3 sem. hrs.
- HIST 3345 - America by Nature 3 sem. hrs.
- HIST 3370 - Introduction to Public History 3 sem. hrs.
- HIST 3373 - Oral History and Podcasting 3 sem. hrs.
- HIST 4320 - U.S. Cultural Experience 3 sem. hrs.
- HIST 4327 - U.S. Modern Popular Culture 3 sem. hrs.
- HIST 4335 - The Military and United States History 3 sem. hrs.
- HIST 4336 - Mexican American History 3 sem. hrs.
  *
- HIST 4337 - United States Women's History 3 sem. hrs.
- HIST 4349 - Transnational Histories of Asia and the Pacific 3 sem. hrs.
  *
- HIST 4350 - Narratives of World War II in the Pacific 3 sem. hrs.
  *
- HIST 4352 - Mexican American Women's History 3 sem. hrs.
- HIST 4390 - Topics in History 3 sem. hrs.
  **

European and World History (6 hours):

- HIST 3301 - History of World Religions 3 sem. hrs.
- HIST 3303 - Colonial Latin America 3 sem. hrs.
  *
- HIST 3304 - Modern Latin America 3 sem. hrs.
  *
- HIST 3307 - The Ancient World 3 sem. hrs.
- HIST 3315 - Europe 1750-1815 3 sem. hrs.
- HIST 3317 - Europe 1815-1914 3 sem. hrs.
- HIST 3319 - Europe 1914 to the Present 3 sem. hrs.
- HIST 3340 - Modern Asia 3 sem. hrs.
  *
- HIST 3350 - Dictators and Dirty Wars in Latin America 3 sem. hrs.
- HIST 4340 - European Women's History 3 sem. hrs.
- HIST 4342 - The Holocaust 3 sem. hrs.
- HIST 4345 - European Thought and Culture, 1750-present 3 sem. hrs.
- HIST 4346 - The Search for Modern China: From 1600 to the Present 3 sem. hrs.
- HIST 4347 - The History of Sexuality in the West 3 sem. hrs.
- HIST 4349 - Transnational Histories of Asia and the Pacific 3 sem. hrs.
• HIST 4350 - Narratives of World War II in the Pacific 3 sem. hrs.

• HIST 4374 - Mexico: the National Period 3 sem. hrs.
• HIST 4375 - Cold War Kids: Youth in Modern Latin America 3 sem. hrs.
• HIST 4390 - Topics in History 3 sem. hrs.

**

6 hours of History electives; students may select any upper division History courses that are not required for the major.

Note:

Students from both tracks must take at least 3 hours of History ethnicity or gender classes, which include:

• HIST 4336 - Mexican American History 3 sem. hrs.
• HIST 4337 - United States Women's History 3 sem. hrs.
• HIST 4340 - European Women's History 3 sem. hrs.
• HIST 4347 - The History of Sexuality in the West 3 sem. hrs.
• HIST 4352 - Mexican American Women's History 3 sem. hrs.

Total: 33 hrs.

Note:

*May not be used to satisfy requirements in more than one cluster.

**When topic is approved for cluster--see S.A.I.L. or advisor for further information.

Public History Track

University (History) Core Requirements (6 hours):

• HIST 1301 - U.S. History to 1865* 3 sem. hrs.
• HIST 1302 - U.S. History Since 1865* 3 sem. hrs.
• HIST 2301 - Texas History 3 sem. hrs.

Major Requirements (9 hours):

• HIST 2322 - World History Since 1500 3 sem. hrs.
• HIST 3385 - The Art and Practice of History 3 sem. hrs.
HIST 4385 - Historical Research and Writing 3 sem. hrs.

Western Civilization Surveys (3 hours):

- HIST 2311 - Western Civilization I 3 sem. hrs.
- HIST 2312 - Western Civilization II 3 sem. hrs.

Upper-division Surveys (3 hours):

- HIST 3303 - Colonial Latin America 3 sem. hrs. *
- HIST 3304 - Modern Latin America 3 sem. hrs. *
- HIST 3340 - Modern Asia 3 sem. hrs. *
- HIST 4336 - Mexican American History 3 sem. hrs. *

U.S. History (3 hours):

- HIST 3320 - Colonial and Revolutionary U.S. 3 sem. hrs.
- HIST 3321 - The Early American Republic 3 sem. hrs.
- HIST 3323 - Civil War and Reconstruction 3 sem. hrs.
- HIST 3324 - U.S. Gilded Age and Progressive Era 3 sem. hrs.
- HIST 3325 - Emergence of Modern U.S. 3 sem. hrs.
- HIST 3326 - U.S. Since 2nd World War 3 sem. hrs.
- HIST 3335 - The U.S. Urban Experience 3 sem. hrs.
- HIST 3345 - America by Nature 3 sem. hrs. *
- HIST 3370 - Introduction to Public History 3 sem. hrs. *
- HIST 3373 - Oral History and Podcasting 3 sem. hrs. *
- HIST 4320 - U.S. Cultural Experience 3 sem. hrs.
- HIST 4327 - U.S. Modern Popular Culture 3 sem. hrs.
- HIST 4335 - The Military and United States History 3 sem. hrs.
- HIST 4336 - Mexican American History 3 sem. hrs. *
- HIST 4337 - United States Women's History 3 sem. hrs.
- HIST 4349 - Transnational Histories of Asia and the Pacific 3 sem. hrs. *
- HIST 4350 - Narratives of World War II in the Pacific 3 sem. hrs. *
  *
- HIST 4352 - Mexican American Women's History 3 sem. hrs.
- HIST 4390 - Topics in History 3 sem. hrs. **

European and World History (3 hours):

- HIST 3301 - History of World Religions 3 sem. hrs.
- HIST 3303 - Colonial Latin America 3 sem. hrs. *
- HIST 3304 - Modern Latin America 3 sem. hrs. *
- HIST 3307 - The Ancient World 3 sem. hrs.
- HIST 3315 - Europe 1750-1815 3 sem. hrs.
- HIST 3317 - Europe 1815-1914 3 sem. hrs.
- HIST 3319 - Europe 1914 to the Present 3 sem. hrs.
- HIST 3340 - Modern Asia 3 sem. hrs. *
- HIST 3350 - Dictators and Dirty Wars in Latin America 3 sem. hrs.
- HIST 4340 - European Women's History 3 sem. hrs.
- HIST 4342 - The Holocaust 3 sem. hrs.
- HIST 4345 - European Thought and Culture, 1750-present 3 sem. hrs.
- HIST 4346 - The Search for Modern China: From 1600 to the Present 3 sem. hrs.
- HIST 4347 - The History of Sexuality in the West 3 sem. hrs.
- HIST 4349 - Transnational Histories of Asia and the Pacific 3 sem. hrs. *
- HIST 4350 - Narratives of World War II in the Pacific 3 sem. hrs. *
- HIST 4374 - Mexico: the National Period 3 sem. hrs.
- HIST 4375 - Cold War Kids: Youth in Modern Latin America 3 sem. hrs.
- HIST 4390 - Topics in History 3 sem. hrs. **

Public History Requirements (6 hours):

- HIST 3370 - Introduction to Public History 3 sem. hrs. *
- HIST 4399 - Internship 3 sem. hrs.

Public History Electives (6 hours):

- HIST 3335 - The U.S. Urban Experience 3 sem. hrs. *
- HIST 3373 - Oral History and Podcasting 3 sem. hrs. *
- HIST 4350 - Narratives of World War II in the Pacific 3 sem. hrs. *
- HIST 4399 - Internship 3 sem. hrs.
- HIST 4390 - Topics in History 3 sem. hrs. **
- ENGL 4321 - Grants and Proposals 3 sem. hrs.

Note:

Students from both tracks must take at least 3 hours of History, ethnicity or gender classes, which include:

- HIST 4336 - Mexican American History 3 sem. hrs.
- HIST 4337 - United States Women's History 3 sem. hrs.
- HIST 4340 - European Women's History 3 sem. hrs.
• HIST 4347 - The History of Sexuality in the West 3 sem. hrs.
• HIST 4352 - Mexican American Women's History 3 sem. hrs.

Total: 33 hrs.

Note:

*May not be used to satisfy requirements in more than one cluster.

**When topic is approved for cluster--see S.A.I.L. or advisor for further information.

Philosophy, BA

Philosophy involves rigorous, persistent reflection on a wide range of issues, such as how one ought to live, the existence of God and the problem of evil, the relation between mind and body, and the ways in which beliefs may be justified. Students in philosophy courses learn to:

• understand important periods, themes, movements, and figures in the history of philosophy;
• apply ethical theories to major social issues;
• analyze arguments using the principles and methods of logic;
• develop their own philosophical views and arguments;
• evaluate responses to problems in metaphysics, epistemology, and other areas of philosophy.

The study of philosophy can have a significant impact on one’s beliefs and values, and it helps develop a variety of intellectual skills and abilities which students can put to use in their lives, whatever they choose to do after they graduate. Among those skills and abilities are the capacities to engage in thinking that is critical, disciplined and creative; to express oneself effectively and appreciate the ideas and perspectives of others; to uncover and examine assumptions; to understand, construct, and evaluate arguments on different sides of issues; and to deal reasonably with questions to which there are no easy answers.

Studying philosophy also prepares students well for professional careers in such fields as law, ministry, psychology, business, and medicine, and for postgraduate work in philosophy. In recent years, philosophy majors have achieved exceptionally high scores on admissions tests to law schools and business schools (the LSAT and the GMAT) and on the GRE. They have been extremely successful in gaining admission to law schools and medical schools.
Students may select philosophy as a major or as a minor. Philosophy courses are also offered as electives for students in all fields of study.

Degree Requirements

Students majoring in philosophy must complete a minimum of 30 semester hours of philosophy course work, at least 21 of which must be at the upper-division level. The course work must be selected from the groups of courses listed below.

<table>
<thead>
<tr>
<th>Sem. Hrs.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. University Core Curriculum Programs</td>
<td>42</td>
</tr>
<tr>
<td>2. First-Year Seminars (when applicable)*</td>
<td>(2)</td>
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<tr>
<td>3. Major Requirements</td>
<td>30</td>
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<tr>
<td>4. University Electives</td>
<td>40-42</td>
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<tr>
<td>5. Foreign Language Requirements</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>120 (122)</td>
</tr>
</tbody>
</table>

*First Year Seminars

First-Year Seminars or Electives

9 hours from Basic Philosophy Courses

- PHIL 1301 - Introduction to Philosophy 3 sem. hrs. *
- PHIL 2303 - Introduction to Logic and Critical Thinking 3 sem. hrs. *
- PHIL 2306 - Introduction to Ethics 3 sem. hrs. *

6 hours from History of Philosophy

- PHIL 3306 - History of Eastern Philosophy I 3 sem. hrs.
- PHIL 3307 - History of Eastern Philosophy II 3 sem. hrs.
- PHIL 3327 - American Philosophy 3 sem. hrs. **
- PHIL 4321 - Ancient Philosophy 3 sem. hrs. **
- PHIL 4322 - Modern Philosophy 3 sem. hrs. **
- PHIL 4323 - Contemporary Philosophy 3 sem. hrs. **

6 hours from Metaphysics and Epistemology
• PHIL 3327 - American Philosophy 3 sem. hrs. **
• PHIL 4303 - Minds and Machines 3 sem. hrs.
• PHIL 4304 - Metaphysics 3 sem. hrs.
• PHIL 4305 - Truth, Knowledge, and Justification 3 sem. hrs.
• PHIL 4321 - Ancient Philosophy 3 sem. hrs. **
• PHIL 4322 - Modern Philosophy 3 sem. hrs. **
• PHIL 4323 - Contemporary Philosophy 3 sem. hrs. **
• PHIL 4330 - Philosophy and History of Science and Technology 3 sem. hrs.
• PHIL 4331 - Issues in Philosophy of Religion 3 sem. hrs.

3 hours from Values and Society

• PHIL 3342 - Philosophy of Love and Sex 3 sem. hrs.
• PHIL 3343 - Philosophy of Law 3 sem. hrs.
• PHIL 3344 - Social and Political Philosophy 3 sem. hrs.
• PHIL 3345 - The Meaning of Life 3 sem. hrs.
• PHIL 3348 - Ethics, War, and Terrorism 3 sem. hrs.
• PHIL 4332 - Moral Issues in Contemporary Medicine 3 sem. hrs.
• PHIL 4333 - Environmental Ethics 3 sem. hrs.
• PHIL 4335 - Moral Philosophy 3 sem. hrs.

6 hours from Prescribed Electives; students may select (a) courses from the list below, or (b) any other upper-level philosophy courses that they are not using to satisfy the requirements of the groups listed above.

• PHIL 3346 - Elementary Formal Logic 3 sem. hrs.
• PHIL 3347 - Philosophy and Science Fiction 3 sem. hrs.
• PHIL 4336 - Advanced Seminar in Philosophy 3 sem. hrs.
• PHIL 4337 - Philosophy of Language 3 sem. hrs.
• PHIL 4390 - Topics in Philosophy 3 sem. hrs.
• PHIL 4396 - Directed Individual Study 1-3 sem. hrs.

Students are encouraged to take PHIL 1301 and PHIL 2303 as early as possible in their pursuit of the major.

*May not be taken for both Philosophy credit and Core Curriculum credit. Students who take the course for Core Curriculum credit must take an upper level Philosophy course to meet this Basic Philosophy Course requirement.

**May count towards either the History of Philosophy requirement or the Metaphysics and Epistemology requirement (but cannot be counted towards both requirements).
Spanish, BA

The Spanish program offers a major and minor in Spanish. The main focus of the program is to develop the student's language proficiency and the literary, cultural, practical application, and translation competencies demanded by many professional fields. To accomplish these goals, the Spanish curriculum includes courses in general Spanish Language, Spanish for the Professions, Hispanic Linguistics, Spanish and Spanish-American Literatures and Civilizations, and Translation. These courses are provided for students pursuing a Bachelor of Arts degree in Spanish with or without Secondary Teacher Certification, or Spanish/English Translation Certificate; for those fulfilling Second Language requirements or the Language, Philosophy, and Culture requirement in the Core Curriculum Program, and for those seeking electives to support majors and minors in other fields.

Student Learning Outcomes

Students will

- demonstrate advanced proficiency in Spanish through performance on examinations, in-class presentations, and research papers;
- demonstrate the ability to understand, analyze, and interpret the cultural, linguistic and literary aspects of the Spanish-speaking countries through in-class presentations, examinations, and research papers;
- demonstrate proficiency in the practice, theory, and ethical aspects of translation and interpretation through in-class presentations, examinations, and translation projects;
- be prepared to teach Spanish and/or continue their studies at the graduate level.

For students planning to register for 3000 or 4000 level courses, Spanish Faculty approval or a prerequisite of two 2000 courses (or equivalent) is required. For Teacher Certification, both the TExES examination (LOTE-613 [Languages Other Than English]) and the PPR-160 (Pedagogy and Professional Responsibilities Test) must be completed. For the Translation Certificate, students must complete 16 credits of Spanish translation related coursework and pass an exit exam.

Students interested in Credit by Examination towards the Spanish major or minor must do so through the AP, IB, CLEP, or ACTFL exams. Students who choose the CLEP exam need to be cleared by a member of the Spanish faculty to apply those credits towards the major (or minor) and enroll in upper-division courses. The Bachelor of Arts in Spanish requires a minimum of 36 semester hours in Spanish, out of which 30 must be upper-division. The distribution of upper and lower-division hours can be found below. Students seeking a B.A. in Spanish must complete the following requirements.
## Degree Requirements

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>2. First-Year Seminars (when applicable)</td>
<td>36</td>
</tr>
<tr>
<td>3. Major Requirements</td>
<td>34-36</td>
</tr>
<tr>
<td>4. University Electives</td>
<td>6</td>
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<tr>
<td>5. Foreign Language Requirement</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

The Spanish BA Program consists of a total of 36 hours with the following distribution:

Full-time, first-year student are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

27 hours from:

**Base Language (6 hrs):**

- SPAN 2311 - Spanish III 3 sem. hrs.
  (Or credit-by examination)
- SPAN 2312 - Continuing Spanish 3 sem. hrs.
  (Or credit-by-examination)
- SPAN 2313 - Spanish for Heritage Speakers 3 sem. hrs.
  (Or credit-by-examination)
- SPAN 2315 - Language and Culture for Heritage Learners 3 sem. hrs.
  (Or credit by examination)

**Grammar & Writing (6 hrs):**

- SPAN 3302 - Spanish Composition 3 sem. hrs.
- SPAN 3312 - Spanish Grammar 3 sem. hrs.
Linguistics & Oral Communication (3 hrs):

- SPAN 3303 - Spanish Conversation 3 sem. hrs.
- SPAN 3311 - Spanish Phonetics 3 sem. hrs.
- SPAN 3317 - Introduction to Hispanic Linguistics 3 sem. hrs.
- SPAN 4320 - Spanish in the Americas 3 sem. hrs.
- SPAN 4327 - Methods in Foreign Language Instruction 3 sem. hrs.

Culture & Civilization (3 hrs.)

- SPAN 3304 - Spanish Civilization 3 sem. hrs.
- SPAN 3305 - Latin American Civilization 3 sem. hrs.
- SPAN 3315 - Civilizations of the Spanish-Speaking World 3 sem. hrs.

Spanish Literature (3 hrs):

- SPAN 3320 - Introduction to Spanish Literature 3 sem. hrs.
- SPAN 4304 - Miguel de Cervantes' Don Quijote 3 sem. hrs.
- SPAN 4306 - Modern Spanish Literature 3 sem. hrs.
- SPAN 4390 - Topics in Spanish 3 sem. hrs.

Latin American Literature (3 hrs):

- SPAN 3325 - Introduction to Latin American Literature 3 sem. hrs.
- SPAN 4302 - Mexican Narrative 3 sem. hrs.
- SPAN 4305 - Latin American Novel 3 sem. hrs.
- SPAN 4390 - Topics in Spanish 3 sem. hrs.

Translation and Applied Spanish (3 hrs):

- SPAN 3313 - Introduction to Translation 3 sem. hrs.
- SPAN 3316 - Spanish for the Professions 3 sem. hrs.

9 hours from any of the following:

Literature and Culture:

- SPAN 3304 - Spanish Civilization 3 sem. hrs.
- SPAN 3305 - Latin American Civilization 3 sem. hrs.
- SPAN 3315 - Civilizations of the Spanish-Speaking World 3 sem. hrs.
• SPAN 3320 - Introduction to Spanish Literature 3 sem. hrs.
• SPAN 3325 - Introduction to Latin American Literature 3 sem. hrs.
• SPAN 4302 - Mexican Narrative 3 sem. hrs.
• SPAN 4304 - Miguel de Cervantes' Don Quijote 3 sem. hrs.
• SPAN 4305 - Latin American Novel 3 sem. hrs.
• SPAN 4306 - Modern Spanish Literature 3 sem. hrs.
• SPAN 4390 - Topics in Spanish 3 sem. hrs.

Linguistics:

• SPAN 3311 - Spanish Phonetics 3 sem. hrs.
• SPAN 3317 - Introduction to Hispanic Linguistics 3 sem. hrs.
• SPAN 4320 - Spanish in the Americas 3 sem. hrs.
• SPAN 4327 - Methods in Foreign Language Instruction 3 sem. hrs.

Translation:

• SPAN 3313 - Introduction to Translation 3 sem. hrs.
• SPAN 3316 - Spanish for the Professions 3 sem. hrs.
• SPAN 4322 - Medical, Scientific and Technical Translation 3 sem. hrs.
• SPAN 4421 - Business, Commercial, and Legal Translation 4 sem. hrs.

About Upper-Division Spanish Courses

To enroll in upper-division Spanish courses, students must first do one of the following:

• pass two 2000 level Spanish courses.
• receive an equivalent score on the AP, IB, CLEP, or ACTFL tests.
• obtain approval from Spanish Faculty.

About the Teaching Certification and the Translation Certificate:

• Students interested in receiving the Teaching Certification in Spanish, see catalog section under Spanish Teaching Certification.
• Students interested in receiving the Spanish/English Translation Certificate, see catalog section under Certificates. Note that only 6 hours from this certificate can be applied to the Spanish major.

About Double-Majors and Double-Degrees:
Students who pursue the Spanish major as support for another major or degree in a different discipline are allowed to complete the program with 36 hours, at least 21 of which must be upper-division. Since these students are completing entire programs in another field simultaneously, they are allowed to complete the 36 hours with any distribution of their choice.

Teacher Certificate

History Teacher Certifications

Admission and Retention Requirements for History Certification

For admission to and retention in Teacher Education in the field of History, students must achieve and sustain a 2.75 GPA in all history coursework. To qualify to take the History (Secondary) TExES examination, students must meet the following criteria:

1. Have at least a 2.5 GPA on all college coursework (lower and upper level).
2. Have a 2.75 GPA on all history coursework (lower and upper level).
3. Be advised by the Content Area Certification Coordinator for History and Social Studies.

Students who fail the certification exam must meet with the Content Area Certification Coordinator for History and Social Studies to develop an action plan before re-taking the exam.

Students returning to the University to complete certification must see the History TExES coordinator or designee to receive a deficiency plan. All criteria outlined in the plan must be met before the student will be permitted to take the History TExES.

Students seeking certification must also qualify to take the Professional Development TExES. For information, see the College of Education and Human Development section of this catalog.

Students seeking teacher certification in history or social studies must take the following courses, in addition to the Core Curriculum Program and all professional development courses. Students who have substituted Texas History for three hours of U.S. History in meeting their core curriculum requirements are still responsible for successfully completing both HIST 1301 and HIST 1302 for History certification. Please see the College of Education and Human Development for a list of professional development courses.
History (Grades 7-12)

Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core Curriculum Program*</td>
<td>42 (2)</td>
</tr>
<tr>
<td>2. First-Year Seminars (when applicable)</td>
<td>42</td>
</tr>
<tr>
<td>3. Content Area Requirements</td>
<td>24</td>
</tr>
<tr>
<td>4. Professional Development</td>
<td></td>
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<tr>
<td>5. Teacher Certification Requirements</td>
<td>3</td>
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<tr>
<td>6. Foreign Language Requirement</td>
<td>6</td>
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<tr>
<td>7. University Electives</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>120 (122)</strong></td>
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</tbody>
</table>

A. University Core Curriculum (42 SCH)

See Core Curriculum Program.

*All certification track students are required to take 9 hours of English in the Core Curriculum program.

B. First-Year Seminars or Electives (2 SCH)

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

C. Content Area Requirements (42 SCH)

History Core Requirements (24 SCH)

- HIST 2301 - Texas History 3 sem. hrs.
- HIST 2311 - Western Civilization I 3 sem. hrs.
- HIST 2312 - Western Civilization II 3 sem. hrs.
- HIST 2322 - World History Since 1500 3 sem. hrs.
- HIST 3304 - Modern Latin America 3 sem. hrs.
- HIST 3340 - Modern Asia 3 sem. hrs.
• HIST 3385 - The Art and Practice of History 3 sem. hrs.
• HIST 4385 - Historical Research and Writing 3 sem. hrs.

U.S. History Electives (6 SCH)

• HIST 3320 - Colonial and Revolutionary U.S. 3 sem. hrs.
• HIST 3321 - The Early American Republic 3 sem. hrs.
• HIST 3323 - Civil War and Reconstruction 3 sem. hrs.
• HIST 3324 - U.S. Gilded Age and Progressive Era 3 sem. hrs.
• HIST 3325 - Emergence of Modern U.S. 3 sem. hrs.
• HIST 3326 - U.S. Since 2nd World War 3 sem. hrs.
• HIST 3335 - The U.S. Urban Experience 3 sem. hrs.
• HIST 3345 - America by Nature 3 sem. hrs.
• HIST 3370 - Introduction to Public History 3 sem. hrs.
• HIST 3373 - Oral History and Podcasting 3 sem. hrs.
• HIST 4320 - U.S. Cultural Experience 3 sem. hrs.
• HIST 4327 - U.S. Modern Popular Culture 3 sem. hrs.
• HIST 4335 - The Military and United States History 3 sem. hrs.
• HIST 4336 - Mexican American History 3 sem. hrs.
• HIST 4337 - United States Women's History 3 sem. hrs.
• HIST 4349 - Transnational Histories of Asia and the Pacific 3 sem. hrs.
• HIST 4350 - Narratives of World War II in the Pacific 3 sem. hrs.
• HIST 4352 - Mexican American Women's History 3 sem. hrs.
• HIST 4390 - Topics in History 3 sem. hrs.
  (when appropriate)

European and World History Electives (6 SCH)

• HIST 3301 - History of World Religions 3 sem. hrs.
• HIST 3307 - The Ancient World 3 sem. hrs.
• HIST 3315 - Europe 1750-1815 3 sem. hrs.
• HIST 3317 - Europe 1815-1914 3 sem. hrs.
• HIST 3319 - Europe 1914 to the Present 3 sem. hrs.
• HIST 3350 - Dictators and Dirty Wars in Latin America 3 sem. hrs.
• HIST 4340 - European Women's History 3 sem. hrs.
• HIST 4342 - The Holocaust 3 sem. hrs.
• HIST 4345 - European Thought and Culture, 1750-present 3 sem. hrs.
• HIST 4346 - The Search for Modern China: From 1600 to the Present 3 sem. hrs.
• HIST 4347 - The History of Sexuality in the West 3 sem. hrs.
• HIST 4349 - Transnational Histories of Asia and the Pacific 3 sem. hrs.
• HIST 4350 - Narratives of World War II in the Pacific 3 sem. hrs.
- HIST 4374 - Mexico: the National Period 3 sem. hrs.
- HIST 4375 - Cold War Kids: Youth in Modern Latin America 3 sem. hrs.
- HIST 4390 - Topics in History 3 sem. hrs.
  (when appropriate)

6 hours of History electives; students may select any upper division History courses that are not in the Requirements cluster.

D. Professional Development (24 SCH)

Please see the College of Education and Human Development for a list of professional development courses.

E. Teacher Certification Requirements (3 SCH)

- READ 3353 - Content Area Reading for Secondary Students 3 sem. hrs.

F. Foreign Language Requirement (6 SCH)

Please see the College of Liberal Arts for the college language requirement.

G. University Electives (3 SCH)

Social Studies (Grades 4-8)

Degree Requirements

<table>
<thead>
<tr>
<th></th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core Curriculum Program</td>
<td>(2)</td>
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<tr>
<td>2. First-Year Seminars (when applicable)</td>
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<tr>
<td>3. Content Area Requirements</td>
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<td>4. Professional Development</td>
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<td>5. Teacher Certification Requirements</td>
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<td>6. Foreign Language Requirement</td>
<td>6</td>
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<td></td>
<td>Total 129 (131)</td>
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</table>

A. University Core Curriculum (42 SCH)
See Core Curriculum Program.

All certification track students are required to take 9 hours of English in the Core Curriculum program.

B. First-Year Seminars (2 SCH)

Full-time, first-year student are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

C. Content Area Requirements (39 SCH)

History Core Requirements (24 SCH)

- ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
- GEOG 1300 - World Geography 3 sem. hrs.
- HIST 2301 - Texas History 3 sem. hrs.
- HIST 2311 - Western Civilization I 3 sem. hrs.
- HIST 2312 - Western Civilization II 3 sem. hrs.
- HIST 2322 - World History Since 1500 3 sem. hrs.
- HIST 3304 - Modern Latin America 3 sem. hrs.
- HIST 3340 - Modern Asia 3 sem. hrs.

U. S. History Electives (6 SCH)

- HIST 3320 - Colonial and Revolutionary U.S. 3 sem. hrs.
- HIST 3321 - The Early American Republic 3 sem. hrs.
- HIST 3323 - Civil War and Reconstruction 3 sem. hrs.
- HIST 3324 - U.S. Gilded Age and Progressive Era 3 sem. hrs.
- HIST 3325 - Emergence of Modern U.S. 3 sem. hrs.
- HIST 3326 - U.S. Since 2nd World War 3 sem. hrs.
- HIST 3335 - The U.S. Urban Experience 3 sem. hrs.
- HIST 3345 - America by Nature 3 sem. hrs.
- HIST 3370 - Introduction to Public History 3 sem. hrs.
- HIST 3373 - Oral History and Podcasting 3 sem. hrs.
- HIST 4320 - U.S. Cultural Experience 3 sem. hrs.
- HIST 4327 - U.S. Modern Popular Culture 3 sem. hrs.
- HIST 4335 - The Military and United States History 3 sem. hrs.
- HIST 4336 - Mexican American History 3 sem. hrs.
- HIST 4337 - United States Women's History 3 sem. hrs.
• HIST 4349 - Transnational Histories of Asia and the Pacific 3 sem. hrs.
• HIST 4350 - Narratives of World War II in the Pacific 3 sem. hrs.
• HIST 4352 - Mexican American Women's History 3 sem. hrs.
• HIST 4390 - Topics in History 3 sem. hrs.
(when appropriate)

European and World History Electives (6 SCH)

• HIST 3301 - History of World Religions 3 sem. hrs.
• HIST 3303 - Colonial Latin America 3 sem. hrs.
• HIST 3307 - The Ancient World 3 sem. hrs.
• HIST 3315 - Europe 1750-1815 3 sem. hrs.
• HIST 3317 - Europe 1815-1914 3 sem. hrs.
• HIST 3319 - Europe 1914 to the Present 3 sem. hrs.
• HIST 3350 - Dictators and Dirty Wars in Latin America 3 sem. hrs.
• HIST 4340 - European Women's History 3 sem. hrs.
• HIST 4342 - The Holocaust 3 sem. hrs.
• HIST 4345 - European Thought and Culture, 1750-present 3 sem. hrs.
• HIST 4346 - The Search for Modern China: From 1600 to the Present 3 sem. hrs.
• HIST 4347 - The History of Sexuality in the West 3 sem. hrs.
• HIST 4349 - Transnational Histories of Asia and the Pacific 3 sem. hrs.
• HIST 4350 - Narratives of World War II in the Pacific 3 sem. hrs.
• HIST 4374 - Mexico: the National Period 3 sem. hrs.
• HIST 4375 - Cold War Kids: Youth in Modern Latin America 3 sem. hrs.
• HIST 4390 - Topics in History 3 sem. hrs.
(when appropriate)

Political Science Electives (3 SCH)

• POLS 3313 - The Legislative Process 3 sem. hrs.
• POLS 3314 - Public Opinion 3 sem. hrs.
• POLS 3315 - Political Parties 3 sem. hrs.
• POLS 3316 - The American Presidency 3 sem. hrs.

D. Professional Development (24 SCH)

Please see the College of Education and Human Development for a list of professional development courses.

E. Teacher Certification Requirements (18 SCH)

• READ 3320 - Principles and Practices of Reading Instruction 3 sem. hrs.
• READ 3351 - Diagnosis and Correction of Reading Problems 3 sem. hrs.
• SMTE 1350 - Fundamentals of Mathematics I* 3 sem. hrs.
• SMTE 1351 - Fundamentals of Mathematics II* 3 sem. hrs.
• SMTE 3315 - Foundational Approaches to the Physical Sciences 3 sem. hrs.
• SMTE 3316 - Foundational Approaches to the Life Sciences 3 sem. hrs.

F. Foreign Language Requirement (6 SCH)

Please see the College of Liberal Arts for the college language requirement.

Social Studies (Grades 7-12)

Degree Requirements

<table>
<thead>
<tr>
<th></th>
<th>Sem. Hrs.</th>
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<tbody>
<tr>
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<td>42</td>
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<tr>
<td>1. Core Curriculum Program*</td>
<td>(2)</td>
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<td>2. First-Year Seminars (when applicable)</td>
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<td>3. Major Requirements</td>
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<td>4. Professional Development</td>
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<td>5. Teacher Certification Requirements</td>
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<td>6. Foreign Language Requirement</td>
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<td>Total</td>
<td>120 (122)</td>
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</tbody>
</table>

A. University Core Curriculum (42 SCH)

See Core Curriculum Program.

*All certification track students are required to take 9 hours of English in the Core Curriculum program.

B. First-Year Seminars or Electives (2 SCH)

• UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
• UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

C. Content Area Requirements (45 SCH)
History Core Requirements (27 SCH)

- ECON 2301 - Macroeconomics Principles* 3 sem. hrs.
- GEOG 1300 - World Geography 3 sem. hrs.
- HIST 2301 - Texas History 3 sem. hrs.
- HIST 2311 - Western Civilization I 3 sem. hrs.
- HIST 2312 - Western Civilization II 3 sem. hrs.
- HIST 2322 - World History Since 1500 3 sem. hrs.
- HIST 3304 - Modern Latin America 3 sem. hrs.
- HIST 3340 - Modern Asia 3 sem. hrs.
- HIST 4385 - Historical Research and Writing 3 sem. hrs.

U.S. History Electives (6 SCH)

- HIST 3320 - Colonial and Revolutionary U.S. 3 sem. hrs.
- HIST 3321 - The Early American Republic 3 sem. hrs.
- HIST 3323 - Civil War and Reconstruction 3 sem. hrs.
- HIST 3324 - U.S. Gilded Age and Progressive Era 3 sem. hrs.
- HIST 3325 - Emergence of Modern U.S. 3 sem. hrs.
- HIST 3326 - U.S. Since 2nd World War 3 sem. hrs.
- HIST 3335 - The U.S. Urban Experience 3 sem. hrs.
- HIST 3345 - America by Nature 3 sem. hrs.
- HIST 3370 - Introduction to Public History 3 sem. hrs.
- HIST 3373 - Oral History and Podcasting 3 sem. hrs.
- HIST 4320 - U.S. Cultural Experience 3 sem. hrs.
- HIST 4327 - U.S. Modern Popular Culture 3 sem. hrs.
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- HIST 4350 - Narratives of World War II in the Pacific 3 sem. hrs.
- HIST 4352 - Mexican American Women's History 3 sem. hrs.
- HIST 4390 - Topics in History 3 sem. hrs.
  (when appropriate)

European and World History Electives (6 SCH)

- HIST 3301 - History of World Religions 3 sem. hrs.
- HIST 3303 - Colonial Latin America 3 sem. hrs.
- HIST 3307 - The Ancient World 3 sem. hrs.
- HIST 3315 - Europe 1750-1815 3 sem. hrs.
• HIST 3317 - Europe 1815-1914 3 sem. hrs.
• HIST 3319 - Europe 1914 to the Present 3 sem. hrs.
• HIST 3350 - Dictators and Dirty Wars in Latin America 3 sem. hrs.
• HIST 4340 - European Women's History 3 sem. hrs.
• HIST 4342 - The Holocaust 3 sem. hrs.
• HIST 4345 - European Thought and Culture, 1750-present 3 sem. hrs.
• HIST 4346 - The Search for Modern China: From 1600 to the Present 3 sem. hrs.
• HIST 4347 - The History of Sexuality in the West 3 sem. hrs.
• HIST 4349 - Transnational Histories of Asia and the Pacific 3 sem. hrs.
• HIST 4374 - Mexico: the National Period 3 sem. hrs.
• HIST 4375 - Cold War Kids: Youth in Modern Latin America 3 sem. hrs.
• HIST 4390 - Topics in History 3 sem. hrs.
(when appropriate)

Political Science Electives (6 SCH)

• POLS 3313 - The Legislative Process 3 sem. hrs.
• POLS 3314 - Public Opinion 3 sem. hrs.
• POLS 3315 - Political Parties 3 sem. hrs.
• POLS 3316 - The American Presidency 3 sem. hrs.
• POLS 3321 - Comparative Politics 3 sem. hrs.
• POLS 3331 - International Relations 3 sem. hrs.
• POLS 3361 - Western Political Theory 3 sem. hrs.
• POLS 4361 - American Political Thought 3 sem. hrs.

D. Professional Development (24 SCH)

Please see the College of Education and Human Development for a list of professional development courses.

E. Teacher Certification Requirements (3 SCH)

• READ 3353 - Content Area Reading for Secondary Students^ 3 sem. hrs.

F. Foreign Language Requirement (6 SCH)

Please see the College of Liberal Arts for the college language requirement.

Spanish Teaching Certification EC-12
Admission and Retention Requirements for Spanish Certification

For admission to and retention in Teacher Education in the field of Spanish, students must achieve and sustain a 2.75 GPA in all Spanish coursework. To qualify to take the Spanish (All Level) TExES examination (LOTE-613), students must meet the following criteria:

1. Have at least a 2.5 GPA on all college coursework (lower and upper level).
2. Have a 2.75 GPA on all Spanish coursework (lower and upper level).
3. Have completed one Spanish TExES Review Workshop. This workshop must be taken in the semester prior to the term the student takes the TExES.
4. Provide official permit with approval of Spanish certification coordinator or designee.

Students returning to the University to complete certification must see the Spanish certification coordinator to receive a deficiency plan. All criteria outlined in the plan must be met before the student will be permitted to take the Spanish TExES.

For further information on required professional development courses, the Professional Development TExES (PPR-160), and other Teacher Certification requirements, please see the College of Education section of this catalog. Students should also consult the Certification Office of the College of Education for complete and current information about Teacher Certification requirements.

Students seeking Teacher Certification in Spanish must take a minimum of 36 semester hours in Spanish, at least 30 of which must be at the upper-division level.

Degree Requirements

<table>
<thead>
<tr>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
</tr>
</tbody>
</table>

1. Core Curriculum Program
2. First-Year Seminars (when applicable)* (2)
3. Major Requirements
4. Professional Development 36
5. Certification Requirements 24
6. University Electives
7. Foreign Language Requirement 3
First-Year Seminars

First-Year Seminars or Electives

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Requirements

36 hours from:

Base Language (6 hrs):

- SPAN 2311 - Spanish III 3 sem. hrs.
- SPAN 2312 - Continuing Spanish 3 sem. hrs.
- SPAN 2313 - Spanish for Heritage Speakers 3 sem. hrs.
- SPAN 2315 - Language and Culture for Heritage Learners 3 sem. hrs.

Grammar & Writing (6 hrs):

- SPAN 3302 - Spanish Composition 3 sem. hrs.
- SPAN 3312 - Spanish Grammar 3 sem. hrs.

Oral Communication (3 hrs):

- SPAN 3303 - Spanish Conversation 3 sem. hrs.
- SPAN 4320 - Spanish in the Americas 3 sem. hrs.

Linguistics (9 hrs):

- SPAN 3311 - Spanish Phonetics 3 sem. hrs.
- SPAN 3317 - Introduction to Hispanic Linguistics 3 sem. hrs.
- SPAN 4327 - Methods in Foreign Language Instruction 3 sem. hrs.
Culture & Civilization (3 hrs):

- SPAN 3304 - Spanish Civilization 3 sem. hrs.
- SPAN 3305 - Latin American Civilization 3 sem. hrs.
- SPAN 3315 - Civilizations of the Spanish-Speaking World 3 sem. hrs.

Spanish Literature (3 hrs):

- SPAN 3320 - Introduction to Spanish Literature 3 sem. hrs.
- SPAN 4304 - Miguel de Cervantes' Don Quijote 3 sem. hrs.
- SPAN 4306 - Modern Spanish Literature 3 sem. hrs.
- SPAN 4390 - Topics in Spanish 3 sem. hrs.

Latin American Literature (3 hrs):

- SPAN 3325 - Introduction to Latin American Literature 3 sem. hrs.
- SPAN 4302 - Mexican Narrative 3 sem. hrs.
- SPAN 4305 - Latin American Novel 3 sem. hrs.
- SPAN 4390 - Topics in Spanish 3 sem. hrs.

Translation & Applied Spanish (3 hrs):

- SPAN 3313 - Introduction to Translation 3 sem. hrs.
- SPAN 3316 - Spanish for the Professions 3 sem. hrs.

In addition, students in the Teacher Certification Program must complete 27 hours in Reading and Professional Development:

- EDUC 3311 - School and Society 3 sem. hrs.
- EDUC 4312 - Classroom Management: Grades 7-12 3 sem. hrs.
- EDUC 4322 - Instructional Design for Special Populations: Grades 7-12 3 sem. hrs.
- EDUC 4606 - Planning, Teaching, Assessment and Technology for Grades 7-12 Teachers 6 sem. hrs.
- EDUC 4993 - Student Teaching: Grades 7-12 9 sem. hrs.
- READ 3353 - Content Area Reading for Secondary Students 3 sem. hrs.

and pass both the TExES examination (LOTE-613 [Languages Other Than English]) and the PPR-160 (Pedagogy and Professional Responsibilities Test) in order to receive the Teacher Certification.

Minor
History Minor

The History minor is designed for students who are interested in history but cannot commit to it as their major. It makes an excellent companion for students majoring in pre-law and criminal justice, political science, literature and modern languages, philosophy, and sociology.

The minor requires just eighteen credit hours beyond the history core and can usually be completed in one academic year. After completing six hours of lower-division history surveys (HIST 2311, 2312, 2322), students choose two courses each from two large clusters of upper-division electives.

University (History) Core Requirements (6 hours):

- HIST 1301 - U.S. History to 1865* 3 sem. hrs.
- HIST 1302 - U.S. History Since 1865* 3 sem. hrs.
- HIST 2301 - Texas History 3 sem. hrs.

Lower-division Surveys (6 hours):

- HIST 2311 - Western Civilization I 3 sem. hrs.
- HIST 2312 - Western Civilization II 3 sem. hrs.
- HIST 2322 - World History Since 1500 3 sem. hrs.

European and World History (6 hours):

- HIST 3301 - History of World Religions 3 sem. hrs.
- HIST 3303 - Colonial Latin America 3 sem. hrs.
- HIST 3304 - Modern Latin America 3 sem. hrs.
- HIST 3307 - The Ancient World 3 sem. hrs.
- HIST 3315 - Europe 1750-1815 3 sem. hrs.
- HIST 3317 - Europe 1815-1914 3 sem. hrs.
- HIST 3319 - Europe 1914 to the Present 3 sem. hrs.
- HIST 3340 - Modern Asia 3 sem. hrs.
- HIST 3350 - Dictators and Dirty Wars in Latin America 3 sem. hrs.
- HIST 3385 - The Art and Practice of History 3 sem. hrs.
- HIST 4340 - European Women's History 3 sem. hrs.
- HIST 4342 - The Holocaust 3 sem. hrs.
- HIST 4345 - European Thought and Culture, 1750-present 3 sem. hrs.
- HIST 4346 - The Search for Modern China: From 1600 to the Present 3 sem. hrs.
- HIST 4347 - The History of Sexuality in the West 3 sem. hrs.
- HIST 4349 - Transnational Histories of Asia and the Pacific 3 sem. hrs.
- HIST 4350 - Narratives of World War II in the Pacific 3 sem. hrs.
- HIST 4374 - Mexico: the National Period 3 sem. hrs.
- HIST 4375 - Cold War Kids: Youth in Modern Latin America 3 sem. hrs.
- HIST 4390 - Topics in History 3 sem. hrs. *

U.S. History (6 hours):

- HIST 3320 - Colonial and Revolutionary U.S. 3 sem. hrs.
- HIST 3321 - The Early American Republic 3 sem. hrs.
- HIST 3323 - Civil War and Reconstruction 3 sem. hrs.
- HIST 3324 - U.S. Gilded Age and Progressive Era 3 sem. hrs.
- HIST 3325 - Emergence of Modern U.S. 3 sem. hrs.
- HIST 3326 - U.S. Since 2nd World War 3 sem. hrs.
- HIST 3335 - The U.S. Urban Experience 3 sem. hrs.
- HIST 3345 - America by Nature 3 sem. hrs.
- HIST 3370 - Introduction to Public History 3 sem. hrs.
- HIST 3373 - Oral History and Podcasting 3 sem. hrs.
- HIST 4320 - U.S. Cultural Experience 3 sem. hrs.
- HIST 4327 - U.S. Modern Popular Culture 3 sem. hrs.
- HIST 4335 - The Military and United States History 3 sem. hrs.
- HIST 4336 - Mexican American History 3 sem. hrs.
- HIST 4337 - United States Women's History 3 sem. hrs.
- HIST 4349 - Transnational Histories of Asia and the Pacific 3 sem. hrs.
- HIST 4350 - Narratives of World War II in the Pacific 3 sem. hrs.
- HIST 4352 - Mexican American Women's History 3 sem. hrs.
- HIST 4390 - Topics in History 3 sem. hrs. *

*When topic is approved for cluster-see SAIL or advisor for further information.

Latin American Studies Minor

This interdisciplinary minor invites students to study the history, politics, languages, cultures, and economics of Latin America. Such a course of study can benefit a range of majors from Business, Education, the Social Sciences, and the Humanities. Course work must include Spanish beyond the 6 hour College of Liberal Arts Second Language requirement or the equivalent*.
A minimum of 18 semester hours selected from among the following courses in at least two disciplines is required for the minor:

Art

- ARTS 4350 - Pre-Columbian Art of Mesoamerica 3 sem. hrs.
- ARTS 4352 - Modern Art of Mexico 3 sem. hrs.

Business

- FINA 4315 - International Finance 3 sem. hrs.
- MGMT 4315 - Multinational Management* 3 sem. hrs.
- MKTG 4340 - International Marketing 3 sem. hrs.

English

History

- HIST 3303 - Colonial Latin America 3 sem. hrs.
- HIST 3304 - Modern Latin America 3 sem. hrs.
- HIST 3350 - Dictators and Dirty Wars in Latin America 3 sem. hrs.
- HIST 4374 - Mexico: the National Period 3 sem. hrs.
- HIST 4375 - Cold War Kids: Youth in Modern Latin America 3 sem. hrs.

Political Science

- POLS 4325 - Politics in Latin America 3 sem. hrs.

Spanish**

- SPAN 3305 - Latin American Civilization 3 sem. hrs.
- SPAN 3309 - Spanish American Literature I 3 sem. hrs.
- SPAN 3310 - Spanish American Literature II 3 sem. hrs.
- SPAN 3315 - Civilizations of the Spanish-Speaking World 3 sem. hrs.
- SPAN 4302 - Mexican Narrative 3 sem. hrs.
- SPAN 4320 - Spanish in the Americas 3 sem. hrs.

Note:

* This requirement can be satisfied through an equivalency test. See Spanish section of the catalog for details.
All courses are taught in Spanish.

**Mexican American Studies Minor**

Mexican American Studies (also known as Chicano Studies) is a multi-disciplinary concentration that will expose students to a wide range of topics relevant to the Mexican-American experience. This course of study will offer students valuable insights and skills to complement most majors in Nursing, Business, Education, Social Sciences, Arts, and Humanities.

**Minor**

The Mexican American Studies Minor requires a minimum of 18 hours of designated coursework. Students who select this minor must consult with and have approval of the Mexican American Studies Coordinator or the Academic Advisor to establish a degree plan. This should be done prior to completing 6 semester hours of coursework listed for the program.

Students may choose from the following courses. All courses are taught in English except for SPAN.

**Introduction: Required of all students**

- MXAS 3301 - Introduction to Mexican American Studies 3 sem. hrs.

**Cultural/Historical: Six hours are required from this component.**

- ARTS 4350 - Pre-Columbian Art of Mesoamerica 3 sem. hrs.
- ARTS 4352 - Modern Art of Mexico 3 sem. hrs.
- HIST 3303 - Colonial Latin America 3 sem. hrs.
- HIST 3304 - Modern Latin America 3 sem. hrs.
- HIST 3350 - Dictators and Dirty Wars in Latin America 3 sem. hrs.
- HIST 4336 - Mexican American History 3 sem. hrs.
- HIST 4337 - United States Women's History 3 sem. hrs.
- HIST 4352 - Mexican American Women's History 3 sem. hrs.
- HIST 4374 - Mexico: the National Period 3 sem. hrs.
- HIST 4375 - Cold War Kids: Youth in Modern Latin America 3 sem. hrs.
- SPAN 3304 - Spanish Civilization 3 sem. hrs.
- SPAN 3305 - Latin American Civilization 3 sem. hrs.
- SPAN 3315 - Civilizations of the Spanish-Speaking World 3 sem. hrs.
- MXAS 3307 - Mexican American Folklore 3 sem. hrs.
Linguistic/Literary: Six hours are required from this component.

- ENGL 3366 - Language in Society 3 sem. hrs.
- ENGL 4361 - Race and Ethnicity in Literature 3 sem. hrs. *
- SPAN 1311 - Spanish I 3 sem. hrs.
- SPAN 1312 - Spanish II 3 sem. hrs.
- SPAN 2311 - Spanish III 3 sem. hrs.
- SPAN 2312 - Continuing Spanish 3 sem. hrs.
- SPAN 3302 - Spanish Composition 3 sem. hrs.
- SPAN 3303 - Spanish Conversation 3 sem. hrs.
- SPAN 3307 - Spanish Literature I 3 sem. hrs.
- SPAN 3308 - Spanish Literature II 3 sem. hrs.
- SPAN 3309 - Spanish American Literature I 3 sem. hrs.
- SPAN 3310 - Spanish American Literature II 3 sem. hrs.
- SPAN 4301 - Spanish Civil War and Literature 3 sem. hrs.
- SPAN 4302 - Mexican Narrative 3 sem. hrs.
- SPAN 4303 - Spanish in the Southwest 3 sem. hrs.
- SPAN 4320 - Spanish in the Americas 3 sem. hrs.
- MXAS 3311 - Mexican American Literature 3 sem. hrs.

Political/Social Science: Three hours are required from this component.

- COMM 4345 - Intercultural Communication 3 sem. hrs.
- POLS 2311 - Mexican American and Latinx Politics 3 sem. hrs.
- POLS 4325 - Politics in Latin America 3 sem. hrs.
- PSYC 4332 - Cross-cultural Psychology* 3 sem. hrs.
- SOCI 3321 - Mexican American Women 3 sem. hrs.

Note:

Students may elect to count six hours from either their major, or the college foreign language requirement (SPAN 1311 and SPAN 1312) towards the minor in Mexican American Studies.

Topics (4390) courses can be taken in any participating discipline as electives when the topics are appropriate and approved by the program coordinator.

*ENGL 4361 will count when the topic is appropriate and approved by the program advisor.
Philosophy Minor

The philosophy minor requires a minimum of 21 semester hours of philosophy coursework. At least 12 of those hours must be at the upper-division level. The courses required for the minor are listed below.

9 hours from Basic Philosophy Courses

- PHIL 1301 - Introduction to Philosophy 3 sem. hrs.
- PHIL 2303 - Introduction to Logic and Critical Thinking 3 sem. hrs.
- PHIL 2306 - Introduction to Ethics 3 sem. hrs.

3 hours from History of Philosophy or Metaphysics and Epistemology

- PHIL 3306 - History of Eastern Philosophy I 3 sem. hrs.
- PHIL 3307 - History of Eastern Philosophy II 3 sem. hrs.
- PHIL 3327 - American Philosophy 3 sem. hrs.
- PHIL 4303 - Minds and Machines 3 sem. hrs.
- PHIL 4304 - Metaphysics 3 sem. hrs.
- PHIL 4305 - Truth, Knowledge, and Justification 3 sem. hrs.
- PHIL 4321 - Ancient Philosophy 3 sem. hrs.
- PHIL 4322 - Modern Philosophy 3 sem. hrs.
- PHIL 4323 - Contemporary Philosophy 3 sem. hrs.
- PHIL 4330 - Philosophy and History of Science and Technology 3 sem. hrs.
- PHIL 4331 - Issues in Philosophy of Religion 3 sem. hrs.

3 hours from Values and Society

- PHIL 3342 - Philosophy of Love and Sex 3 sem. hrs.
- PHIL 3343 - Philosophy of Law 3 sem. hrs.
- PHIL 3344 - Social and Political Philosophy 3 sem. hrs.
- PHIL 3345 - The Meaning of Life 3 sem. hrs.
- PHIL 3348 - Ethics, War, and Terrorism 3 sem. hrs.
- PHIL 4333 - Environmental Ethics 3 sem. hrs.
- PHIL 4335 - Moral Philosophy 3 sem. hrs.

6 hours from Prescribed Electives

Students may select:
• any other upper level philosophy courses that they are not using to satisfy the requirements of the groups listed above, or
• courses from the list below.
  PHIL 3346 - Elementary Formal Logic 3 sem. hrs.
  PHIL 3347 - Philosophy and Science Fiction 3 sem. hrs.
  PHIL 4336 - Advanced Seminar in Philosophy 3 sem. hrs.
  PHIL 4337 - Philosophy of Language 3 sem. hrs.
  PHIL 4390 - Topics in Philosophy 3 sem. hrs.
  PHIL 4396 - Directed Individual Study 1-3 sem. hrs.

Students are encouraged to take PHIL 1301 and PHIL 2303 as early as possible in their pursuit of the minor.

* Included in the Core Curriculum Program

Spanish Minor

Students planning to minor in Spanish must complete 18 semester hours in Spanish or Spanish related areas, at least 12 of which must be at the upper-division level. Students are required to take the following courses:

12 hours from:

• SPAN 3302 - Spanish Composition 3 sem. hrs.
• SPAN 3303 - Spanish Conversation 3 sem. hrs.
• SPAN 3304 - Spanish Civilization 3 sem. hrs.
• SPAN 3305 - Latin American Civilization 3 sem. hrs.
• SPAN 3311 - Spanish Phonetics 3 sem. hrs.
• SPAN 3312 - Spanish Grammar 3 sem. hrs.
• SPAN 3313 - Introduction to Translation 3 sem. hrs.
• SPAN 3315 - Civilizations of the Spanish-Speaking World 3 sem. hrs.
• SPAN 3316 - Spanish for the Professions 3 sem. hrs.
• SPAN 3317 - Introduction to Hispanic Linguistics 3 sem. hrs.
• SPAN 3320 - Introduction to Spanish Literature 3 sem. hrs.
• SPAN 3325 - Introduction to Latin American Literature 3 sem. hrs.
• SPAN 4302 - Mexican Narrative 3 sem. hrs.
• SPAN 4303 - Spanish in the Southwest 3 sem. hrs.
• SPAN 4304 - Miguel de Cervantes' Don Quijote 3 sem. hrs.
• SPAN 4305 - Latin American Novel 3 sem. hrs.
• SPAN 4306 - Modern Spanish Literature 3 sem. hrs.
• SPAN 4313 - Spanish Interpretation 3 sem. hrs.
• SPAN 4320 - Spanish in the Americas 3 sem. hrs.
• SPAN 4421 - Business, Commercial, and Legal Translation 4 sem. hrs.
• SPAN 4322 - Medical, Scientific and Technical Translation 3 sem. hrs.
• SPAN 4327 - Methods in Foreign Language Instruction 3 sem. hrs.
• SPAN 4390 - Topics in Spanish 3 sem. hrs.

6 hours from:

• SPAN 2000, 3000, 4000 courses 6 sem. hrs. (or credit by examination)
• ARTS 4350 - Pre-Columbian Art of Mesoamerica 3 sem. hrs.
• ARTS 4352 - Modern Art of Mexico 3 sem. hrs.
• ENGL 4361 - Race and Ethnicity in Literature 3 sem. hrs.
• HIST 3303 - Colonial Latin America 3 sem. hrs.
• HIST 3304 - Modern Latin America 3 sem. hrs.
• HIST 3350 - Dictators and Dirty Wars in Latin America 3 sem. hrs.
• HIST 4336 - Mexican American History 3 sem. hrs.
• HIST 4337 - United States Women's History 3 sem. hrs.
• HIST 4375 - Cold War Kids: Youth in Modern Latin America 3 sem. hrs.
• MXAS 3301 - Introduction to Mexican American Studies 3 sem. hrs.
• MXAS 3311 - Mexican American Literature 3 sem. hrs.
• MXAS 4390 - Topics in Mexican American Studies 3 sem. hrs.
• POLS 2311 - Mexican American and Latinx Politics 3 sem. hrs.
• POLS 4325 - Politics in Latin America 3 sem. hrs.
• PORT 2315 - Portuguese for Spanish Speakers 3 sem. hrs.
• SOCI 3321 - Mexican American Women 3 sem. hrs.

Women, Gender, and Sexuality Studies Minor

This minor is an interdisciplinary program for undergraduate students who desire more in-depth study than can be obtained in one or a few courses on the changing statuses, issues, problems, and future prospects of women and men in contemporary society. The interdisciplinary nature of this program integrates the study of intersections of gender, race, class, and sexuality in multicultural and global contexts. This program is designed to complement undergraduate study programs in the University.

Students who select this minor must consult and have approval of the program advisor to establish a plan of study. This should be done prior to completing 6 hours of coursework listed for the program. The minor plan must be filed with an academic advisor in the College of Liberal Arts and certified prior to application for graduation by the Dean of the College in which the major study degree will be awarded.
A minimum of 18 semester hours selected from the following courses is required for the minor. Topics courses (*) may be taken for credit when the announced content is appropriate to the minor. At least 12 of the hours must be at the upper division level and 12 must be taken at A&M-Corpus Christi.

Required Courses

- WGST 3301 - Introduction to Women and Gender Studies 3 sem. hrs. (Open to all students)
- WGST 4380 - Senior Seminar in Women and Gender Studies 3 sem. hrs.

Elective Courses

- ANTH 3390 - Special Topics in Anthropology 3 sem. hrs. *
- ARTS 4390 - Topics in Art History 3 sem. hrs. *
- BIOL 4590 - Selected Topics 1-5 sem. hrs. *
- BLAW 4390 - Current Topics in Business Law 1-3 sem. hrs. * Women in the Workplace
- COMM 4314 - Gender Communication 3 sem. hrs.
- COMM 4345 - Intercultural Communication 3 sem. hrs.
- CRIJ 4324 - Women and Criminal Justice 3 sem. hrs.
- CRIJ 4360 - Intimate Relationship Violence 3 sem. hrs.
- ENGL 3366 - Language in Society 3 sem. hrs.
- ENGL 4360 - Gender, Sexuality and Literature 3 sem. hrs.
- ENGL 4361 - Race and Ethnicity in Literature 3 sem. hrs.
- ENGL 4390 - Topics in Literary Studies 3 sem. hrs. *
- HIST 4337 - United States Women's History 3 sem. hrs.
- HIST 4340 - European Women's History 3 sem. hrs.
- HIST 4347 - The History of Sexuality in the West 3 sem. hrs.
- MXAS 4390 - Topics in Mexican American Studies 3 sem. hrs. *
- NURS 4390 - Dimensions in Nursing 1-3 sem. hrs. *
- POLS 3311 - Women and Politics 3 sem. hrs.
- PSYC 3374 - Human Sexuality 3 sem. hrs.
- PSYC 4367 - Gender Issues in Psychology 3 sem. hrs.
- PSYC 4390 - Topics in Psychology 3 sem. hrs. *
- SOCI 3320 - Sociology of Gender 3 sem. hrs.
- SOCI 3321 - Mexican American Women 3 sem. hrs.
- SOCI 3340 - Sociology of the Family 3 sem. hrs.
- SPAN 4390 - Topics in Spanish 3 sem. hrs. *

Note:
* Topics courses (3390 and 4390) are limited to those approved by the program adviser as appropriate

Certificates

Spanish/English Translation

The Translation Certificate is available to Spanish majors, Spanish minors, Students in Business, International Studies and Nursing, and general public from the Corpus Christi community who wish to specialize in English-Spanish and Spanish-English translation. Translators produce a written document that was originally written in another language. Students completing this program will develop or enhance their skills to obtain employment as business, financial, healthcare and legal translators. The Certificate will require completion of 16 credits and an Exit Examination.

Student Learning Outcomes:

Upon Completion of this certificate, students will:

- Analyze original texts for translation and examine the conventions of the text and genre
- Differentiate type of texts, tools, language and strategies for specialized translation
- Translate specialized texts from English into Spanish and Spanish into English in the business, financial, healthcare, commercial, and legal areas at a near-professional level

Required Courses (16 hours):

- SPAN 3312 - Spanish Grammar 3 sem. hrs.
- SPAN 3313 - Introduction to Translation 3 sem. hrs.
- SPAN 3316 - Spanish for the Professions 3 sem. hrs.
- SPAN 4322 - Medical, Scientific and Technical Translation 3 sem. hrs.
- SPAN 4421 - Business, Commercial, and Legal Translation 4 sem. hrs.

Music

Bachelor of Arts

Music, BA
Bachelor of Arts in Music

The Bachelor of Arts in Music offers a choice of two emphases. The BA-Music, Music Studies Emphasis is a desirable degree for those who wish to study music within a traditional liberal arts framework. The degree is appropriate for students who wish to engage in studies in the performing arts, musicology, composition, and other academic music areas, or as instructors in private music studios. The BA-Music, Music Industry Emphasis is a desirable degree for those who wish to study music within a traditional liberal arts framework combined with studies in music business, recording technology, and related fields. The degree is appropriate for students who seek comprehensive knowledge and a foundation of skills foundation for work and growth in the music industry.

Concentration/Emphasis

A concentration or emphasis is a structured plan of study within a major. The number of semester hours for a concentration or emphasis varies, but is included within the semester hours for the major. Students pursuing the BA in Music will select an emphasis in either Music Studies or Music Industry.

Student Learning Outcomes

Students will:

- have knowledge of music theory, history, literature, and culture
- be able to apply their knowledge through singing or performing on a musical instrument
- be able to apply critical thinking skills when hearing musical sounds

In addition, students undertaking the Music Industry Emphasis will:

- have a working knowledge of the operations of the music industry
- operate professional audio recording systems

Specific Degree Requirements

All music majors must meet all general University and College graduation requirements, including First Year Seminars, regardless of the following specific degree requirements, unless specifically excused. All music degrees require MUSI 1307 - Elements of Musical Style, which also meets the Core Curriculum Program Fine Arts requirement. Understanding and Enjoying Music (MUSI 1306) cannot count towards any degree requirement of the Bachelor of Arts in Music. No music coursework with a grade
lower than "C" will be counted toward the completion of the Bachelor of Arts in Music, the Bachelor of Music with Teacher Certification, or the Bachelor of Music in Performance, with the following exception. In order to progress to the next level of applied principal lessons (MUAP courses), a student must earn at least an "A" or "B" in his/her lessons and also be recommended to advance by the jury committee. A student who does not advance to the next level of lessons, as recommended by the jury committee, can earn no higher than a "C" in applied music. Students who do not advance in lessons due to their ineligibility to take the Basic Music Skills Assessment due to other factors (i.e. theory sequence issues) are not held to this grading policy.

Degree Requirements (Music Studies Emphasis)

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<th>Sem. Hrs.</th>
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<td>42</td>
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1. Core Curriculum Program (2)
2. First-Year Seminars (when applicable)*
3. Major Requirements 52
4. Undesignated Upper-Division Electives 20
5. Foreign Language Requirements
6

Total 120 (122)

Degree Requirements (Music Industry Emphasis)

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<th>Sem. Hrs.</th>
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<td>42</td>
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</table>

1. Core Curriculum Program
2. First-Year Seminars (when applicable)*(2)
3. Major Requirements 39
4. Emphasis-specific coursework
5. Foreign Language Requirements 33
First-Year Seminars

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Note:

Transfer students with 24 or more hours are exempt from First-Year Seminar.

Music Industry Emphasis students are required to complete ECON 2301 and ECON 2302 as part of their Core Curriculum Program.

Requirements common to both emphases in the BA-Music degrees:

- MUSI 1311 - Musicianship I 3 sem. hrs.
- MUSI 1312 - Musicianship II 3 sem. hrs.
- MUSI 2311 - Musicianship III 3 sem. hrs.
- MUSI 2312 - Musicianship IV 3 sem. hrs.
- MUSI 1116 - Aural Training I 1 sem. hrs.
- MUSI 1117 - Aural Training II 1 sem. hrs.
- MUSI 2116 - Aural Training III 1 sem. hrs.
- MUSI 2117 - Aural Training IV 1 sem. hrs.
- MUSI 1181 - Class Piano I 1 sem. hrs. *
- MUSI 1182 - Class Piano II 1 sem. hrs. *
- MUSI 3346 - Form and Analysis of Tonal Music 3 sem. hrs.
- MUSI 1307 - Elements of Musical Style 3 sem. hrs.
- MUSI 4334 - History of Western Music I 3 sem. hrs.
- MUSI 4335 - History of Western Music II 3 sem. hrs.

Note:

*Students with adequate keyboard skills may substitute Secondary Piano Studio courses for Class Piano I-IV with permission of the Music Department Chair.
Appropriate 6-semester sequence (8 hrs.) of

- Principal Applied Studio courses in one performance area.

Minimum of 4 hrs. of appropriate large ensemble

- MUEN 1123 - Symphonic Winds 1 sem. hrs. OR
  MUEN 3123 - Symphonic Winds 1 sem. hrs.

- MUEN 1124 - Concert Orchestra 1 sem. hrs. OR
  MUEN 3124 - Orchestra 1 sem. hrs.

- MUEN 1151 - University Singers 1 sem. hrs. OR
  MUEN 3151 - University Singers 1 sem. hrs.

Students in the BA-Music, Music Studies Emphasis will also take the following:

- MUSI 2181 - Class Piano III 1 sem. hrs.
- MUSI 2182 - Class Piano IV 1 sem. hrs.
- MUSI 3253 - Basic Conducting 2 sem. hrs.
- MUSI 4385 - Senior Capstone 3 sem. hrs.

Minimum of 6 hrs. of

- Upper-division music electives

Music Credits Required for the Bachelor of Arts in Music, Music Studies Emphasis: 52 hrs.

Students in the BA-Music, Music Industry Emphasis will also take the following:

- MIND 3311 - Applications of Music Technology 3 sem. hrs.
- MIND 3312 - Recording Techniques I 3 sem. hrs.
- MIND 3313 - Recording Techniques II 3 sem. hrs.
- MIND 3314 - Live Sound Engineering 3 sem. hrs.
- MIND 3316 - Introduction to MIDI Sound Synthesis and Control 3 sem. hrs.
- MIND 3320 - Music Business Survey 3 sem. hrs.
- MIND 3321 - Music Business II 3 sem. hrs.
- MIND 4398 - Applied Experience 3 sem. hrs.
• BUSI 3315 - Entrepreneurship, Creativity, & Innovation* 3 sem. hrs.
• BUSI 4320 - New Venture Creation 3 sem. hrs.

And Choose one of the following:

• MIND 3315 - Musical Acoustics 3 sem. hrs.
• MIND 3322 - Entertainment Law and the Music Industry 3 sem. hrs.

Music Credits Required for the Bachelor of Arts in Music, Music Industry Emphasis: 39 hrs.


Total Minimum Requirement for the Bachelor of Arts in Music: 120 hrs.

Bachelor of Music

Music Degree Programs

Texas A&M University-Corpus Christi offers three distinct degree programs, a minor in music, and a minor in music industry.

Music, BA

Music, BM with EC-12 Teacher Certification

Performance (Instrumental), BM

Performance (Voice), BM

The mission of the Texas A&M University-Corpus Christi Department of Music is to assist students in the development of their aural, aesthetic, and analytical capacities in music. This mission is accomplished within a nurturing, student-centered environment where faculty and students strive together for attainment of the following program goals:

1. To prepare music majors for successful professional careers in music education, studio teaching, music industry, and performance;
2. To provide music courses for all students that will acquaint them with fundamental music skills, various musical styles, historical periods and literature, the functions of music in the community, and to provide opportunities to participate in the live performance of music;

3. To encourage students to be continually aware of music as an art form, and to seek opportunities for creative experiences and personal enrichment that are inherent in the study, performance, and production of music; and

4. To contribute to the artistic and cultural life of the community by providing public concerts and recitals, and other forms of appropriate musical involvement of faculty and students.

Texas A&M University-Corpus Christi is an accredited institutional member of the National Association of Schools of Music.

Music Courses Designed Specifically for Non-Majors

Music course offerings of special interest to students majoring in fields outside music include various kinds of ensemble experience; MUSI 1302 Non-major Class Piano I, MUSI 1303 Basic Guitar I, MUSI 1306 Understanding and Enjoying Music*, MUSI 1310 History of Rock and Roll*, MUSI 3310 History of Jazz, MUSI 2302 Non-major Class Piano II, MUSI 2303 Basic Guitar II, MUSI 3334 Music Cultures of the World, and MUSI 3370 Class Voice.

Admission to Music Degree Programs

Degree-seeking music majors are expected to perform at increasingly higher levels of technical and artistic performance throughout the course of undergraduate study. Assessment of growth in performance is accomplished at the final examination for each semester of Principal Studio enrollment. This consists of a performance before a jury committee composed of music faculty members. Jury committees are charged with two tasks: first, they recommend an advisory jury grade to each student’s studio teacher, and second, they determine if students will pass to the next course in the studio sequence. In order to avoid a situation in which a student attempts the pursuit of a music degree for which there is little or no practical hope of success, the following procedures governing admission to Texas A&M-Corpus Christi music degree programs are closely followed.

All music majors share a common first-year music course enrollment, consisting of Musicianship I and II, Aural Training I and II, Class Piano I and II, First Year Principal Applied Studio I and II, and an appropriate major ensemble. The jury examination for First Year Principal Applied Studio II will serve as an application audition for the Bachelor of Music or Bachelor of Music with Teacher Certification. Jury committees will
approve applications based upon the jury performance and recommendation of the student's principal studio instructor. Because the Bachelor of Arts program is more broadly focused and not as dependent upon performance, students who are not accepted into the Bachelor of Music or Bachelor of Music with Teacher Certification programs may continue with the BA. Transfer students who have completed two or more semesters of principal studio at another institution should audition for admission to the BM or BMTC degrees at auditions held during the first week of classes each semester for that purpose. Students may attempt to qualify for the Bachelor of Music or the Bachelor of Music with Teacher Certification program only twice.

Ensemble Participation and Requirements

1. Every full-time music major must enroll, participate and receive a passing grade in a major ensemble every semester except the student teaching semester.

2. Major ensemble requirements must be satisfied in the following ways:
   - A student in any instrumental music degree program whose major instrument is a woodwind, brass, or percussion instrument must register for MUEN 1123 Symphonic Winds and/or MUEN 1124 Concert Orchestra or as assigned by the instrumental ensemble directors and the applied teacher, based on auditions as required.
   - A student in any instrumental music degree program whose major instrument is an orchestral stringed instrument must register for MUEN 1124 Concert Orchestra or .
   - A student in any vocal/choral/general music degree program must register for MUEN 1151 University Singers as assigned by the choral ensemble director and the applied music teacher, based on auditions as required.
   - Pianists or guitarists in instrumental music degree normally enroll in MUEN 1151 University Singers to fulfill the ensemble requirement. If they play a wind band or orchestral instrument well enough, they may enroll in concert band or orchestra instead.

3. Exceptions to these policies will be made only with the approval of the student's applied teacher, the Department Chair and the appropriate ensemble director.

Music, BM with EC-12 Teacher Certification

Bachelor of Music with Teacher Certification
This is the appropriate professional degree for students who seek careers in elementary and/or secondary music education. Degree tracks in vocal/general and instrumental music are available. This degree leads to Texas EC-12 teacher certification in music.

The Bachelor of Music with Teacher Certification curriculum has been designed to insure reasonable competence in all graduates, but it is rigorous and time consuming. Although the program can be completed in 9 regular semesters, it requires very heavy course loads to do so. Students whose personal learning styles do not respond well to such pressure, or those who must continue partial employment, should consider attending several summer sessions and/or extending their programs to 10 full semesters. In all cases, however, students are strongly urged to consult with the Music Department Chair or their assigned faculty advisor prior to beginning the program and frequently throughout.

All students seeking the Bachelor of Music with Teacher Certification degree must complete a 122 hr. set of Common Requirements consisting of the Core Curriculum Program (42 hrs.), Common Musicianship coursework (40 hrs.), Common Pedagogy Core (10 hrs.), and Professional Development (27 hrs.). In addition, a 10 hr. Track Specific Techniques Block must be completed.

**Student Learning Outcomes**

Student will:

- be able to assess and critique student performances
- have knowledge of music theory, history, literature, and culture
- be able to structure and apply appropriate music pedagogy to form effective instruction in classrooms or ensembles

**Specific Degree Requirements**

All music majors must meet all general University and College graduation requirements, including First Year Seminars, regardless of the following specific degree requirements, unless specifically excused. All music degrees require MUSI 1307 - Elements of Musical Style, which also meets the Core Curriculum Program Fine Arts requirement. Understanding and Enjoying Music (MUSI 1306) cannot count towards any degree requirement of the Bachelor of Music with Teacher Certification. No music coursework with a grade lower than "C" will be counted toward the completion of the Bachelor of Arts in Music, the Bachelor of Music with Teacher Certification, or the Bachelor of Music in Performance, with the following exception. In order to progress to the next level of applied principal lessons (MUAP courses), a student must earn at least an "A" or "B" in his/her lessons and also be recommended to advance by the jury committee. A student
who does not advance to the next level of lessons, as recommended by the jury committee, can earn no higher than a "C" in applied music. Students who do not advance in lessons due to their ineligibility to take the Basic Music Skills Assessment due to other factors (i.e. theory sequence issues) are not held to this grading policy.

Degree Requirements

<table>
<thead>
<tr>
<th>Category</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core Curriculum Program</td>
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<tr>
<td>2. First-Year Seminars (when applicable) (2)</td>
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<tr>
<td>3. Major Requirements</td>
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<td>4. Professional Development</td>
<td></td>
</tr>
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<td>5. Teacher Certification Requirements</td>
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<td>129 (131)</td>
</tr>
</tbody>
</table>

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Teacher Certification Common Music Core

- MUSI 1311 - Musicianship I 3 sem. hrs.
- MUSI 1312 - Musicianship II 3 sem. hrs.
- MUSI 2311 - Musicianship III 3 sem. hrs.
- MUSI 2312 - Musicianship IV 3 sem. hrs.
- MUSI 1116 - Aural Training I 1 sem. hrs.
- MUSI 1117 - Aural Training II 1 sem. hrs.
- MUSI 2116 - Aural Training III 1 sem. hrs.
- MUSI 2117 - Aural Training IV 1 sem. hrs.
- MUSI 1181 - Class Piano I 1 sem. hrs. *
- MUSI 1182 - Class Piano II 1 sem. hrs. *
- MUSI 2181 - Class Piano III 1 sem. hrs. *
- MUSI 2182 - Class Piano IV 1 sem. hrs. *
- MUSI 3346 - Form and Analysis of Tonal Music 3 sem. hrs.
• MUSI 1307 - Elements of Musical Style 3 sem. hrs.
• MUSI 4334 - History of Western Music I 3 sem. hrs.
• MUSI 4335 - History of Western Music II 3 sem. hrs.
• MUSI 4085 - Senior Recital 0 sem. hrs.

Appropriate 6-semester sequence (8 hrs.) of

• Principal Applied Studio courses in one performance area.

Minimum of 4 hrs. of appropriate large ensemble

• MUEN 1123 - Symphonic Winds 1 sem. hrs. OR
• MUEN 3123 - Symphonic Winds 1 sem. hrs.
• MUEN 1124 - Concert Orchestra 1 sem. hrs. OR
• MUEN 3124 - Orchestra 1 sem. hrs.
• MUEN 1151 - University Singers 1 sem. hrs. OR
• MUEN 3151 - University Singers 1 sem. hrs.

Note:

*Students with adequate keyboard skills may substitute Secondary Piano Studio courses for Class Piano I-IV with permission of the Music Department Chair.

Total Teacher Certification Music Core: 41 hrs.

Teacher Certification Common Pedagogy Core

• MUSI 3252 - Foundations of Music Programs 2 sem. hrs.
• MUSI 3253 - Basic Conducting 2 sem. hrs.
• MUSI 3354 - Advanced Conducting 3 sem. hrs.
• MUSI 4355 - Music for Young Children 3 sem. hrs.

Total Teacher Certification Common Pedagogy Core: 10 hrs.

Professional Development Coursework

For more information on required professional development courses, the Professional Development TExES (PPR-160), and other teacher certification requirements, please see the College of Education and Human Development section of this catalog. Students
should also consult the Certification Office of the College of Education for complete and current information about teacher certification requirements.

Track-Specific Techniques Block: Vocal/General

- MUSI 31xx - Secondary Guitar Studio 1 sem. hrs.
- MUSI 3166 - Woodwind Techniques I 1 sem. hrs. OR
  MUSI 3167 - Woodwind Techniques II 1 sem. hrs.
- MUSI 3168 - Brass Techniques I 1 sem. hrs. OR
  MUSI 3169 - Brass Techniques II 1 sem. hrs.
- MUSI 3188 - Percussion Techniques 1 sem. hrs.
- MUSI 3162 - Diction for Singers I 1 sem. hrs.
- MUSI 3165 - Diction for Singers II 1 sem. hrs.
- MUSI 4357 - Choral Literature and Techniques 3 sem. hrs.

Total Vocal/General Track-Specific Techniques Block: 9 hrs.

Total Music Teacher Certification, Vocal/General Track: 129 hrs.

Track-Specific Techniques Block: Instrumental*

- MUSI 3166 - Woodwind Techniques I 1 sem. hrs.
- MUSI 3167 - Woodwind Techniques II 1 sem. hrs.
- MUSI 3168 - Brass Techniques I 1 sem. hrs.
- MUSI 3169 - Brass Techniques II 1 sem. hrs.
- MUSI 3170 - Voice Techniques for Instrumentalists 1 sem. hrs.
- MUSI 3188 - Percussion Techniques 1 sem. hrs.
- MUSI 3189 - String Techniques 1 sem. hrs.
- MUSI 4358 - Instrumental Literature and Techniques 3 sem. hrs.

Note:

*Students are NOT required to take the instrumental techniques course that includes their own major instrument.

Total Instrumental Track-Specific Techniques Block: 9 hrs.

Total Music Teacher Certification, Instrumental Track: 129 hrs.
Other Certification Requirements

For more information on teacher certification requirements, see the College of Education section of this catalog. Students should also consult the Certification Office of the College of Education for complete and current information about teacher certification requirements.

Upon satisfactory completion of all subject field and professional development courses, a student may register for the subject field certification examination, called TExES (Texas Examinations of Educator Standards). A student wishing to take the TExES prior to program completion must satisfy the following:

1. Make pre-specified acceptable scores on TExES practice tests, or departmental equivalent, and participate in practice test review and analysis session.
2. Provide official permit with signature of Department Chair or designated person for each teaching field on the student's certification plan.

Students must also qualify to take the Professional Development TExES.

Performance (Instrumental), BM

Bachelor of Music in Performance

This degree is intended for students whose skills and interest in the performance of music are focused at the professional level. Those who elect this option must be aware that ultimate success in performance careers normally involves further study beyond the bachelor's degree, as well as a growing accumulation of actual performance experience.

Student Learning Outcomes

Students will:

- gain knowledge of music theory, history, literature, and culture
- acquire skills necessary to perform, conduct, and/or compose music from various periods and genres
- acquire knowledge of performance literature appropriate to their medium

Specific Degree Requirements

All music majors must meet all general University and College graduation requirements, including First Year Seminars, regardless of the following specific degree requirements,
unless specifically excused. All music degrees require MUSI 1307 - Elements of Musical Style, which also meets the Core Curriculum Program Fine Arts requirement. Understanding and Enjoying Music (MUSI 1306) cannot count towards any degree requirement of the Bachelor of Music in Performance. No music coursework with a grade lower than "C" will be counted toward the completion of the Bachelor of Arts in Music, the Bachelor of Music with Teacher Certification, or the Bachelor of Music in Performance, with the following exception. In order to progress to the next level of applied principal lessons (MUAP courses), a student must earn at least an "A" or "B" in his/her lessons and also be recommended to advance by the jury committee. A student who does not advance to the next level of lessons, as recommended by the jury committee, can earn no higher than a "C" in applied music. Students who do not advance in lessons due to their ineligibility to take the Basic Music Skills Assessment due to other factors (i.e. theory sequence issues) are not held to this grading policy.

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<td><strong>Total 120 (122)</strong></td>
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*Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Note:

Transfer students with 24 or more hours are exempt from First-Year Seminar.

Requirements

- MUSI 1311 - Musicianship I 3 sem. hrs.
- MUSI 1312 - Musicianship II 3 sem. hrs.
- MUSI 2311 - Musicianship III 3 sem. hrs.
- MUSI 2312 - Musicianship IV 3 sem. hrs.
- MUSI 1116 - Aural Training I 1 sem. hrs.
• MUSI 1117 - Aural Training II 1 sem. hrs.
• MUSI 2116 - Aural Training III 1 sem. hrs.
• MUSI 2117 - Aural Training IV 1 sem. hrs.
• MUSI 1181 - Class Piano I 1 sem. hrs. *
• MUSI 1182 - Class Piano II 1 sem. hrs. *
• MUSI 2181 - Class Piano III 1 sem. hrs. *
• MUSI 2182 - Class Piano IV 1 sem. hrs. *
• MUSI 3346 - Form and Analysis of Tonal Music 3 sem. hrs.

• MUSI 4346 - Orchestration and Arranging 3 sem. hrs. OR
• MUSI 3345 - Composition 3 sem. hrs.

• MUSI 1307 - Elements of Musical Style 3 sem. hrs.
• MUSI 4334 - History of Western Music I 3 sem. hrs.
• MUSI 4335 - History of Western Music II 3 sem. hrs.
• MUSI 3253 - Basic Conducting 2 sem. hrs.
• MUSI 4340 - Studies in Repertoire 3 sem. hrs.
• MUSI 4360 - Studies in Pedagogy 3 sem. hrs.
• MUSI 3085 - Junior Recital 0 sem. hrs.
• MUSI 4085 - Senior Recital 0 sem. hrs.
• Appropriate 8-semester sequence of Principal Applied Studio courses in one performance area (20 sem. hrs.).

Note:

*Students with adequate keyboard skills may substitute Secondary Piano Studio courses for Class Piano I-IV with permission of the Music Department Chair.

Minimum of 8 hrs. of appropriate large ensemble

• MUEN 1123 - Symphonic Winds 1 sem. hrs. OR
• MUEN 3123 - Symphonic Winds 1 sem. hrs.

• MUEN 1124 - Concert Orchestra 1 sem. hrs. OR
• MUEN 3124 - Orchestra 1 sem. hrs.

• MUEN 1151 - University Singers 1 sem. hrs. OR
• MUEN 3151 - University Singers 1 sem. hrs.

Upper-Division music electives 10 hrs.
Total Music Coursework: 78 hrs.

Total Core Curriculum Program: 42 hrs.

Total Minimum Requirements for the Bachelor of Music in Performance (Instrumental): 120 hrs.

Performance (Voice), BM

Bachelor of Music in Performance

This degree is intended for students whose skills and interest in the performance of music are focused at the professional level. Those who elect this option must be aware that ultimate success in performance careers normally involves further study beyond the bachelor's degree, as well as a growing accumulation of actual performance experience.

Student Learning Outcomes

Students will:

- gain knowledge of music theory, history, literature, and culture
- acquire skills necessary to perform, conduct, and/or compose music from various periods and genres
- acquire knowledge of performance literature appropriate to their medium

Specific Degree Requirements

All music majors must meet all general University and College graduation requirements, including First Year Seminars, regardless of the following specific degree requirements, unless specifically excused. All music degrees require MUSI 1307 - Elements of Musical Style, which also meets the Core Curriculum Program Fine Arts requirement. Understanding and Enjoying Music (MUSI 1306) cannot count towards any degree requirement of the Bachelor of Arts in Music. No music coursework with a grade lower than "C" will be counted toward the completion of the Bachelor of Arts in Music, the Bachelor of Music with Teacher Certification, or the Bachelor of Music in Performance, with the following exception. In order to progress to the next level of applied principal lessons (MUAP courses), a student must earn at least an "A" or "B" in his/her lessons and also be recommended to advance by the jury committee. A student who does not advance to the next level of lessons, as recommended by the jury committee, can earn no higher
than a "C" in applied music. Students who do not advance in lessons due to their ineligibility to take the Basic Music Skills Assessment due to other factors (i.e. theory sequence issues) are not held to this grading policy.

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<td>4. Foreign Language Requirements</td>
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<td><strong>Total</strong></td>
<td><strong>126 (128)</strong></td>
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</table>

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Note:

Transfer students with 24 or more hours are exempt from First-Year Seminar.

Requirements

- MUSI 3162 - Diction for Singers I 1 sem. hrs.
- MUSI 3165 - Diction for Singers II 1 sem. hrs.
- MUSI 1311 - Musicianship I 3 sem. hrs.
- MUSI 1312 - Musicianship II 3 sem. hrs.
- MUSI 2311 - Musicianship III 3 sem. hrs.
- MUSI 2312 - Musicianship IV 3 sem. hrs.
- MUSI 1116 - Aural Training I 1 sem. hrs.
- MUSI 1117 - Aural Training II 1 sem. hrs.
- MUSI 2116 - Aural Training III 1 sem. hrs.
- MUSI 2117 - Aural Training IV 1 sem. hrs.
- MUSI 1181 - Class Piano I 1 sem. hrs. *
- MUSI 1182 - Class Piano II 1 sem. hrs. *
- MUSI 2181 - Class Piano III 1 sem. hrs. *
• MUSI 2182 - Class Piano IV 1 sem. hrs. *
• MUSI 3346 - Form and Analysis of Tonal Music 3 sem. hrs.

• MUSI 4346 - Orchestration and Arranging 3 sem. hrs. OR
• MUSI 3345 - Composition 3 sem. hrs.

• MUSI 1307 - Elements of Musical Style 3 sem. hrs.
• MUSI 4334 - History of Western Music I 3 sem. hrs.
• MUSI 4335 - History of Western Music II 3 sem. hrs.
• MUSI 3253 - Basic Conducting 2 sem. hrs.
• MUSI 4340 - Studies in Repertoire 3 sem. hrs.
• MUSI 4360 - Studies in Pedagogy 3 sem. hrs.
• MUSI 3085 - Junior Recital 0 sem. hrs.
• MUSI 4085 - Senior Recital 0 sem. hrs.
• Appropriate 8-semester sequence of Principal Applied Studio courses in one performance area (20 sem. hrs.).

Note:

*Students with adequate keyboard skills may substitute Secondary Piano Studio courses for Class Piano I-IV with permission of the Music Department Chair.

Minimum of 8 hrs. of appropriate large ensemble

• MUEN 1123 - Symphonic Winds 1 sem. hrs. OR
• MUEN 3123 - Symphonic Winds 1 sem. hrs.

• MUEN 1124 - Concert Orchestra 1 sem. hrs. OR
• MUEN 3124 - Orchestra 1 sem. hrs.

• MUEN 1151 - University Singers 1 sem. hrs. OR
• MUEN 3151 - University Singers 1 sem. hrs.

Upper-Division music electives 8 hrs.

Total Music Coursework: 78 hrs.

Total Core and Language: 48 hrs.

Total Minimum Requirements for Bachelor of Music in Performance (Vocal): 126 hrs.
Minor

Music Industry Minor

The minor in music industry is designed to provide students with the basic specialized skills required for post-graduate employment opportunities in arts marketing and management, studio technology, and audio recording. Students will have hands-on opportunities to work with up-to-date software packages used in music industry. Finally, students will have a significant opportunity to undertake an independent practical project within a chosen area of the music industry.

Requirements for this minor are:

- MIND 3311 - Applications of Music Technology 3 sem. hrs.
- MIND 3312 - Recording Techniques I 3 sem. hrs.
- MIND 3313 - Recording Techniques II 3 sem. hrs.
- MIND 3320 - Music Business Survey 3 sem. hrs.
- MIND 3321 - Music Business II 3 sem. hrs.

- MIND 4396 - Directed Individual Study 1-3 sem. hrs.

  OR

- MIND 4398 - Applied Experience 3 sem. hrs.

Music Minor

Students wishing to minor in music should possess a certain degree of musical competence, including the ability to read music and perform as a vocalist or on an instrument at an intermediate level. Students are encouraged to discuss their plans to pursue a music minor with an advisor within the Music Department or the academic advisor prior to enrolling in music coursework. The course of study leading to the minor is comprised of 21-22 semester credit hours from the following courses.

Requirements

- MUSI 1311 - Musicianship I 3 sem. hrs.
- MUSI 1312 - Musicianship II 3 sem. hrs.
- MUSI 1116 - Aural Training I 1 sem. hrs.
- MUSI 1117 - Aural Training II 1 sem. hrs.
- MUAP 1XXX or higher - Secondary Applied Studio (two semesters)
- MUAP 2XXX or higher - Secondary Applied Studio (two semesters)
- MUEN 1123 - Symphonic Winds 1 sem. hrs. OR
- MUEN 3123 - Symphonic Winds 1 sem. hrs. OR
- MUEN 1124 - Concert Orchestra 1 sem. hrs. OR
- MUEN 3124 - Orchestra 1 sem. hrs. OR
- MUEN 1151 - University Singers 1 sem. hrs. OR
- MUEN 3151 - University Singers 1 sem. hrs.

Choose two from the following:

- MUSI 3253 - Basic Conducting 2 sem. hrs.
- MUSI 3310 - History of Jazz 3 sem. hrs.
- MIND 3311 - Applications of Music Technology 3 sem. hrs.
- MIND 3312 - Recording Techniques I 3 sem. hrs.
- MIND 3313 - Recording Techniques II 3 sem. hrs.
- MIND 3320 - Music Business Survey 3 sem. hrs.
- MIND 3321 - Music Business II 3 sem. hrs.
- MUSI 4334 - History of Western Music I 3 sem. hrs.

Psychology and Sociology

Bachelor of Arts

Psychology, BA

Mission

In keeping with the University's mission, the discipline of Psychology seeks to discover, communicate, and apply knowledge about human behavior in a complex and changing world. The specific mission of the undergraduate program is three-fold: to provide a basic education within the field of psychology as a foundation for graduate work in a professional field of psychology, such as clinical or counseling psychology, cognitive psychology, social psychology, or developmental psychology; to provide disciplinary knowledge through a broadly-based curriculum which can be applied to related careers such as human services, business, communications, and research; and to contribute to the education of students majoring in other areas of study. An on-campus format provides a mix of face-to-face, blended and online courses. An online format provides all psychology requirements via the web. The course schedule for the online BA in Psychology will differ from on campus offerings and may not include all course options available to on-campus students.
Student Learning Outcomes

- Knowledge Base of Psychology

  Students will demonstrate understanding of the concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

- Research Methods in Psychology

  Students will understand and apply research methods in psychology, including research design, data analysis, and interpretation.

- Critical Thinking Skills in Psychology

  Students will use critical and creative thinking, skeptical inquiry, and the scientific approach to solve problems related to behavior and mental processes.

The Bachelor of Arts degree with a major in psychology requires a minimum of 37 semester hours in psychology, including General Psychology. At least 25 of these hours must be at the upper-division level. The College of Liberal Arts also requires students in Psychology to take at least 6 hours of a second language.

To earn a degree with a major in psychology, a student must complete a minimum of 37 semester hours of psychology courses exclusively applied to the major and beyond the requirements of the Core Curriculum Program. Within the College of Liberal Arts, only 6 semester hours that count toward a major can be applied to a minor.

A primary objective of the psychology program is to provide the psychology major with a broadly-based education in the discipline. Therefore, all psychology majors are expected to complete the required curriculum listed below. Remaining coursework will be selected by the student in consultation with the academic advisor and is designed to meet individual students' needs and interests. The combination of psychology with a minor from another area, such as sociology or communications, often provides more marketable credentials at the bachelor's level of training.

A course in General Psychology (PSYC 2301) or permission of the instructor is required for admission into all psychology courses beyond the 1000-level. The student majoring in psychology shall take the following:

Degree Requirements
<table>
<thead>
<tr>
<th>A. University Core Curriculum Programs</th>
<th>42</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. First-Year Seminars (when applicable)</td>
<td>(2)</td>
</tr>
<tr>
<td>C. Major Requirements</td>
<td>37</td>
</tr>
<tr>
<td>D. University Electives</td>
<td>33-35</td>
</tr>
<tr>
<td>E. Foreign Language Requirement</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

**Required Courses:**

- PSYC 2301 - General Psychology* 3 sem. hrs.
- PSYC 3411 - Experimental Psychology* 4 sem. hrs.
- PSYC 4310 - Psychology Capstone Seminar* 3 sem. hrs.

Choose 2 of 4 (6 hours) from:

- PSYC 3342 - Cognitive Psychology* 3 sem. hrs.
- PSYC 3343 - Learning and Behavior* 3 sem. hrs.
- PSYC 4352 - Physiological Psychology* 3 sem. hrs.
- PSYC 4354 - Sensation and Perception* 3 sem. hrs.

Choose 2 of 4 (6 hours) from:

- PSYC 2314 - Lifespan Developmental Psychology* 3 sem. hrs.
- PSYC 2319 - Social Psychology* 3 sem. hrs.
- PSYC 3361 - Psychology of Personality* 3 sem. hrs.
- PSYC 3363 - Abnormal Psychology* 3 sem. hrs.
Psychology Electives

Choose 5 courses (15 hours) from the electives listed below or any other upper division psychology course listed above which does not count towards the required major hours in another area.

- PSYC 2390 - Topics in Psychology 3 sem. hrs. (Can be taken multiple times as long as the topic is different.)
- PSYC 3325 - Close Relationships 3 sem. hrs.
- PSYC 3335 - Forensic Psychology 3 sem. hrs.
- PSYC 3346 - Psychology of Language 3 sem. hrs.
- PSYC 3350 - Evolutionary Psychology 3 sem. hrs.
- PSYC 3360 - Health Psychology* 3 sem. hrs.
- PSYC 3370 - Psychology of Religion 3 sem. hrs.
- PSYC 3374 - Human Sexuality* 3 sem. hrs.
- PSYC 3375 - Introduction to Clinical Psychology 3 sem. hrs.
- PSYC 4309 - History and Systems of Psychology* 3 sem. hrs.
- PSYC 4332 - Cross-cultural Psychology* 3 sem. hrs.
- PSYC 4344 - Drug Use and Abuse 3 sem. hrs.
- PSYC 4367 - Gender Issues in Psychology 3 sem. hrs.
- PSYC 4372 - Psychological Testing 3 sem. hrs.
- PSYC 4377 - Industrial/Organizational Psychology 3 sem. hrs.
- PSYC 4390 - Topics in Psychology 3 sem. hrs. (can be taken multiple times as long as the topic is different)
- PSYC 4395 - Undergraduate Research 3 sem. hrs.
- PSYC 4396 - Directed Individual Study* 1-3 sem. hrs.
- PSYC 4398 - Applied Experience* 3 sem. hrs.

Note:

MATH 1442 or its equivalent is a prerequisite course for taking PSYC 3411 - Experimental Psychology*.

In order to register for PSYC 4310, students must first complete 24 hours of psychology coursework and have senior class standing or permission of the instructor.

BA Psychology - Online Completion

In keeping with the University's mission, the Psychology department is devoted to discovering, communicating, and applying knowledge in a complex and changing world. The specific mission of the undergraduate program is three-fold: to provide a basic education within the field of psychology as a foundation for graduate work in a
professional field of psychology, such as clinical or counseling psychology, cognitive psychology, social psychology, or developmental psychology; to provide disciplinary knowledge through a broadly-based curriculum which can be applied to related careers such as human services, business, communications, and research; and to contribute to the education of students majoring in other areas of study. An on-campus format provides a mix of face-to-face, blended and online courses. An online format provides all psychology requirements via the web. The course schedule for the online BA in Psychology will differ from on campus offerings and may not include all course options available to on-campus students.

Student Learning Outcomes

• Knowledge Base of Psychology

Students will demonstrate understanding of the concepts, theoretical perspectives, empirical findings, and historical trends in psychology.

• Research Methods in Psychology

Students will understand and apply research methods in psychology, including research design, data analysis, and interpretation.

• Critical Thinking Skills in Psychology

Students will use critical and creative thinking, skeptical inquiry, and the scientific approach to solve problems related to behavior and mental process.

Entry Requirements

Students may apply to be accepted into the fully online Psychology BA program after the completion of all University Core Curriculum requirements including the following courses or their equivalents:

PSYC 2301 - General Psychology* 3 sem. hrs.

MATH 1442 - Statistics for Life*^ 4 sem. hrs.

The Bachelor of Arts degree with a major in Psychology

The Bachelor of Arts degree with a major in psychology requires a minimum of 37 semester hours of psychology, including General Psychology. At least 25 of these hours must be at the upper-division level. The College of Liberal Arts also requires students in
Psychology to take at least 6 hours of a second language. To earn a degree with a major in psychology, a student must complete a minimum of 37 semester hours of psychology courses exclusively applied to the major and beyond the requirements of the Core Curriculum Program. Within the College of Liberal Arts, only 6 semester hours that count toward a major can be applied to a minor. A primary objective of the psychology program is to provide the psychology major with a broadly-based education in the discipline. Therefore, all psychology majors are expected to complete the required curriculum listed below. Remaining coursework will be selected by the student in consultation with the faculty advisor and is designed to meet individual students' needs and interests. The combination of psychology with a minor from another area, such as sociology or communications, often provides more marketable credentials at the bachelor's level of training.

A course in General Psychology (PSYC 2301) or permission of the instructor is required for admission into all psychology courses beyond the 1000-level. The student majoring in psychology shall take the following:

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<td>33-35</td>
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<tr>
<td>E. Foreign Language Requirement</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
</tr>
</tbody>
</table>

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.
Required Courses:

- PSYC 2301 - General Psychology* 3 sem. hrs.
- PSYC 3411 - Experimental Psychology* 4 sem. hrs.
- PSYC 4310 - Psychology Capstone Seminar* 3 sem. hrs.

Choose 2 of 4 (6 hours) from:

- PSYC 2314 - Lifespan Developmental Psychology* 3 sem. hrs.
- PSYC 2319 - Social Psychology* 3 sem. hrs.
- PSYC 3361 - Psychology of Personality* 3 sem. hrs.
- PSYC 3363 - Abnormal Psychology* 3 sem. hrs.

Choose 2 of 4 (6 hours) from:

- PSYC 3342 - Cognitive Psychology* 3 sem. hrs.
- PSYC 3343 - Learning and Behavior* 3 sem. hrs.
- PSYC 4352 - Physiological Psychology* 3 sem. hrs.
- PSYC 4354 - Sensation and Perception* 3 sem. hrs.

Psychology Electives - 5 courses (15 hours)

- PSYC 2314 - Lifespan Developmental Psychology* 3 sem. hrs.
- PSYC 2319 - Social Psychology* 3 sem. hrs.
- PSYC 3360 - Health Psychology* 3 sem. hrs.
- PSYC 3361 - Psychology of Personality* 3 sem. hrs.
- PSYC 3363 - Abnormal Psychology* 3 sem. hrs.
- PSYC 3374 - Human Sexuality* 3 sem. hrs.
- PSYC 4332 - Cross-cultural Psychology* 3 sem. hrs.
- PSYC 4396 - Directed Individual Study* 1-3 sem. hrs.
- PSYC 4398 - Applied Experience* 3 sem. hrs.

Sociology, BA

Sociology is the scientific study of human societies. At the macro-level, sociology studies societies as a whole and their social institutions such as the family, economy, religion, polity, and education. At the micro-level, sociology is concerned with everyday interactions within small social groups.

The purpose of the sociology curriculum is to:

1. provide education in the theories, concepts, definitions and language of sociology;
2. cultivate an understanding of the methods of research and interpretation of research findings;
3. prepare students for graduate study in sociology;
4. develop selected skills applicable to careers in the public or private sector.

Student Learning Outcomes

Students will:

- Demonstrate an understanding in the theories, concepts, definitions and language of sociology;
- Demonstrate the ability to apply professional standards of writing and research to sociological issues;
- Obtain advanced knowledge for use in the pursuit of graduate study in sociology;
- Complete a sociological research project and present it to a professional audience;
- Obtain advanced knowledge of research and writing skills applicable to careers in the public and private sector.

Areas covered in the curriculum include, but are not limited to, development of human societies, the nature of social interactions at the individual and group levels, structures and processes of social organizations, deviant behavior, and research methods and computer applications used in social analysis. Skills acquired from this curriculum are helpful for careers in human services, government, business, and or graduate studies.

The Bachelor of Arts degree with a major in sociology requires a minimum of 37 semester hours in sociology. At least 24 of these hours must be at the upper-division (3300 or 4300) level. The College of Liberal Arts also requires students in sociology to take at least 6 hours of a second language. Sociology majors are encouraged to take MATH 1442 to satisfy the Mathematics Core Curriculum Program requirement. Students who do not take MATH 1442 to satisfy the Mathematics Core Curriculum Program requirement will be required to do so in order to fulfill the statistics requirement for the major. Students are also encouraged to select a minor or elective work in a related field that is pertinent to the student's career goals.

To earn a degree with a major in sociology, a student must complete a minimum of 37 semester hours of sociology courses exclusively applied to the major and beyond the requirement of the Core Curriculum Program. Within the College of Liberal Arts, only 6 semester hours that count towards a major may be applied to a minor.

Degree Requirements
Sem. Hrs.

1. Core Curriculum Program 42
2. First-Year Seminars (when applicable)* 37
3. Major Requirements** 32-34
4. University Electives 6

Total 120

*First Year Seminars

First-Year Seminars or Electives

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Major Study Courses

- SOCI 1301 - Introduction to Sociology* 3 sem. hrs.
- SOCI 4301 - Social Theory 3 sem. hrs.
- SOCI 4445 - Social Research Methods 4 sem. hrs.
- SOCI 4385 - Senior Seminar in Sociology 3 sem. hrs. (to be taken during senior year only)
  (SOCI 4301 and SOCI 4445 must be taken before SOCI 4385)

At least two courses from each of the following categories:

Inequalities 9 hrs

- SOCI 2301 - Social Problems 3 sem. hrs.
- SOCI 3312 - Racial and Ethnic Relations 3 sem. hrs.
- SOCI 3320 - Sociology of Gender 3 sem. hrs.
- SOCI 3321 - Mexican American Women 3 sem. hrs.
- SOCI 4312 - Social Class and Inequality^ 3 sem. hrs.

Social Organizations and Institutions 6 hrs

- SOCI 3340 - Sociology of the Family 3 sem. hrs.
- SOCI 3350 - Sociology of Education 3 sem. hrs.
- SOCI 4310 - Sociology of Work and Occupations 3 sem. hrs.
- SOCI 4315 - Complex Organizations 3 sem. hrs.

Sociology Electives 9 hrs

- Elective coursework may include courses in Sociology or Anthropology as selected by the student in consultation with a faculty advisor. Electives are designed to meet students’ needs and interests.
- SOCI 2319 - Social Psychology 3 sem. hrs.
- SOCI 3301 - Cultural Anthropology 3 sem. hrs.
- SOCI 3310 - Sociology through Film 3 sem. hrs.
- SOCI 3315 - Population 3 sem. hrs.
- SOCI 3321 - Mexican American Women 3 sem. hrs.
- SOCI 3349 - Sociology of Deviant Behavior 3 sem. hrs.
- SOCI 3370 - Native Americans in North America 3 sem. hrs.
- SOCI 4320 - Sociology of Sports 3 sem. hrs.
- SOCI 4325 - Medical Sociology 3 sem. hrs.
- SOCI 4326 - Food and Society 3 sem. hrs.
- SOCI 4331 - Juvenile Delinquency 3 sem. hrs.
- SOCI 4335 - Criminology 3 sem. hrs.
- SOCI 4390 - Topics in Sociology 3 sem. hrs.
- SOCI 4396 - Directed Individual Study 1-3 sem. hrs.
- SOCI 4398 - Applied Experience 3 sem. hrs.

Total: 37 hrs

Required Sequences of Courses:

SOCI 1301 before all other sociology courses

MATH 1442 before SOCI 4445

SOCI 4445 and SOCI 4301 must be taken before SOCI 4385

Note:

Introduction to Sociology (SOCI 1301) or permission of the instructor is required for admission into all upper-division sociology courses.

Minor
Psychology Minor

To obtain a minor in psychology, the student must declare the minor with the academic advisor and complete the 18 semester hours required for a minor, 12 hours of which must be upper division courses. The student must complete PSYC 2301 as well as the required coursework described below.

Psychology Minor

Required Course: 3 hours

- PSYC 2301 - General Psychology* 3 sem. hrs.

Choose 1 of 4 from: 3 hours

- PSYC 3342 - Cognitive Psychology* 3 sem. hrs.
- PSYC 3343 - Learning and Behavior* 3 sem. hrs.
- PSYC 4352 - Physiological Psychology* 3 sem. hrs.
- PSYC 4354 - Sensation and Perception* 3 sem. hrs.

Choose 1 of 4 from: 3 hours

- PSYC 2314 - Lifespan Developmental Psychology* 3 sem. hrs.
- PSYC 2319 - Social Psychology* 3 sem. hrs.
- PSYC 3361 - Psychology of Personality* 3 sem. hrs.
- PSYC 3363 - Abnormal Psychology* 3 sem. hrs.

Psychology Electives – 3 courses (9 hours)

(see list of electives above in description of the major)

Social Work Minor

This minor is an interdisciplinary program for undergraduate students who are interested in the field of social work or social services and want more in-depth study in this area than other courses provide. This program is designed to complement undergraduate study programs in the University.
The purpose of the minor is to give students a basic understanding of social work practice. This includes the history, function, and processes with emphasis on skill application.

Social work is concerned with human well-being. Social workers help people function within their environment and work for improved social conditions. They provide services to people in areas such as counseling, education, health, mental health, housing, public welfare, services to the aging, care for the intellectually disabled, family services, child welfare services, and criminal justice.

Requirement for the Minor

To obtain a minor in social work, the student must declare a minor with the academic advisor and complete the 18 semester hours required for a minor, including the required 12 hours of social work classes listed below. The minor also requires an additional two elective courses from those listed below in social work, psychology, sociology, or criminal justice. However the elective courses may not overlap with coursework in the student's declared major (e.g. a psychology major cannot take two psychology electives to meet the social work minor requirement).

Required Courses

- SOCW 3301 - Introduction to Social Work 3 sem. hrs.
- SOCW 3310 - Approaches to Social Welfare 3 sem. hrs.
- SOCW 3320 - Social Services in the Community 3 sem. hrs.
- SOCW 3350 - Social Work Practice 3 sem. hrs.

Electives

The electives for this minor must be selected outside your major. Any electives not included in the list below must have prior approval by your Social Work advisor.

Social Work

- SOCW 4398 - Applied Experience 3 sem. hrs.

Psychology

- PSYC 2314 - Lifespan Developmental Psychology* 3 sem. hrs.
- PSYC 3360 - Health Psychology* 3 sem. hrs.
- PSYC 3361 - Psychology of Personality* 3 sem. hrs.
- PSYC 3363 - Abnormal Psychology* 3 sem. hrs.
- PSYC 3375 - Introduction to Clinical Psychology 3 sem. hrs.
- PSYC 4332 - Cross-cultural Psychology* 3 sem. hrs.
- PSYC 4367 - Gender Issues in Psychology 3 sem. hrs.

Sociology

- SOCI 3312 - Racial and Ethnic Relations 3 sem. hrs.
- SOCI 3320 - Sociology of Gender 3 sem. hrs.
- SOCI 3321 - Mexican American Women 3 sem. hrs.
- SOCI 3340 - Sociology of the Family 3 sem. hrs.
- SOCI 4312 - Social Class and Inequality^ 3 sem. hrs.
- SOCI 4325 - Medical Sociology 3 sem. hrs.

Criminal Justice

- CRIJ 4331 - Juvenile Delinquency 3 sem. hrs.
- CRIJ 4360 - Intimate Relationship Violence 3 sem. hrs.

Sociology Minor

To obtain a minor in sociology the student must register with the academic advisor and complete the 18 semester hours required for a minor. Of these, 12 hours must be upper division. The student must complete SOCI 1301, at least one course from each of the two substantive categories (Inequalities and Social Organizations and Institutions) and at least three electives.

Required Course

- SOCI 1301 - Introduction to Sociology* 3 sem. hrs. before all other SOCI courses

At least one course from the following two categories:

Inequalities 3 hrs

- SOCI 2301 - Social Problems 3 sem. hrs.
- SOCI 3312 - Racial and Ethnic Relations 3 sem. hrs.
- SOCI 3320 - Sociology of Gender 3 sem. hrs.
- SOCI 4312 - Social Class and Inequality^ 3 sem. hrs.
- SOCI 3321 - Mexican American Women 3 sem. hrs.
Social Organizations and Institutions 3 hrs

- SOCI 3340 - Sociology of the Family 3 sem. hrs.
- SOCI 3350 - Sociology of Education 3 sem. hrs.
- SOCI 4310 - Sociology of Work and Occupations 3 sem. hrs.
- SOCI 4315 - Complex Organizations 3 sem. hrs.

At least three courses from the following category (or additional courses from the Inequalities or Social Organizations and Institutions categories):

Sociology Electives 9 hrs

Elective coursework may include courses in Sociology or Anthropology as selected by the student in consultation with a faculty advisor. Electives are designed to meet students' needs and interests.

- SOCI 2319 - Social Psychology 3 sem. hrs.
- SOCI 3301 - Cultural Anthropology 3 sem. hrs.
- SOCI 3310 - Sociology through Film 3 sem. hrs.
- SOCI 3315 - Population 3 sem. hrs.
- SOCI 3349 - Sociology of Deviant Behavior 3 sem. hrs.
- SOCI 3370 - Native Americans in North America 3 sem. hrs.
- SOCI 4301 - Social Theory 3 sem. hrs.
- SOCI 4320 - Sociology of Sports 3 sem. hrs.
- SOCI 4325 - Medical Sociology 3 sem. hrs.
- SOCI 4326 - Food and Society 3 sem. hrs.
- SOCI 4331 - Juvenile Delinquency 3 sem. hrs.
- SOCI 4335 - Criminology 3 sem. hrs.
- SOCI 4390 - Topics in Sociology 3 sem. hrs.
- SOCI 4396 - Directed Individual Study 1-3 sem. hrs.
- SOCI 4398 - Applied Experience 3 sem. hrs.
- SOCI 4445 - Social Research Methods 4 sem. hrs.

Social Sciences

Bachelor of Arts

Political Science, BA

Political Science
Political science is the study of politics, government, and public policy at the local, state, national, and international levels. It is concerned with the struggle for power and the exercise of power in public institutions. Political science seeks to reveal the patterns of behavior associated with politics, to explain the functioning of political and governmental institutions, to appraise alternative public policies, and to assess government's role in society.

Political science provides students with the broad-training necessary to become successful professionals in a variety of fields, as well as engaged democratic citizens. As such, the purpose of the political science program is to foster the development of vital skills such as critical thinking, communication, and analytical abilities in our students in order to prepare them for both a broad range of career choices and the pursuit of lifelong learning.

Student Learning Outcomes

Upon completion of the BA in political science, students will be able to:

1. Demonstrate critical thinking skills, to include: creative thinking, innovation, inquiry and analysis, evaluation, and synthesis of information.
2. Demonstrate communication skills, to include: the effective development, interpretation, and expression of ideas through written, oral, and visual communication.
3. Demonstrate empirical and quantitative skills, to include: the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Major in Political Science

To earn a BA in political science, a student must complete a minimum of 33 semester hours of political science courses beyond the requirements of the Core Curriculum Program. Political science majors are advised to take MATH 1324, MATH 1325, or MATH 1442 to satisfy the Mathematics Core Curriculum Program requirement. Students who do not take MATH 1324, MATH 1325, or MATH 1442 to satisfy the core Math requirement will be required to take one to fulfill the requirements for the major. The department recommends taking MATH 1442 to satisfy both the Core and major requirement. If students have any questions, they should visit with the social science academic advisor. The degree hour requirements for the BA in political science are as follows:

Degree Requirements
<table>
<thead>
<tr>
<th>Requirements</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Core Curriculum Program</td>
<td>42*</td>
</tr>
<tr>
<td>B. First-Year Seminar (when applicable)</td>
<td>(2)</td>
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<tr>
<td>C. Major Requirements</td>
<td>33</td>
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<tr>
<td>D. University Electives</td>
<td>36-38</td>
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<td>E. Foreign Language Requirements</td>
<td>6</td>
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<tr>
<td><strong>Total Hours</strong></td>
<td><strong>120-1</strong></td>
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</table>

**Note:**

*Students are required to take POLS 2305 U.S. Government and Politics*\(^*\) and POLS 2306 State and Local Government*\(^*\) as part of the University Core Curriculum

**Full-time, first-year students are required to take the following courses:**

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

**University Core Curriculum (42 hours)**

Please see Core Curriculum Program for more details. Hours will depend on MATH course taken.

**Note:**

*Students are required to take POLS 2305 U.S. Government and Politics*\(^*\) and POLS 2306 State and Local Government*\(^*\) as part of the University Core Curriculum

**Required Courses**

- POLS 2304 - Introduction to Political Science 3 sem. hrs.
- POLS 3303 - Contemporary Political Analysis 3 sem. hrs.
  (pre-requisite for POLS 4303)
- POLS 4303 - Seminar in Political Science 3 sem. hrs.

Students must take 18 upper-division hours from the following lists, with at least three courses from each list. The remaining 6 semester hours of unrestricted electives may be any political science course included in these lists or the internship experience (POLS 4398 Applied
Experience). When POLS 4390 courses are offered by faculty, the course description will indicate whether the course applies to List 1 or List 2.

List 1 American Politics, Public Policy, and Public Administration

- POLS 2311 - Mexican American and Latinx Politics 3 sem. hrs.
- POLS 3311 - Women and Politics 3 sem. hrs.
- POLS 3312 - Campaigns and Elections 3 sem. hrs.
- POLS 3313 - The Legislative Process 3 sem. hrs.
- POLS 3314 - Public Opinion 3 sem. hrs.
- POLS 3315 - Political Parties 3 sem. hrs.
- POLS 3316 - The American Presidency 3 sem. hrs.
- POLS 3317 - Judicial Politics 3 sem. hrs.
- POLS 3318 - Interest Groups 3 sem. hrs.
- POLS 3341 - Introduction to Public Administration 3 sem. hrs.
- POLS 3342 - Introduction to Public Policy 3 sem. hrs.
- POLS 3351 - U.S. Constitution and Federalism 3 sem. hrs.
- POLS 4311 - Urban Politics 3 sem. hrs.
- POLS 4312 - Government Budgeting and Finance 3 sem. hrs.
- POLS 4390 - Topics in Political Science 3 sem. hrs.

List 2 Comparative Politics, International Relations, and Political Theory

- POLS 3319 - Religion and Politics 3 sem. hrs.
- POLS 3321 - Comparative Politics 3 sem. hrs.
- POLS 3331 - International Relations 3 sem. hrs.
- POLS 3361 - Western Political Theory 3 sem. hrs.
- POLS 3365 - Political Theory and Ideologies 3 sem. hrs.
- POLS 4321 - Comparative Politics of Developing Nations 3 sem. hrs.
- POLS 4322 - Transitions to Democracy 3 sem. hrs.
- POLS 4325 - Politics in Latin America 3 sem. hrs.
- POLS 4327 - The Politics of War 3 sem. hrs.
- POLS 4361 - American Political Thought 3 sem. hrs.
- POLS 4390 - Topics in Political Science 3 sem. hrs.

*POLS 4390 will be applied to list 1 or List 2 as approved by department.

*POLS 4390 will be applied to list 1 or List 2 as approved by department.

Bachelor of Science
Criminal Justice, BS

Criminal Justice

The Criminal Justice Program leads to a Bachelor of Science Degree in Criminal Justice and supports the Bachelor of Applied Science Degree with courses applicable to the Criminal Justice, Community and Mental Health, and Legal Studies tracks. The program has two main objectives: to provide an advanced understanding of the criminal justice system and its components and to provide either a concentration of knowledge and application of skills in a specialized subfield of study or a broad exploration of the discipline based on individual student needs through the selection of disciplinary electives.

The curriculum is planned to offer preparation for a professional career by integrating a core of Criminal Justice courses into a general program of the arts, sciences, humanities and social sciences. The student in consultation with faculty will determine the most desirable course offerings from core courses and recommended electives to achieve his or her particular educational goals. The program may be used as preparation for entry into graduate work or law school. Criminal Justice courses are recommended as social science electives for non-majors.

Student Learning Outcomes:

Students will:

- Demonstrate an understanding of the operation and purposes of the major components of the criminal justice system (police, courts, and corrections)
- Demonstrate the ability to critically analyze the criminal justice system and its aims and objectives
- Demonstrate the ability to apply professional standards of writing and research to criminal justice issues

Program Requirements

The Criminal Justice major requires a minimum of 45 semester hours, 27 semester hours of which must be at the upper-division level. Supporting courses related to essential skills totaling 3 hours are also required. Criminal Justice majors are encouraged to take MATH 1442 to satisfy the Mathematics Core Curriculum Program requirement. Students who do not take MATH 1442 in the Core Curriculum will be required to do so to fulfill the
supporting coursework requirement for majors. The College of Liberal Arts also requires students in Criminal Justice to take at least 6 hours of a second language.

Students seeking the Bachelor of Science in Criminal Justice are expected to develop a breadth of knowledge of the component parts of the criminal justice system. Through their choice of disciplinary electives, students may concentrate on Criminal Justice subfields or broadly explore the discipline and its career options. Students should select a majority of their upper-division elective hours from disciplines which support their choice of specialization.

Students may also register for CRIJ 4398 and participate in the Applied Experience Program to earn course credit while gaining practical work experience in Criminal Justice or a related field. Registration is by application. Interested students should contact the Criminal Justice Applied Experience Coordinator.

Every candidate for the BS in Criminal Justice must complete the CRIJ 4085 Major Field Test in Criminal Justice during their final long semester prior to graduation. The details as to the date and time of administration of the Major Field Test in Criminal Justice are announced at the beginning of each Fall and Spring semester.

Degree Requirements

<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sem. Hrs.</td>
<td></td>
</tr>
<tr>
<td>A. University Core Curriculum Programs</td>
<td>42</td>
</tr>
<tr>
<td>B. First-Year Seminars (when applicable)*</td>
<td>(2)</td>
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<tr>
<td>C. Major Requirements</td>
<td>45</td>
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<tr>
<td>D. University Electives</td>
<td>24</td>
</tr>
<tr>
<td>E. Foreign Language Requirements</td>
<td>6</td>
</tr>
<tr>
<td>F. Required Supporting Courses</td>
<td>3</td>
</tr>
<tr>
<td>G. Major Field Test in Criminal Justice Completion</td>
<td>0</td>
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</tbody>
</table>
Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

University Core Curriculum (42 hours)

Please see Core Curriculum Program for more details.

Note: Students who do not take MATH 1442 in the Core Curriculum will be required to do so for the major.

Criminal Justice Major Requirements: (21 sem. hrs.)

Students who major in Criminal Justice must complete the following coursework.

- CRIJ 1301 - Introduction to Criminal Justice 3 sem. hrs.
- CRIJ 1306 - Court Systems and Processes 3 sem. hrs.
- CRIJ 1310 - Fundamentals of Criminal Law 3 sem. hrs.
- CRIJ 4085 - Major Field Test 0 sem. hrs.
- CRIJ 4355 - Criminology 3 sem. hrs.
- CRIJ 4345 - Research Methods in Criminal Justice 3 sem. hrs.

Advanced Understanding in Criminal Justice (12 sem. hrs.)

Theoretical Perspectives

From:

- CRIJ 4325 - Race, Ethnicity, Crime & Criminal Justice 3 sem. hrs.
  OR
- CRIJ 4331 - Juvenile Delinquency 3 sem. hrs.

Corrections

From:
• CRIJ 3325 - Community-Based Corrections 3 sem. hrs.
  OR
• CRIJ 4320 - Offender Rehabilitation 3 sem. hrs.
  OR
• CRIJ 4321 - American Prisons and Prisoners 3 sem. hrs.

Courts

From:

• CRIJ 4312 - Law and Evidence 3 sem. hrs.
  OR
• CRIJ 4313 - Criminal Procedure 3 sem. hrs.

Law Enforcement

From:

• CRIJ 3302 - Police and Society 3 sem. hrs.
  OR
• CRIJ 4351 - Police Supervision and Management 3 sem. hrs.

Criminal Justice Electives: (12 sem. hrs.)

Choose 12 sem. hrs. from list below or any other upper-level Criminal Justice course listed above that is not counting towards required major hours in another area.

• CRIJ 3313 - The Juvenile Justice System 3 sem. hrs.
• CRIJ 3340 - Comparative Criminal Justice 3 sem. hrs.
• CRIJ 3341 - Terrorism 3 sem. hrs.
• CRIJ 3360 - Organized Crime 3 sem. hrs.
• CRIJ 3361 - Drugs, the Drug War, and Criminal Justice 3 sem. hrs.
• CRIJ 3365 - Sex Crimes 3 sem. hrs.
• CRIJ 3370 - Crime in the Media 3 sem. hrs.
• CRIJ 3375 - Applied Statistics in Criminal Justice 3 sem. hrs.
• CRIJ 4324 - Women and Criminal Justice 3 sem. hrs.
• CRIJ 4360 - Intimate Relationship Violence 3 sem. hrs.
• CRIJ 4365 - White Collar Crime 3 sem. hrs.
• CRIJ 4390 - Topics in Criminal Justice 3 sem. hrs.
• CRIJ 4396 - Directed Individual Study 1-3 sem. hrs.
• CRIJ 4398 - Applied Experience 3 sem. hrs.

Note
Students may choose to concentrate their Criminal Justice Electives in a subfield of Theoretical Perspectives, Corrections, Courts, or Law Enforcement. For more information please contact a Criminal Justice Faculty or the Academic Advisor for Criminal Justice majors.

Required Supporting Courses: (3 sem. hrs.)

- ENGL 3301 - Technical and Professional Writing 3 sem. hrs.

Minor

Criminal Justice Minor

The minor in Criminal Justice consists of 18 semester hours of Criminal Justice coursework, 15 of which must be at the upper-division level. The 18 semester hours for the Minor in Criminal Justice must be selected from the following courses.

Criminal Justice Minor Core Courses: (15 sem. hrs.)

Systems (3 sem. hrs.) *

From:
- CRIJ 1301 - Introduction to Criminal Justice 3 sem. hrs.
- CRIJ 3313 - The Juvenile Justice System 3 sem. hrs.

Theoretical Perspectives (3 sem. hrs.):

From:
- CRIJ 3315 - Crime Prevention 3 sem. hrs.
- CRIJ 4322 - Crime and Punishment in Literature 3 sem. hrs.
- CRIJ 4331 - Juvenile Delinquency 3 sem. hrs.
- CRIJ 4335 - Criminology 3 sem. hrs.

Corrections (3 sem. hrs.):

From:
- CRIJ 4320 - Offender Rehabilitation 3 sem. hrs.
- CRIJ 4321 - American Prisons and Prisoners 3 sem. hrs.
Courts (3 sem. hrs.):

From:

- CRIJ 1306 - Court Systems and Processes 3 sem. hrs.
- CRIJ 4312 - Law and Evidence 3 sem. hrs.
- CRIJ 4313 - Criminal Procedure 3 sem. hrs.

Law Enforcement (3 sem. hrs.):

From:

- CRIJ 3302 - Police and Society 3 sem. hrs.
- CRIJ 4351 - Police Supervision and Management 3 sem. hrs.

Elective: 3 sem. hrs.*

*Either the three credit Systems requirement or the Elective requirement may be satisfied by lower-division transfer credit.

Political Science Minor

To earn a minor in political science, a student must complete a minimum of 18 semester hours of political science courses beyond the requirements of the Core Curriculum Program.

Of these 18 semester hours, at least one course (3 hours) must be taken from the courses in EACH of the four lists below:

List 1

- POLS 3312 - Campaigns and Elections 3 sem. hrs.
- POLS 3314 - Public Opinion 3 sem. hrs.
- POLS 3315 - Political Parties 3 sem. hrs.

List 2

- POLS 3313 - The Legislative Process 3 sem. hrs.
- POLS 3316 - The American Presidency 3 sem. hrs.
- POLS 3317 - Judicial Politics 3 sem. hrs.

List 3
• POLS 3321 - Comparative Politics 3 sem. hrs.
• POLS 3331 - International Relations 3 sem. hrs.
• POLS 4325 - Politics in Latin America 3 sem. hrs.

List 4

• POLS 3361 - Western Political Theory 3 sem. hrs.
• POLS 3365 - Political Theory and Ideologies 3 sem. hrs.
• POLS 4361 - American Political Thought 3 sem. hrs.

The remaining 6 hours of unrestricted electives can be any political science course.

Other Minors

Minor

Pre-Law Minor

This minor is intended for those students who are considering law school and want to obtain the foundational skills to gain entrance to and succeed in law school. It consists of 21 hours, 15 of which must be upper-division. The courses are designed to meet the core skills and values laid out by the American Bar Association.* This includes the ability to write, research, read critically, analyze, communicate, and value serving others by promoting justice. The minor will also enable students to obtain the general knowledge expected of law school applicants.

Required Courses

Students in the pre-law minor must satisfy 3 hours from each of the following seven categories:

• Writing
• Analytical and Problem Solving
• Critical Reading and General Knowledge
• Oral Communication and Listening
• Research
• Value of Serving Others
• Legal Topics
Elective Courses

Writing (3 hours)

Choose one of the following:

- ENGL 2370 - Introduction to Literary Studies 3 sem. hrs.
- ENGL 3301 - Technical and Professional Writing 3 sem. hrs.

Analytical and Problem Solving (3 hours)

Choose one of the following:

- PHIL 2303 - Introduction to Logic and Critical Thinking 3 sem. hrs.
- PHIL 3346 - Elementary Formal Logic 3 sem. hrs.
- MGMT 4340 - Critical Thinking and Decision Making* 3 sem. hrs.

Critical Reading and General Knowledge (3 hours)

Choose one of the following:

- ECON 4388 - History of Economic Thought* 3 sem. hrs.
- HIST 2311 - Western Civilization I 3 sem. hrs.
- HIST 2312 - Western Civilization II 3 sem. hrs.
- HIST 4336 - Mexican American History 3 sem. hrs.
- MXAS 3301 - Introduction to Mexican American Studies 3 sem. hrs.
- SOCI 4312 - Social Class and Inequality^ 3 sem. hrs.
- PHIL 3344 - Social and Political Philosophy 3 sem. hrs.
- POLS 3303 - Contemporary Political Analysis 3 sem. hrs.
- POLS 3321 - Comparative Politics 3 sem. hrs.
- POLS 4361 - American Political Thought 3 sem. hrs.
- WGST 3301 - Introduction to Women and Gender Studies 3 sem. hrs.

Oral Communication and Listening

Choose one of the following:

- COMM 1315 - Public Speaking 3 sem. hrs. *
- COMM 2333 - Small Group Communication 3 sem. hrs.
- COMM 3330 - Persuasion 3 sem. hrs.
- COMM 4345 - Intercultural Communication 3 sem. hrs.
* Public Speaking may not be counted towards both the core and the minor. It is required for students who did not take it as part of the core curriculum (e.g. some transfer students).

Research (3 hours)

Choose one of the following:

- CRIJ 4345 - Research Methods in Criminal Justice 3 sem. hrs.
- SOCI 4390 - Topics in Sociology 3 sem. hrs. *
- SOCI 4445 - Social Research Methods 4 sem. hrs.
- Capstone: Research based capstone in your major 3 sem. hrs.*

*This must be approved by your faculty mentor and prelaw advisor

Value of Servings Others (3 hours)

Choose one of the following:

- CRIJ 4398 - Applied Experience^ 3 sem. hrs.
- ENGL 4321 - Grants and Proposals 3 sem. hrs.
- SOCI 4398 - Applied Experience 3 sem. hrs. *
- SOCW 4398 - Applied Experience 3 sem. hrs. *
- Service Learning - Upper-division course with a service learning component*

* Must be approved by faculty or minor advisor.

Legal Topics (3 hours)

Choose one of the following:

- BLAW 3310 - Legal Environment of Business* 3 sem. hrs.
- MEDA 4341 - First Amendment and Ethical Issues in the Media 3 sem. hrs.
- CRIJ 1306 - Court Systems and Processes 3 sem. hrs.
- CRIJ 4310 - Constitutional Law 3 sem. hrs.
- CRIJ 4312 - Law and Evidence 3 sem. hrs.
- ESCI 4301 - Environmental Regulations 3 sem. hrs.
- GISC 4305 - Legal Aspects of Spatial Information 3 sem. hrs.
- HLSC 4310 - Health Law^ 3 sem. hrs.
- KINE 3335 - Legal Issues in Sport 3 sem. hrs.
- PHIL 3343 - Philosophy of Law 3 sem. hrs.

Theatre and Dance
Bachelor of Arts

Theatre, BA

The mission of the Texas A&M University-Corpus Christi Theatre Program is to provide students with the tools needed for preparation as Theatre educators or professional practitioners, or for continuation of their studies on the graduate level.

The goal of the program is to provide students with meaningful experiences that promote an understanding of Theatre as a medium of expression and collaboration. Students are given opportunities for creative and critical thinking, problem solving, and exploration in an environment that values artistic integrity, understands failure as well as success, and respects the viewpoints of others in the encouragement of artistic truth. The extensive season of the Theatre Program serves not only as a training lab for the students, but also enhances the cultural and aesthetic experience of the campus and is a major cultural resource for the residents of South Texas.

Student Learning Outcomes

1. BA in Theatre: Acting/Directing concentration and Design/Technical concentration will demonstrate the following

   - Demonstrate analysis competencies in historical research and script analysis;
   - Communicate historical and cultural dimensions of Theatre during a required exit jury with the faculty;
   - Communicate and defend their senior capstone project to the Theatre faculty;
   - Communicate and defend a cumulative portfolio of their work complete with headshot, resume, and marketing strategy for post-baccalaureate opportunities in graduate school or professional work.

2. BA in Theatre: Teaching Certificate concentration will demonstrate the following:

   - Communicate competencies in historical research and script analysis during a required exit jury with the Theatre faculty.
   - Communicate historical and cultural dimensions of Theatre during a required exit jury with the Theatre faculty.
   - Communicate visual and aural perceptions of Theatre performance during a required exit jury with the Theatre faculty. The student will use specific examples from their participation in University Theatre productions.

BA Theatre Entrance Auditions/Interviews and BA Theatre Scholarship Auditions
All students wishing to major in Theatre must audition/interview or present a design/technical portfolio for review prior to Admission into the program.

- Auditions/interviews for incoming fall or spring: Incoming first-year and transfer students should schedule an audition/interview or design/technical portfolio review prior to Islander Launch (new student orientation) by calling Mr. Kelly Russell, Director of the University Theatre, at 361-825-5992. If you have not auditioned/interviewed or presented a design/technical portfolio for review prior to Islander Launch, you will be asked to do so prior to enrolling in Theatre courses. Theatre auditions for the acting/directing or teacher certification concentration consist of a resume and two contrasting monologues totaling no more than 2 minutes. Students majoring with the design/technical concentration are required to bring a design/technical portfolio and resume of their previous work in the Theatre for review to a scheduled interview prior to being admitted into Theatre courses.
- For transfers and those first-year students who missed Islander Launch, auditions/interviews, or design/technical portfolio reviews should be scheduled for the Friday or Monday before classes are scheduled to begin. Contact Mr. Kelly Russell for an audition/interview, or design/technical portfolio review and schedule a day and time.

To schedule an audition/interview time, design/technical portfolio review, to audition for a Theatre Scholarship, or for more information, contact:

Mr. Kelly Russell

Texas A&M University-Corpus Christi

6300 Ocean Drive, Unit 5724
Corpus Christi, Texas 78412

Phone: 361-825-5992
Fax: 361-825-2250
Email: kelly.russell@tamucc.edu

Scholarships for Theatre Majors and Minors

Theatre scholarships are talent-based awards given to Theatre majors and minors by annual audition/interview, and/or portfolio review. The scholarships range from $1,000 to $3,000 per academic year. To audition for a scholarship, contact Mr. Kelly Russell at the above contact information.
Admission to Theatre Degree Programs

Prospective Theatre majors are required to audition/interview prior to admission to the Theatre Program. Degree seeking Theatre majors are expected to perform at increasingly higher levels of design, technical, and/or artistic performance throughout their course of undergraduate study. Successful students in acting/directing or design/technical Theatre will maintain a 3.0 grade point average or higher in their course work and receive a positive faculty evaluation at their required annual jury. Students receiving negative faculty jury reviews or low grade point averages may be asked to re-audition or re-interview to continue as a Theatre major.

BACHELOR OF ARTS DEGREE WITH A MAJOR IN THEATRE

Students earning a Bachelor of Arts with a major in Theatre may concentrate on one of two specialties:

   Acting/Directing Concentration

   Design/Technical Theatre Concentration

Theatre majors may also pursue a Bachelor of Arts in Theatre leading to Teacher Certification.

Degree Requirements

<table>
<thead>
<tr>
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<th>Sem. Hrs.</th>
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<tbody>
<tr>
<td>1. Core Curriculum Program</td>
<td>42</td>
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<tr>
<td>2. First-Year Seminars (when applicable)</td>
<td>(2)</td>
</tr>
<tr>
<td>3. Major Requirements (Design/Tech or Acting/Directing)</td>
<td>61-63</td>
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<tr>
<td>4. University Electives</td>
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<td>5. Foreign Language Requirements</td>
<td>7-9</td>
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<td>Total</td>
<td>120 (122)</td>
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Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
• UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Specific Degree Requirements:

All Theatre majors must meet all general University and College graduation requirements, including UCCP First Year Seminars, regardless of the following specific degree requirements, unless specifically exempt. It is critical for all Theatre majors to meet with their academic advisor prior to registering each semester.

Theatre Courses: Required for all Theatre majors in the Acting/Directing Concentration and the Design/Technical Theatre Concentration

(33 semester hours)

• THEA 1100 - Theatre Production Lab I 1 sem. hrs.
• THEA 1101 - Theatre Production Lab II 1 sem. hrs.
• THEA 1351 - Acting I 3 sem. hrs.
• THEA 1371 - Costume Construction 3 sem. hrs.
• THEA 2100 - Theatre Production Lab III 1 sem. hrs.
• THEA 2101 - Theatre Production Lab IV 1 sem. hrs.
• THEA 2370 - Theatre Stagecraft 3 sem. hrs.
• THEA 3100 - Theatre Production Lab V 1 sem. hrs.
• THEA 3101 - Theatre Production Lab VI 1 sem. hrs.
• THEA 3311 - Script Analysis 3 sem. hrs.
• THEA 3350 - Production Management 3 sem. hrs.
• THEA 3370 - History of the Theatre I 3 sem. hrs.
• THEA 3371 - History of the Theatre II 3 sem. hrs.
• THEA 4100 - Senior Seminar 1 sem. hrs.
• THEA 4200 - Senior Capstone 2 sem. hrs.
• THEA 4360 - Stage Direction I 3 sem. hrs.

Acting/Directing Concentration:

(30 required credit hour)

The following courses are required in the Acting/Directing concentration:

• THEA 1341 - Stage Makeup 3 sem. hrs.
• THEA 1342 - Voice and Diction 3 sem. hrs.
• THEA 1352 - Acting II 3 sem. hrs.
• THEA 3300 - Movement for Actors 3 sem. hrs.
• THEA 3302 - Creative Dramatics 3 sem. hrs.
(highly recommended)

- THEA 3340 - Audition Preparation 3 sem. hrs.
- THEA 3375 - Acting III: Period Styles 3 sem. hrs.
- THEA 3386 - Playwriting 3 sem. hrs.
- THEA 4361 - Stage Direction II 3 sem. hrs.
- THEA 4371 - Acting for the Camera 3 sem. hrs.
- THEA 4373 - Improvisation Skills Level I 3 sem. hrs.
- THEA 4374 - Improvisation Skills Level II 3 sem. hrs.
  (May be repeated for credit)
  (highly recommended)

Total Hours for BA in Theatre: Acting/Directing Concentration: 63 hrs.

Design/Technical Theatre Concentration:

(28 credit hour)

The following courses are required in the Design/Technical Theatre Concentration:

- THEA 1341 - Stage Makeup 3 sem. hrs.
- THEA 3165 - The Design and Technical Portfolio. 1 sem. hrs.
- THEA 3373 - Principles of Design 3 sem. hrs.
- THEA 3380 - History of Theatrical Styles 3 sem. hrs.
- THEA 3381 - Drawing and Rendering for the Stage 3 sem. hrs.
- THEA 3382 - Drafting and Computer-Aided Design for the Stage 3 sem. hrs.
- THEA 4314 - Collaborative Approaches to Design 3 sem. hrs.
- THEA 4365 - Costume Design 3 sem. hrs.
- THEA 4370 - Set Design 3 sem. hrs.
- THEA 4375 - Lighting Design 3 sem. hrs.
  (3 semester hours of Art classes are highly recommended)

Total Hours for BA in Theatre: Design/Technical Theatre Concentration: 61 hrs.

The following Theatre and Dance courses are highly recommended (but not required) as electives for the Acting/Directing, Design/Technical, and Teacher Certification Concentration Areas:

Theatre Electives

- THEA 3302 - Creative Dramatics 3 sem. hrs.
- THEA 3312 - Stage Combat I 3 sem. hrs.
- THEA 4312 - Stage Combat II 3 sem. hrs.
(May be repeated for credit)

- THEA 4373 - Improvisation Skills Level I 3 sem. hrs.
- THEA 4374 - Improvisation Skills Level II 3 sem. hrs.
(End of list

Dance Electives

- DANC 1141 - Ballet I 1 sem. hrs.
- DANC 1147 - Jazz Dance I 1 sem. hrs.
- DANC 1148 - Modern Dance I 1 sem. hrs.
- DANC 1304 - Dance in Performance 3 sem. hrs.
(End of list

- DANC 2141 - Ballet II 1 sem. hrs.
- DANC 2147 - Jazz Dance II 1 sem. hrs.
- DANC 2148 - Modern Dance II 1 sem. hrs.
- DANC 3303 - World Dance and Culture 3 sem. hrs.
- DANC 3306 - Dance Choreography I 3 sem. hrs.
- DANC 3310 - History of Dance* 3 sem. hrs.
- DANC 4306 - Dance Choreography II 3 sem. hrs.
(End of list

- DANC 4310 - Dance Instruction 3 sem. hrs.

Teacher Certificate

Theatre Arts Teacher Certification

Theatre, BA

The mission of the Texas A&M University-Corpus Christi Theatre Program is to provide students with the tools needed for preparation as Theatre educators or professional practitioners, or for continuation of their studies on the graduate level.

The goal of the program is to provide students with meaningful experiences that promote an understanding of theatre as a medium of expression and collaboration. Students are given opportunities for creative and critical thinking, problem solving, and exploration in an environment that values artistic integrity, understands failure as well as success, and respects the viewpoints of others in the encouragement of artistic truth. The extensive season of the Theatre Program serves not only as a training lab for the students, but also enhances the cultural and aesthetic experience of the campus and is a major cultural resource for the residents of South Texas.

Student Learning Outcomes
BA in Theatre graduates with Teaching Certification will demonstrate the following:

Students will

- Communicate historical and cultural dimensions of Theatre during a required exit jury with the Theatre faculty.
- Communicate competencies in historical research and script analysis during a required exit jury with the Theatre faculty.
- Communicate visual and aural perceptions of Theatre performance during a required exit jury with the Theatre faculty. The student will use specific examples from their participation in University Theatre productions.

Teacher Certification in Theatre Arts (grades Early Childhood – 12)

All students seeking certification in Theatre Arts should select a Theatre faculty advisor to help them choose appropriate courses and co-curricular activities.

For information on required professional development courses and other teacher certification requirements, please see the complete and current information about teacher certification requirements.

To qualify to take the TExES (Texas Examinations of Educator Standards), in the field of Theatre, students must meet the following criteria:

1. Make pre-specified acceptable scores on TExES practice tests, or departmental equivalent, and participate in practice test review and analysis session.
2. Provide official permit with signature of Program Coordinator or designated person for each teaching field on the student’s certification plan.

Students must also qualify to take the Professional Development TExES.

Degree Requirements

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<tr>
<td>3. Major Requirements (Design/Tech or Acting/Directing)</td>
<td>51</td>
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<tr>
<td>4. Professional Development</td>
<td>27</td>
</tr>
<tr>
<td>5. Foreign Language Requirements</td>
<td></td>
</tr>
</tbody>
</table>

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*First Year Seminars

First-Year Seminars

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Requirements leading to Teacher Certification in Theatre Arts are as follows:

Acting/Directing Concentration 51 sem. hrs.

- THEA 1100 - Theatre Production Lab I 1 sem. hrs.
- THEA 1101 - Theatre Production Lab II 1 sem. hrs.
- THEA 1342 - Voice and Diction 3 sem. hrs.
- THEA 1351 - Acting I 3 sem. hrs.
- THEA 1352 - Acting II 3 sem. hrs.
- THEA 1371 - Costume Construction 3 sem. hrs.
- THEA 2100 - Theatre Production Lab III 1 sem. hrs.
- THEA 2101 - Theatre Production Lab IV 1 sem. hrs.
- THEA 2370 - Theatre Stagecraft 3 sem. hrs.
- THEA 3100 - Theatre Production Lab V 1 sem. hrs.
- THEA 3300 - Movement for Actors 3 sem. hrs. (highly recommended)
- THEA 3101 - Theatre Production Lab VI 1 sem. hrs.
- THEA 3302 - Creative Dramatics 3 sem. hrs.
- THEA 3311 - Script Analysis 3 sem. hrs.
- THEA 3335 - UIL Debate and Speech 3 sem. hrs.
- THEA 3370 - History of the Theatre I 3 sem. hrs.
- THEA 3371 - History of the Theatre II 3 sem. hrs.
- THEA 3373 - Principles of Design 3 sem. hrs.
- THEA 3375 - Acting III: Period Styles 3 sem. hrs.
- THEA 4314 - Collaborative Approaches to Design 3 sem. hrs.
- THEA 4360 - Stage Direction I 3 sem. hrs.
- THEA 4361 - Stage Direction II 3 sem. hrs.

Design/Technical Theatre Concentration 51 sem. hrs.
- THEA 1100 - Theatre Production Lab I 1 sem. hrs.
- THEA 1101 - Theatre Production Lab II 1 sem. hrs.
- THEA 1341 - Stage Makeup 3 sem. hrs.
- THEA 1351 - Acting I 3 sem. hrs.
- THEA 1371 - Costume Construction 3 sem. hrs.
- THEA 2100 - Theatre Production Lab III 1 sem. hrs.
- THEA 2101 - Theatre Production Lab IV 1 sem. hrs.
- THEA 2370 - Theatre Stagecraft 3 sem. hrs.
- THEA 3100 - Theatre Production Lab V 1 sem. hrs.
- THEA 3101 - Theatre Production Lab VI 1 sem. hrs.
- THEA 3302 - Creative Dramatics 3 sem. hrs.
- THEA 3311 - Script Analysis 3 sem. hrs.
- THEA 3335 - UIL Debate and Speech 3 sem. hrs. (highly recommended)
- THEA 3350 - Production Management 3 sem. hrs.
- THEA 3370 - History of the Theatre I 3 sem. hrs.
- THEA 3371 - History of the Theatre II 3 sem. hrs.
- THEA 3373 - Principles of Design 3 sem. hrs.
- THEA 4314 - Collaborative Approaches to Design 3 sem. hrs.
- THEA 4360 - Stage Direction I 3 sem. hrs.
- THEA 4365 - Costume Design 3 sem. hrs.
- THEA 4370 - Set Design 3 sem. hrs.
- THEA 4375 - Lighting Design 3 sem. hrs.
- 3 sem. hrs. of Art Courses (Highly Recommended)

Total hours for BA in Theatre: Teacher Certification: 51 hrs.

Minor

Dance Minor

The Minor in Dance Program at Texas A&M University-Corpus Christi is comprised of technique courses in ballet, modern, and jazz with opportunities to perform in each course as well as perform in the dance performance course. Dance History provides the foundation necessary for the dance student and courses in World Dance & Culture, Choreography, and Dance Instruction enable the student to pursue multiple career opportunities in the arts and the field of dance.

Required Courses: 21 Semester Hours

- DANC 1141 - Ballet I 1 sem. hrs.
• DANC 1147 - Jazz Dance I 1 sem. hrs.
• DANC 1148 - Modern Dance I 1 sem. hrs.
• DANC 1304 - Dance in Performance 3 sem. hrs.  
  (May be repeated for credit)
• DANC 2141 - Ballet II 1 sem. hrs.
• DANC 2147 - Jazz Dance II 1 sem. hrs.
• DANC 2148 - Modern Dance II 1 sem. hrs.
• DANC 3303 - World Dance and Culture 3 sem. hrs.
• DANC 3306 - Dance Choreography I 3 sem. hrs.
• DANC 3310 - History of Dance* 3 sem. hrs.
• DANC 4310 - Dance Instruction 3 sem. hrs.

Dance Electives

• DANC 3141 - Ballet III 1 sem. hrs.
• DANC 3147 - Jazz Dance III 1 sem. hrs.
• DANC 3148 - Modern Dance III 1 sem. hrs.
• DANC 4141 - Ballet IV 1 sem. hrs.  
  (May be repeated for credit)
• DANC 4147 - Jazz Dance IV 1 sem. hrs.  
  (May be repeated for credit)
• DANC 4148 - Modern Dance IV 1 sem. hrs.  
  (May be repeated for credit)
• DANC 4306 - Dance Choreography II 3 sem. hrs.  
  (May be repeated for credit)

Theatre Minor

The Theatre minor is designed for students who wish to pursue the study of Theatre but who plan to major in another field. The Theatre minor consists of a minimum 19 semester hours of Theatre, including 12 upper-level hours.

Students who select this minor must consult with their Faculty Advisor for the Theatre Minor prior to completing 6 semester hours of coursework listed in the program. The minor plan must be filed with the Academic Advisor in the College of Liberal Arts and certified prior to application for graduation by the Dean of the College in which their major field of study is awarded.

Required Courses for the Minor:

• THEA 1351 - Acting I 3 sem. hrs.
• THEA 3311 - Script Analysis 3 sem. hrs.
• THEA 4360 - Stage Direction I 3 sem. hrs.

Choose one of the following: 4 hours

• THEA 1100 - Theatre Production Lab I 1 sem. hrs. AND
  THEA 1371 - Costume Construction 3 sem. hrs.
  OR
• THEA 1101 - Theatre Production Lab II 1 sem. hrs. AND
  THEA 2370 - Theatre Stagecraft 3 sem. hrs.

Choose one of the following: 3 hours

• THEA 3370 - History of the Theatre I 3 sem. hrs. OR
• THEA 3371 - History of the Theatre II 3 sem. hrs.

Choose one of the following: 3 hours

• THEA 3300 - Movement for Actors 3 sem. hrs.
• THEA 4390 - Topics in Theatre 1-3 sem. hrs.

Certificates

Dance Certificate

The Dance Certificate is available to all majors in all disciplines and professions or for educators seeking a certificate to develop their skill and knowledge in the area of Dance. This Certificate will enhance the marketability of those students who are working towards Teacher Certification and would like to teach Dance as a second discipline and for Theatre majors who are looking to pursue careers as professionals in the arts or for those graduates who are looking to enhance their careers working in arts education, community Theatre or health therapies.

Student Learning Outcomes:

• Students obtaining a certificate in Dance will demonstrate proficiency in the technical, historical, cultural and choreographic dimensions of dance. Specifically the student will have the ability to;
• Develop relationships with world dance cultures and choreographic elements;
• Demonstrate written competencies in the historical, cultural and critical analysis of Dance;
• Demonstrate competencies in ballet, jazz and modern Dance technique.
In order to receive a Dance Certificate, 16 semester hours with at least 9 semester hours in residence is required.

Required Courses

- DANC 1141 - Ballet I 1 sem. hrs.
- DANC 1147 - Jazz Dance I 1 sem. hrs.
- DANC 1148 - Modern Dance I 1 sem. hrs.
- DANC 1304 - Dance in Performance 3 sem. hrs. 
  May be repeated for credit.
- DANC 3303 - World Dance and Culture 3 sem. hrs.
- DANC 3306 - Dance Choreography I 3 sem. hrs.
- DANC 4306 - Dance Choreography II 3 sem. hrs. 
  May be repeated for credit.

Dance Electives

- DANC 2141 - Ballet II 1 sem. hrs.
- DANC 2147 - Jazz Dance II 1 sem. hrs.
- DANC 2148 - Modern Dance II 1 sem. hrs.
- DANC 3141 - Ballet III 1 sem. hrs.
- DANC 3147 - Jazz Dance III 1 sem. hrs.
- DANC 3148 - Modern Dance III 1 sem. hrs.
- DANC 4141 - Ballet IV 1 sem. hrs. 
  May be repeated for credit.
- DANC 4147 - Jazz Dance IV 1 sem. hrs. 
  May be repeated for credit.
- DANC 4148 - Modern Dance IV 1 sem. hrs. 
  May be repeated for credit.

College of Nursing and Health Sciences

College of Nursing and Health Sciences

- Nursing, BSN
- Healthcare Administration, BS
- Healthcare Administration Minor
- Health Sciences, BSHS (Being phased out)
- Health Sciences Minor (Being phased out)
Mission

The College of Nursing & Health Sciences positively impacts the health of the global population through the education of health care leaders and providers of tomorrow with innovative educational programs in the nursing and health professions. The College identifies, attracts, and graduates students of high potential, especially from groups who have been historically under-represented in the organization and provision of health care. This work is enhanced through faculty contributions to community service, leadership, practice and research. These activities are fostered in a collaborative interprofessional and multicultural learning environment promoting a sense of community and caring.

College of Nursing and Health Sciences Goals

The goals of the College of Nursing and Health Sciences assist the College in implementing the university and college missions:

1. To develop within the student the knowledge and skills necessary for beginning professional and advanced health care practice, cultivating basic and specialized abilities needed to successfully pursue a career.
2. To promote the concept of caring and facilitate attainment of a care delivery system sensitive to multicultural diverse communities and their health values.
3. To offer individuals the opportunity to increase the breadth and depth of the theoretical and ethical base for health care practice, enhance and expand competence, prepare for role specialization and contribute to the discovery of new health care knowledge.
4. To provide an educational environment of respect within which students may evolve as broadly educated, responsible and accountable professionals dedicated to the principles of lifelong learning.
5. To build a foundation for life-long learning & systematic practice, and
6. To ethically serve diverse communities as health care experts, leaders, consultants, and advocates of resources.

Undergraduate Degrees

The College of Nursing and Health Sciences offers course work leading to the following undergraduate degrees:

Bachelor of Science in Nursing (BSN)
Bachelor of Science in Healthcare Administration (BS)
Bachelor of Science in Health Sciences (BSHS) (Being phased out)

Undergraduate Courses

All course descriptions are located in course descriptions.

Bachelor of Science

Healthcare Administration, BS

The Bachelor of Science in Healthcare Administration (BSHA) prepares graduates for a variety of career opportunities in the health care field by providing the management skills necessary for success. By designing a degree plan using electives in such areas as computer science, marketing, education, business administration, accounting, human resource management, and information systems, the student may pursue specific areas of interest. Students can also use electives to design a degree plan that will satisfy entrance requirements for admission to professional schools such as medicine, dentistry, physical therapy, public health, law, and business.

Student Learning Outcomes

Students will:

- Demonstrate a thorough understanding of the theoretical and practical aspects of the health care delivery system from a historical, comparative, economic, cultural, and ethical perspective.
- Employ a variety of business and management skills and techniques including marketing, financial management, law, and information management to effectively and efficiently advance the goals of the organization.
- Demonstrate creativity in defining, negotiating, and solving problems.
- Communicate and educate, using the most current information and communication technology.

Program Requirements for Healthcare Administration

Prior to designation as a BSHA major, students must meet with the advisor to create a degree completion and minor area of specialization plan

BS Graduation Requirements

Degree Requirements
Sem. Hrs.

42
1. Core Curriculum Program  
   6-14
2. Electives*  
   18-22
3. Specialization  
4. Healthcare Administration Major  
   46

Total 120

*Students generally have all core curriculum and supporting courses completed before admittance into the program. This includes a completed Core Curriculum, 18-22 hours of a specialization area, and 6-14 hours of other electives. Specialization hours may be taken concurrently with the Healthcare Administration Major courses. Advising approval is required prior to declaration of the Healthcare Administration Major.

Del Mar College– Articulation agreement details: See advising for assistance.

Grading:

1. A scholastic grade point average of 2.25 is a minimum requirement in the upper division courses designated for the Bachelor of Science in Healthcare Administration. A minimum grade of C is required in all courses in the BSHA major.

2. If a student earns a grade of D, F, or W in a healthcare administration course, that course must be repeated. A course in which a grade of less than C (i.e., D, F, or W, Withdrawal) was earned may be repeated only once.

3. A student who has earned a grade of less than C (i.e., D, F, or W, Withdrawal) in two courses or who has earned a grade of less than C (D, F, or W, Withdrawal) twice in the same course will be dismissed from the BSHA program.

4. Students receiving a grade of D, F, or W (Withdrawal) or I (Incomplete) in a course may not progress to courses for which that course is a prerequisite.

Healthcare Administration Major

- HCAD 3300 - The Health Care System 3 sem. hrs.
- HCAD 3310 - Epidemiology 3 sem. hrs.
- HCAD 3320 - Health Care Marketing 3 sem. hrs.
- HCAD 3330 - Financial Management in Health Care 3 sem. hrs.
- HCAD 3340 - Health Program Planning and Evaluation 3 sem. hrs.
- HCAD 3350 - Information Systems and Technology in Health Care 3 sem. hrs.
- HCAD 3360 - Health Education and Promotion 3 sem. hrs.
- HCAD 4100 - Assessment of Accumulated Knowledge 1 sem. hrs.
- HCAD 4300 - Management and Organizational Behavior in Health Care 3 sem. hrs.
- HCAD 4310 - Health Law, Policy and Ethics 3 sem. hrs.
- HCAD 4320 - Project Management in Health Care 3 sem. hrs.
- HCAD 4340 - Quality Management and Evaluation in Health Care 3 sem. hrs.
- HCAD 4350 - Global Health/Health Disparities 3 sem. hrs.
- HCAD 4680 - Practicum 6 sem. hrs.

Total Hours: 46

Specialization Area

Students must complete a designated minor in one of the following areas:

- Geographic Information Systems 22 sem. hrs.
- Computer Science 22 sem. hrs.
- Business Administration 18 sem. hrs.
- Accounting 18 sem. hrs.
- International Business 18 sem. hrs.
- Management Information Systems 18 sem. hrs.
- Education 18 sem. hrs.
- Marketing 18 sem. hrs.
- Communication Studies 18 sem. hrs.
- Public Relations 21 sem. hrs.
- Social Work 18 sem. hrs.
- Sociology 18 sem. hrs.
- Psychology 18 sem. hrs.
- Environmental Science 20-22 sem. hrs.
- Management 18 sem. hrs.

With approval, students can design a degree plan with an interdisciplinary area of specialization (18-22 hrs) or use electives to satisfy pre-professional school requirements.

Bachelor of Science in Nursing

Nursing, BSN
The philosophical foundations of the Texas A&M University-Corpus Christi Baccalaureate Nursing Program are based on the belief that caring is the essence of nursing. Students are unique individuals with differing backgrounds, needs, and interests, and have the freedom and responsibility to make considered choices. Nursing faculty subscribe to the belief that professional nurses must have a solid foundation in the arts, sciences, and humanities that provides a reservoir of knowledge from which to draw when making critical clinical decisions in the roles of care provider or care coordinator (A.A.C.N., Essentials of Baccalaureate Nursing, 2008). To this purpose, baccalaureate students complete 62 semester hours of pre-requisite program coursework. In addition, they complete 58 semester hours in the nursing courses. Total program hours = 120.

The Nursing Program provides a Bachelor of Science in Nursing degree through three options:

1. Pre-licensure (Traditional/eLine/eLine military) nursing education for the individual who wishes to earn the BSN degree while preparing to become a Registered Nurse (RN).
2. RN-BSN Completion for the RN who wishes to build upon previous education and earn a baccalaureate degree.
3. Accelerated

Student Learning Outcomes

Students will:

- Incorporate the philosophy, "Caring is the Essence of Nursing" into nursing practice.
- Practice nursing utilizing the nursing process and other systematic approaches derived from the sciences and liberal arts to promote optimum health for individuals, families, and communities from diverse populations.
- Communicate and collaborate purposefully, using creative approaches that acknowledge interdependent roles and relationships.
- Demonstrate leadership through the application and utilization of theories for the improvement and enhancement of care and health status.
- Display critical thinking and independent decision-making that utilize and apply theory and research in practice.
- Show awareness of political, ethical, and social issues; accountability for professional practice and commitment for continuing professional development.
- Accept nursing leadership roles that respond to a changing society and health care delivery system.
The program is accredited by the Commission on Collegiate Nursing Education (CCNE), One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120, telephone (202) 887-6791 for a term of ten years until June 30, 2016 and the Texas Board of Nursing, 333 Guadalupe St, Suite #3-460, Austin, TX 78701 telephone (512) 305-7400. The objectives of the program are published in the College of Nursing and Health Sciences Student Handbook, which may be found at http://conhs.tamucc.edu/.

The Texas Board of Nursing requires disclosure of criminal history or disciplinary action and an FBI background check before licensure is granted. In order to promote the safety of the clients in their care and to meet the requirements of the BON and affiliated clinical agencies, students will complete the background check and be deemed eligible to take the licensing exam by the Texas Board of Nursing before acceptance to the program is granted. See the TBON web site http://www.bne.state.tx.us for the statutes and rules regulating licensure.

Admission Requirements and Procedures

A. Pre-licensure Option:

1. For those seeking entrance into the nursing major, the admission procedure is competitive. Admission to the program is two times per year – fall and spring. Three pre-licensure track options are available – traditional, eLine, and eLine Military. Texas A&M University-Corpus Christi sophomores and transfer students will be accepted based on their grade point average for the last 60 credit hours. No "D" or "F" grades will be accepted for credit. Science courses may not be older than 7 years. Those students seeking admission to the nursing program must contact the College of Nursing and Health Sciences to obtain materials to complete the application process. The application process is as follows:
   1. Students must complete an online application to the College of Nursing and Health Sciences using NursingCAS (see College of Nursing and Health Sciences web page for admission deadlines application procedure http://conhs.tamucc.edu/) If the student is not already enrolled at Texas A&M University-Corpus Christi, the student must also apply to the University for admission. Admission to the University DOES NOT constitute admission to the nursing program.
   2. The HESI A2 with critical thinking scores must be uploaded to the NursingCAS application during the application period. (see college web page for information http://conhs.tamucc.edu)
   3. The admissions committee meets to review applications and to make recommendations.
4. Admission is dependent on a matrix including: last 60 hour GPA, science GPA, HESI A2 composite score, reading comprehension score and HESI critical thinking score. (see program web page for IDEAL scores listed under "How to be a competitive nursing applicant.")

5. Notification of the results of the admission review is emailed to students. Admission to the program is conditional pending submission of the background check, proof of vaccination status, and possession of a current CPR card.

6. Pre-nursing courses may be continued in the spring and summer semester prior to the junior year.

2. Freshmen generally declare pre-nursing as their intended course of study. Prior to registration, students need to contact the nursing academic advisor to assist in degree planning.

3. All pre-nursing students must complete the Core Curriculum Program (42 semester hours) and required nursing support courses prior to admission to the nursing major. Please see "Core Curriculum Program" in this catalog for information on Core Curriculum Program requirements. Students should consult their academic advisor and/or faculty mentor for additional information on Core Curriculum Program and support courses, including the sequence in which the courses should be taken. To lighten the academic load, it is suggested that some of these courses be taken in the summer sessions. Science courses may not be older than 7 years for Pre-licensure BSN students.*

*Students actively utilizing and applying content of science courses may request a waiver to the 7-year rule. Students should consult their academic advisor for more information.

4. A personal interview with the applicant may be requested.

5. Transfer students from another nursing school who have completed nursing courses over 2 years ago must validate completed coursework or repeat the course. Additionally, students should provide nursing course descriptions from the college catalog and the course syllabi (must have at least the course objectives, course outline, and a list of textbooks used) from the transferring college/school of nursing. Students should also submit a letter from the Dean or Director of the transferred nursing program indicating they are in good standing and eligible to return. Any student needing to validate courses must meet with the academic advisor who will forward materials to the Associate Dean.

6. Students may only apply for one track into the program. The student's choice must be designated on the Nursing CAS application.

B. Accelerated Baccalaureate Nursing Option
1. This program, 1) is an intensive, accelerated 4 semester program with students graduating with a BSN, 2) coursework consists of hybrid, on-campus and online courses, 3) includes 9 semester hours of graduate course work – dual credit to BSN students, 4) is committed to an integrated framework of health care delivery, 5) leverages technology to reduce carbon footprint, and 6) in collaboration with the TAMUCC Department of Art and Design, this nursing program is enriched through the integration of arts and culture.
   1. Designed specifically for students with baccalaureate degrees in other fields (from a regionally accredited university/college) who seek to transition into nursing.
   2. The program prepares students to sit for the NCLEX-RN licensing exam.
   3. It is expected that students are not employed during enrollment in this intensive program

2. The application process is as follows:
   1. All applicants are required to complete the online application through the NursingCAS website (see College of Nursing and Health Sciences web page for admission deadlines & application procedure http://conhs.tamucc.edu).
      1. Unverified applications will not be reviewed for consideration by the committee. Admission decisions will be made on a rolling basis.
      2. It is the responsibility of the applicant, without exception, to meet all application deadlines and maintain all updates to the applicant's NursingCAS application.

3. Admission criteria:
   1. All prerequisite coursework must be completed from a national/regional accredited institution.
   2. Applicants must have satisfactory completion of all prerequisite coursework with grades of C or better.
   3. The four prerequisite science courses listed below must be completed within seven years of the submission of the application for consideration.*
      All science labs must be completed through on-campus instruction.

*Students actively utilizing and applying content of science courses may request a waiver to the 7-year rule. Students should consult their academic advisor for more information.

i. General Chemistry with lab

ii. Microbiology with lab

iii. Two semesters of Human Anatomy and Human Physiology with labs - taken as two separate courses or as a sequence
d. Completion of a medical terminology course (for credit or certificate of completion) is encouraged.

e. The personal statement should be uploaded to the Personal Statement tab under program materials in the Nursing CAS application.

f. A baccalaureate degree in any field from a national/regional accredited institution with a minimum cumulative GPA of 2.75 on a 4.00 scale

g. Minimum 3.0 cumulative GPA in all prerequisite courses:

<table>
<thead>
<tr>
<th>TAMUCC Prerequisite Courses</th>
<th>Equivalent Courses</th>
<th>Required Number of Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO2420 Principles of Microbiology</td>
<td>Microbiology with lab</td>
<td>4</td>
</tr>
<tr>
<td>CHEM1411 General Chemistry</td>
<td>Chemistry with Lab</td>
<td>4</td>
</tr>
<tr>
<td>PSYCH2301 General Psychology</td>
<td>Introduction to Psychology/Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL2401 Anatomy and Physiology I</td>
<td>Anatomy &amp; Physiology I with Lab</td>
<td>4</td>
</tr>
<tr>
<td>BIOL2402 Anatomy and Physiology II</td>
<td>Anatomy &amp; Physiology II with Lab</td>
<td>4</td>
</tr>
<tr>
<td>PSYC2314 Lifespan Developmental Psychology</td>
<td>Human Growth &amp; Development through Lifespan</td>
<td>3</td>
</tr>
<tr>
<td>MATH1442** Statistics</td>
<td>Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

**MATH 1342 will be acceptable as a transfer equivalent to MATH 1442.

1. Students who are currently enrolled in their last semester of a non-nursing baccalaureate may apply for conditional admission.
   1. Students must verify degree conferment prior to the first day of Accelerated BSN coursework.
2. All in-progress and future coursework including outstanding prerequisite requirements must be documented in the Nursing CAS application and/or included on an official transcript verifying the intent to complete the requirement.

2. Paid or volunteer health care experience is encouraged.


4. Select candidates will be invited to meet with the admission committee for a face-to-face interview. For those invited for an interview, professional attire is required.

1. Students in the Accelerated Baccalaureate Nursing program are subject to the following policies as listed elsewhere in this section:
   1. Program Requirements for all Undergraduate Prelicensure Students
   2. Grading Policies, Progression*, Retention and Dismissal
   3. Advising
   4. Graduation Requirements

*Please review Accelerated BSN Program Academic Progression Stipulation

Accelerated BSN Degree Requirements

<table>
<thead>
<tr>
<th>UG, Upper-Division Courses</th>
<th>51</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Courses</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>60 SCH</td>
</tr>
</tbody>
</table>

C. RN-BSN Completion Option

1. This option is designed for RNs who have completed one of two types of Nursing Programs:
   o Completion of a nationally accredited associate degree nursing program.
   o Completion of a nationally accredited diploma school of nursing program.

For students who are graduates of a non-accredited program, Texas A&M University-Corpus Christi College of Nursing and Health Sciences honors the Texas Nursing Articulation Model, the first voluntary statewide model for transitioning from one level of education to another without repetition in learning. The assumptions of the model that apply to graduates from nonaccredited programs are the following: "5. Articulation without testing is an educationally and professionally sound practice based upon the accepted competencies; 6. Texas nurses seeking educational mobility demonstrate minimal competence on the basis of an official transcript(s) and a valid Texas license(s). (The Texas Nursing Articulation Model 1997-2000).
2. A student receives 30 hours of credit from previous nursing courses, which is held in escrow until the student has successfully completed 12 hours of nursing courses.

3. The application process is as follows:
   1. Provide evidence of current unencumbered Texas registered nurse license.
   2. Attend a personal interview if requested.
   3. Transfer credit if grade is C or better.
   4. Have a grade point average of 2.5 (4.0 scale) or better in the last 60 hours of course work.

Students who are currently enrolled in their last semester of an associate nursing degree program may apply for admission. These students must take and pass the state board examination on the first date they are eligible.

Associate degree students receiving conditional admission status may take up to 5 semester hours of selected nursing courses prior to full status admission. These courses include: NURS 4318 - Nurse as Research Consumer* (3), NURS 4250 - Professional Nursing Issues* (2), or NURS 3435 - Health Assessment* (4).

Program Requirements for All Undergraduate Students

Students will be considered out of compliance if a designated immunization or other item required to be submitted to the CONHS Castle branch database manager or other agency is not updated by the designated deadline throughout their clinical courses. Additionally, there may be further requirements from a clinical facility that students will be required to meet. Any student who is out of compliance may be disenrolled from his/her classes.

1. The Texas Department of State Health Services has specific immunization requirements for students involved with direct patient contact. These requirements, as stated in the Texas Administrative Code, Title 25, Part 1, Chapter 97, Subchapter B, Rule 97.64, include the following:

   1. "Students cannot be provisionally enrolled without at least one dose of measles, mumps, and rubella vaccine if direct patient contact will occur during the provisional enrollment period."
   2. "Polio vaccine is not required. Students enrolled in health-related courses are encouraged to ascertain that they are immune to poliomyelitis"
   3. "One dose of tetanus-diphtheria toxoid (Td) is required within the last ten years."
   4. "Students who were born on or after January 1, 1957, must show, prior to patient contact, acceptable evidence of vaccination of two doses of measles containing vaccine"
5. "Students must show, prior to patient contact acceptable evidence of vaccination of one dose of rubella vaccine."
6. "Students born on or after January 1, 1957, must show, prior to patient contact, acceptable evidence of vaccination of one dose of mumps vaccine."
7. "Students shall receive a complete series of hepatitis B vaccine prior to the start of direct patient care or show serologic confirmation of immunity to hepatitis B virus."
8. "Students shall receive two doses of varicella vaccine unless the first dose was received prior to thirteen years of age."

For additional information, please see the Texas Administrative Code, Title 25, Part 1, Chapter 97, Subchapter B, which is accessible at http://www.sos.state.tx.us/tac/index.shtml. Please note that some hospitals have stricter requirements than the state minimum standards.

Rule 97.65 lists the following exceptions to the immunization requirements:

1. "Serologic confirmations of immunity to measles, rubella, mumps, hepatitis A, hepatitis B, or varicella, are acceptable. Evidence of measles, rubella, mumps, hepatitis A, or hepatitis B, or varicella illness must consist of a laboratory report that indicates either confirmation of immunity or infection."
2. "A parent or physician validated history of varicella disease (chickenpox) or varicella immunity is acceptable in lieu of vaccine. A written statement from a physician, or the student's parent or guardian, or school nurse, must support histories of varicella disease."

(Immunizations are available for a nominal fee at Coastal Bend Wellness Center, the City of Corpus Christi Health District or Amistad Health Center.)

2. Results of tuberculosis PPD screening are required annually.

3. To meet CPR requirements, students will complete their HeartCode® BLS Course during the Fundamentals course lab days. Semester one students will be given more information once classes begin.
4. All Students are required to complete a criminal background check through the Texas Board of Nursing before acceptance into the program.

5. Students are required to purchase professional liability coverage through the University. Fees for this coverage are included in the fees paid at the time of registration at the beginning of each academic year. (See College of Nursing &
6. Medical insurance coverage is strongly recommended. The University and affiliating clinical agencies accept no responsibility for medical care sought as a result of accidents/incidents occurring during the course of nursing instruction or clinical assignments (See College of Nursing & Health Sciences Student Handbook: http://conhs.tamucc.edu/shb/).

7. Students forced to interrupt their regular rotation for personal or academic reasons may apply for reinstatement. Students must complete and submit the application for reinstatement. The academic advisor is available for assistance with this process. The Admissions, Progression & Academic Standards committee may admit a student conditionally if there is evidence of extenuating circumstances.

Grading Policies: Progression, Retention and Dismissal

The following requirements refer to grading policies.

1. A scholastic grade point average of 2.25 is a minimum requirement in the upper division nursing courses designated for the Bachelor of Science in Nursing. A minimum grade of C is required in all courses in the nursing major.

2. If a student earns a grade of D, F, or W in a nursing course, that course must be repeated. A course in which a grade of less than C (i.e., D, F, or W, Withdrawal) was earned may be repeated only once.

3. A student who has earned a grade of less than C (i.e., D, F, or W, Withdrawal) in two nursing courses or who has earned a grade of less than C (D, F, or W, Withdrawal) twice in the same nursing course will be dismissed from the nursing program.

4. Students receiving a grade of D, F, or W (Withdrawal) or I (Incomplete) in a nursing course may not progress to courses for which that course is a prerequisite.

5. Administration and faculty reserve the right to dismiss students without previous warning for unsafe and/or unprofessional behavior. The conduct of nursing students should meet ethical standards as defined by American Nurses Association (ANA) in the Code of Ethics for Nurses. Personal integrity is reflected in professional judgments. Consequently, the College of Nursing and Health Sciences reserves the right to dismiss students from the program for unprofessional or unsafe behavior. (See College of Nursing and Health Sciences Student Handbook for further examples and to review the Academic Honesty and Professional Integrity Policy http://conhs.tamucc.edu/current-students/assets/student-handbook-2017.pdf.)
6. Following dismissal, students may apply for reinstatement to the nursing program. Reinstatement is competitive and based upon space availability.

7. Students must meet the standards for minimal performance and progression established by Texas A&M University-Corpus Christi (see the catalog section on Academic Policies and Regulations).

8. In order for students to progress through the program, they must be in compliance with immunizations/CPR and Hospital Orientation regulations. (See College of Nursing and Health Sciences Student Handbook for consequences for noncompliance to these policies.)

9. Students must complete the Core Curriculum Program. (See "Core Curriculum Program" in this catalog). See "General Education Requirement" in the "Undergraduate Programs" section of this catalog for information on ways in which transfer students can fulfill requirements. In addition to the core curriculum requirements, students must also take the required support courses, which are listed earlier in the nursing section of this catalog.

Advising

Every effort has been made to assure the accuracy of the information in this catalog. However, information is subject to change without notice. Therefore, students must consult with their Nursing Program advisors each semester prior to registration. Transfer students must meet with their advisors.

Students in the nursing majors are assigned a faculty mentor. If for any reason the faculty mentor-student assignment is not effective, the student or the faculty member can request a change in assignment. Freshmen and sophomore students pursuing the pre-nursing curriculum are also assigned a nursing faculty mentor. The academic advisor for the College of Nursing and Health Sciences is available for advisement. Students must make appointments for advisement.

RN-MSN Option

See the Nursing section of the Graduate catalog.

Graduation Requirements

A. Pre-licensure Option

Degree Requirements
<table>
<thead>
<tr>
<th>Course Description</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Curriculum Program</td>
<td>(2)</td>
</tr>
<tr>
<td>First-Year Seminars (when applicable)*</td>
<td></td>
</tr>
<tr>
<td>Nursing Support Courses**</td>
<td>15</td>
</tr>
<tr>
<td>Major in Nursing (Generic) section</td>
<td>58</td>
</tr>
<tr>
<td>Total</td>
<td>120 (122)</td>
</tr>
</tbody>
</table>

*First Year Seminars

First-Year Seminars or Electives

**Overlap may occur between the Core Curriculum Program and Nursing Support Courses. There is a nursing elective area of the degree plan which may be utilized to ensure student meets the minimum 120 Sem Hrs requirement. Students should seek advisement to confirm which courses can be utilized to meet the nursing elective block, if needed. The nursing elective block may not be utilized if student meets the minimum 120 Sem Hrs requirement.

Full-time, first-year students are required to take the following courses:

- **UNIV 1101 - First-Year Seminar I*** 1 sem. hrs.
- **UNIV 1102 - First-Year Seminar II*** 1 sem. hrs.


Students must complete the University's General Education requirements, which include the core curriculum. (See "General Education Requirement" in the "Undergraduate Programs" section of this catalog; see also "Core Curriculum Program.")

Nursing Support Courses**

- **BIOL 2420 (or BIOL 2421) - Principles of Microbiology**
- **CHEM 1411 (or CHEM 1406) - General Chemistry I**
- **PSYC 2301 - General Psychology**
- **BIOL 2401 - Anatomy and Physiology I**
- **BIOL 2402 - Anatomy and Physiology II**
- **NURS 4322 - Health Alterations (recommended) or BIMS 3401 - Pathophysiology**
• PSYC 2314 - Lifespan Developmental Psychology
• MATH 1442 - Statistics for Life (MATH 1342 or MATH 2342 acceptable from other institutions)
• NURS 3342 - Use of Pharmacology Principles

Major in Nursing (Generic) section 58 Sem. Hrs.

• NURS 3150 - Professional Nursing Issues I* sem. hrs.
• NURS 3318 - Nurse as therapeutic Communicator* 3 sem. hrs.
• NURS 3435 - Health Assessment* 4 sem. hrs.
• NURS 3614 - Fundamentals of Nursing Care* 6 sem. hrs.
• NURS 3548 - Nursing Care of Children and their Families* 5 sem. hrs.
• NURS 3550 - Nursing Care of Parents/newborns* 5 sem. hrs.
• NURS 3628 - Nursing Care of Adults I* 6 sem. hrs.
• NURS 4318 - Nurse as Research Consumer* 3 sem. hrs.
• NURS 4564 - Nursing Care of Psychiatric Clients* 5 sem. hrs.
• NURS 4628 - Nursing Care of Adults II* 6 sem. hrs.
• NURS 4660 - Nursing Care of Community Health Clients* 6 sem. hrs.
• NURS 4370 - Nurse Coordinating Care* 3 sem. hrs.
• NURS 4470 - Professional Transitions* 4 sem. hrs.
• NURS 4150 - Professional Nursing Issues II* sem. hrs.

The numbers of weekly lecture and laboratory hours associated with each course are designated by (lecture:lab) following the semester hours (1 lab hour = 3 contact hours.) Additional laboratory work may be required to complete the assignments. All courses involving labs will require appropriate fees.

B. Accelerated Baccalaureate Nursing Option

Degree Requirements

<table>
<thead>
<tr>
<th></th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>2. Nursing Support Courses**</td>
<td>26</td>
</tr>
<tr>
<td>3. Major in Nursing (Generic)</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>120 (128)</td>
</tr>
</tbody>
</table>

Students must complete the University's General Education requirements, which include the core curriculum. (See "General Education Requirement" in the "Undergraduate Programs" section of this catalog; see also "Core Curriculum Program").

Nursing Support Courses

- BIOL 2420 (or BIOL 2421) - Principles of Microbiology
- CHEM 1411 (or CHEM 1406) - General Chemistry I
- PSYC 2301 - General Psychology
- BIOL 2401 - Anatomy and Physiology I
- BIOL 2402 - Anatomy and Physiology II
- PSYC 2314 - Lifespan Developmental Psychology
- MATH 1442 - Statistics for Life (MATH 1342 or MATH 2342 acceptable from other institutions)

Major in Nursing section

- NURS 4155 - Professional Nursing Planning and Licensure Preparation 1 sem. hrs.
- NURS 4172 - Biobehavioral Nursing Interventions II: Population Health and Chronic Health Issues Across the Lifespan 1 sem. hrs.
- NURS 4173 - Biobehavioral Nursing Interventions III: Family and Child Health and Complex Health Issues Across the Lifespan 1 sem. hrs.
- NURS 4231 - Pathophysiology/Pharmacology I 2 sem. hrs.
- NURS 4232 - Pathophysiology/Pharmacology II 2 sem. hrs.
- NURS 4233 - Pathophysiology/Pharmacology III 2 sem. hrs.
- NURS 4234 - Pathophysiology/Pharmacology IV 2 sem. hrs.
- NURS 4251 - Professional Nursing Issues I 2 sem. hrs.
- NURS 4252 - Professional Nursing Issues II 2 sem. hrs.
- NURS 4254 - Professional Nursing Issues IV 2 sem. hrs.
- NURS 4260 - Wellness and Health Promotion Across the Lifespan 2 sem. hrs.
- NURS 4281 - Biobehavioral Care of Chronic Conditions Clinical 2 sem. hrs.
- NURS 4282 - Biobehavioral Health of Complex Conditions Clinical 2 sem. hrs.
- NURS 4283 - Biobehavioral Health of the Family and Child Clinical 2 sem. hrs.
- NURS 4284 - Biobehavioral Population Health Clinical 2 sem. hrs.
- NURS 4353 - Professional Nursing Issues III 3 sem. hrs.
• NURS 4361 - Biobehavioral Nursing Concepts I: Health Assessment and Foundations of Nursing Across the Lifespan 3 sem. hrs.
• NURS 4362 - Biobehavioral Nursing Concepts II: Population Health and Chronic Health Issues Across the Lifespan 3 sem. hrs.
• NURS 4363 - Biobehavioral Nursing Concepts III: Family and Child Health and Complex Health Issues Across the Lifespan 3 sem. hrs.
• NURS 4364 - Synthesis of Nursing Knowledge, Evidence and Practice 3 sem. hrs.
• NURS 4371 - Biobehavioral Nursing Interventions I: Health Assessment and Foundations of Nursing Across the Lifespan 3 sem. hrs.
• NURS 4686 - Interprofessional Collaborative Practice Clinical 6 sem. hrs.
• NURS 5314 - Research Methods in Advanced Nursing Practice (3 SCH) (Graduate Course)
• NURS 5315 - Diverse Care Environments (3 SCH) (Graduate Course)
• NURS 5331 - Nursing Informatics (3 SCH) (Graduate Course)

Graduate courses will only count for TAMU-CC MS in Nursing degree programs. For all 3 courses to count, a student should pursue the MSN in Leadership in Nursing Systems degree. Alternatively, a student may count 2 of the 3 courses in one of the other TAMU-CC MSN programs - either the Family Nurse Practitioner or Nurse Educator degree. Graduate courses and/or credits may or may not transfer to other Universities.

C. RN-BSN Completion Option

Degree Requirements

<table>
<thead>
<tr>
<th></th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>2. Nursing Support Courses**</td>
<td>26</td>
</tr>
<tr>
<td>3. Articulation Coursework</td>
<td>30</td>
</tr>
<tr>
<td>4. RN-BSN Courses</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120 (128)</strong></td>
</tr>
</tbody>
</table>


Students must complete the University's General Education requirements, which include the core curriculum. (See "General Education Requirement" in the "Undergraduate Programs" section of this catalog; see also "Core Curriculum Program.")
Nursing Support Courses

- BIOL 2420 (or BIOL 2421) - Principles of Microbiology
- CHEM 1411 (or CHEM 1406) - General Chemistry I**
- PSYC 2301 - General Psychology
- BIOL 2401 - Anatomy and Physiology I
- BIOL 2402 - Anatomy and Physiology II
- PSYC 2314 - Lifespan Developmental Psychology
- MATH 1442 - Statistics for Life (MATH 1342 or MATH 2342 acceptable from other institutions)

* Students must have all Core Curriculum Program and supporting courses completed before admittance into the program; this includes a completed Core Curriculum Program, prerequisites, and 30 hours of Nursing Articulation.

**General Chemistry I may be waived

RN-BSN Courses

- NURS 3435 - Health Assessment - RN/BSN* 4 sem. hrs.
- NURS 4250 - Professional Nursing Issues* 2 sem. hrs.
- NURS 4318 - Nurse as Research Consumer -RN/BSN* 3 sem. hrs.
- NURS 4322 - Health Alterations - RN/BSN* 3 sem. hrs.
- NURS 4324 - Nurse as Caregiver - RN/BSN* 3 sem. hrs.
- NURS 4365 - Care of the Individual within a Family -RN/BSN* 3 sem. hrs.
- NURS 4471 - Leadership/management - RN/BSN* 4 sem. hrs.
- NURS 4560 - Nursing Care of Community - RN/BSN* 5 sem. hrs.

Note:
* Students must have all core curriculum and supporting courses completed before admittance into the program.

Note:
* Students must have all core curriculum and supporting courses completed before admittance into the program.

Bachelor of Science in Health Sciences

Health Sciences, BSHS
Program Closure Date: 14 August 2023. Last term students can complete the Health Science Major: Summer 2023.

Effective start date of Healthcare Administration Major: Fall 2020.

Students may remain in the HLSC degree program or transfer to the Bachelor of Science in Healthcare Administration Program (BSHA) which begins Fall 2020. Intent to transfer must be made to advising by 1 March 2020.

Date the program provider will cease recommending candidates to the BSHS degree program: 1 December 2019.

The Bachelor of Science in Health Sciences (BSHS) prepares graduates for a variety of career opportunities in the health care field by providing the management skills necessary for success. By designing a degree plan using electives in such areas as computer science, geographic information systems, mathematics, business administration, accounting, international business, and information systems, the student may pursue specific areas of interest. Students can also use electives to design a degree plan that will satisfy entrance requirements for admission to professional schools such as medicine, dentistry, physical therapy, public health, law, and business.

Student Learning Outcomes

Students will:

- Demonstrate a thorough understanding of the theoretical and practical aspects of the health care delivery system from a historical, comparative, economic, cultural, and ethical perspective.
- Employ a variety of business and management skills and techniques including marketing, financial management, law, and information management to effectively and efficiently advance the goals of the organization.
- Demonstrate creativity in defining, negotiating, and solving problems.
- Communicate and educate, using the most current information and communication technology.

Program Requirements for Health Sciences

All of the following requirements MUST be completed and turned into the appropriate personnel BEFORE the practicum is begun. Students who do not have the following completed will not be able to participate in HLSC 4680:
BSHS Graduation Requirements

Degree Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core Curriculum Program</td>
<td>42-45</td>
</tr>
<tr>
<td>2. First Year Seminars (when applicable)*</td>
<td>(2)</td>
</tr>
<tr>
<td>3. Health Science support courses/Minor</td>
<td>37-40</td>
</tr>
<tr>
<td>4. Health Science Major courses</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Total 120 (123)</td>
</tr>
</tbody>
</table>

*Students must have all core curriculum and Health Science supporting courses completed before starting Health Science courses.

Health Science Major

- HLSC 3300 - The Health Care System* 3 sem. hrs.
- HLSC 3310 - Epidemiology^ 3 sem. hrs.
- HLSC 3320 - Health Care Marketing^ 3 sem. hrs.
- HLSC 3330 - Financial Management in Health Care^ 3 sem. hrs.
- HLSC 3340 - Health Program Planning and Evaluation^ 3 sem. hrs.
- HLSC 3350 - Information Systems and Technology in Health Care^ 3 sem. hrs.
- HLSC 3370 - Complementary and Alternative Medicine^ 3 sem. hrs.
- HLSC 4300 - Management and Organization Behavior in Health Care^ 3 sem. hrs.
- HLSC 4310 - Health Law^ 3 sem. hrs.
- HLSC 4680 - Practicum 6 sem. hrs.

Total: 36 hrs.
Specialization Area

Students may complete a designated minor in the following areas:

- Geographic Information Systems 22 sem. hrs.
- Computer Science 22 sem. hrs.
- Mathematics 18 sem. hrs.
- Business Administration 18 sem. hrs.
- Accounting 18 sem. hrs.
- Economics 18 sem. hrs.
- International Business 18 sem. hrs.
- Management Information Systems 18 sem. hrs.

With approval, students can design a degree plan with an interdisciplinary area of specialization (22 hrs) or use electives to satisfy pre-professional school requirements.

Minor

Health Sciences Minor

Program Closure Date: 14 August 2023. Last term students can complete the Health Science Minor: Summer 2023.

Effective start date of Healthcare Administration Minor: Fall 2020.

Students may remain in the HLSC degree program or transfer to the Bachelor of Science in Healthcare Administration Program (BSHA) which begins Fall 2020. Intent to transfer must be made to advising by 1 March 2020.

Students majoring in other academic fields who wish to earn a minor in Health Science must complete the following courses:

- HLSC 3300 - The Health Care System* 3 sem. hrs.
- HLSC 3310 - Epidemiology^ 3 sem. hrs.
- HLSC 3350 - Information Systems and Technology in Health Care^ 3 sem. hrs.
- HLSC 4310 - Health Law^ 3 sem. hrs.
- HLSC Electives 6 sem. hrs.

Total: 18

Healthcare Administration Minor
Undergraduate students majoring in other disciplines can earn a Minor in Healthcare Administration. The minor provides foundational learning that augment the knowledge, skills and values necessary for successful careers in healthcare and related disciplines. The minor program assists students to manage, lead and improve the changing health care needs in South Texas, and to emphasize culturally appropriate patient-centered service delivery systems.

Students majoring in other academic fields who wish to earn a minor in Healthcare Administration must complete the following courses:

- HCAD 3300 - The Health Care System 3 sem. hrs.
- HCAD 3350 - Information Systems and Technology in Health Care 3 sem. hrs.
- HCAD 4310 - Health Law, Policy and Ethics 3 sem. hrs.
- HCAD 4340 - Quality Management and Evaluation in Health Care 3 sem. hrs.
- HCAD Electives 6 semester hours.

Total Hours: 18

College of Science and Engineering

College of Science and Engineering

**Degree Programs**
- Atmospheric Sciences, BS
- Biology, BS
- Biomedical Sciences, BS
- Chemistry, BS
- Civil Engineering, BS
- Clinical Laboratory Science, BS
- Computer Science, BS
- Electrical Engineering, BS
- Environmental Science, BS

**Minors**
- Applied Mathematics Minor
- Atmospheric Sciences Minor
- Biology Minor
- Chemistry Minor
- Computer Science Minor
- Environmental Science Minor
- Geographic Information Science Minor
- Geography Minor

**Teaching Certificates**
- Biology, BS — Grades 7-12 Life Science Education Concentration
- Chemistry, BS — Grades 7-12 Physical Science Education Concentration
- Environmental Science, BS — Grades 4-8 Science Education Concentration
- Elementary Education, BS — Grades 4-8 with
• Geographic Information Science, BS
• Geology, BS
• Industrial Engineering, BS
• Mathematics, BS
• Mechanical Engineering, BS
• Mechanical Engineering Technology, BS
• Physics, BS

• Geology Minor
• Mathematics Minor
• Mechanical Engineering Technology Minor
• Physics Minor

• Mathematics Certification
• Mathematics, BS — Grades 7-12 Mathematics Education Concentration
• Mathematics, Grades 7-12 Teacher Certification Without a Mathematics Major

Fast Track Programs

• Fast Track Biology BS to Biology MS
• Fast Track Computer Science, BS and Computer Science, MS
• Fast Track Environmental Science, BS and Environmental Science, MS
• Fast Track Geographic Information Science, BS and Geospatial Systems Engineering, MS
• Fast Track Geology, BS and Environmental Science, MS
• Fast Track Mathematics, BS and Mathematics, MS

• Geomatics Certificate
• Geographic Information Systems Certificate
• Clinical Laboratory Science Certification

• Unmanned Aircraft Systems Applications Certificate

The College of Science and Engineering offers undergraduate and graduate degrees in basic and applied sciences to support the technical requirements of our post-industrial society. In addition, the College provides many courses supporting the science literacy requirements of non-majors. Specialized course offerings and degree sequences support
Education majors seeking science and mathematics teaching certifications. The office of the Dean is located in Center for Instruction, Suite 350.

Purpose Statement

The College of Science and Engineering is committed to maintaining an academic environment in which students may develop as productive citizens who will contribute to society. In this regard, the faculty recognizes the need to prepare individuals who have an understanding of the foundations and principles of their respective fields and professions. The administration of the College encourages and supports the faculty in meeting their responsibility to continue their professional development and to contribute to the University, the community, and their chosen fields.

In order to accomplish this purpose, the administration and faculty of the College share the following objectives:

1. To provide the opportunity for each student to assimilate and apply the body of knowledge required by a chosen discipline through a clearly defined sequence of courses.
2. To develop each student's ability to think critically and to communicate effectively through creative and challenging educational experiences.
3. To encourage each student to become a well-rounded, educated person through exposure to other disciplines within the University.
4. To contribute to the greater body of knowledge in specialized disciplines through research, scholarship, and professional endeavor.
5. To serve as a professional and educational resource to the local area and larger community by providing consultation and special services.

Centers for Research and Continuing Education

The College of Science and Engineering is the academic home to several major research units, which are physically housed in the Natural Resources Center on the west end of campus.

The National Spill Control School, established in 1977, promotes education on environmental issues. The primary focus of its programs is in presenting continuing education short courses on-campus or on-site for personnel involved in spill prevention and the control of oil, hazardous materials, and hazardous waste. Other areas of interest include allied safety concerns and improving knowledge in these fields through research and targeted education programs.
The Center for Coastal Studies, established in 1984, is an interdisciplinary research unit of the College of Science and Engineering at Texas A&M University-Corpus Christi. The main purpose of the Center is to perform coastal ecosystem research and contract studies on the Padre/Mustang barrier island chain, the Laguna Madre, and the Nueces/Corpus Christi Bay Complex. Currently, cooperative agreements with several branches of the U.S. Fish and Wildlife Service and the Texas Parks and Wildlife Department provide research and practical training experience for Texas A&M University-Corpus Christi science students.

The Conrad Blucher Institute for Surveying and Science, dedicated in 1987, encourages scientific research and education, with a special emphasis on surveying. To provide for the unique needs of Texas surveyors, the Institute is developing strong continuing education and research programs in surveying. As funds and resources permit, the Institute will also promote research and education in all of the supporting sciences. Science education is a vital base for surveyors and scientists. The Institute supports activities to improve these areas and help create professional and student interest in surveying and science.

The Center for Water Supply Studies was established in 1991. The Center provides science students with the opportunity to pursue research in the broad areas of water resources. The Center also provides regional governmental entities with an academic organization through which studies of issues relating to water supply may be carried out.

The Center for Information Assurance, Statistics, and Quality Control (CIASQC) leverages the skills of university experts working together with community leaders to meet the increasing demands for secured information environments and improved quality of education, government, health care and business. The mission of CIASQC is to become the primary South Texas and Gulf of Mexico resource of information assurance, modeling, statistical and quality improvement services, and software engineering for the education, government, health care, and private sectors.

In 2000, Texas A&M University-Corpus Christi received a $46 million pledge from publisher Ed Harte to create the Harte Research Institute for Gulf of Mexico Studies. The Institute supports the Ph.D. programs in Coastal and Marine System Science and Marine Biology offered through the College of Science and Engineering.

**Science and Engineering Degree Programs**

The College of Science and Engineering offers course work leading to the following Bachelor of Science, Master of Science, and Doctor of Philosophy degrees:
<table>
<thead>
<tr>
<th>Field</th>
<th>Degree(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atmospheric Sciences ATSC</td>
<td>BS</td>
</tr>
<tr>
<td>Biology BIOL</td>
<td>BS, MS</td>
</tr>
<tr>
<td>Biomedical Science BIMS</td>
<td>BS</td>
</tr>
<tr>
<td>Chemistry CHEM</td>
<td>BS</td>
</tr>
<tr>
<td>Civil Engineering CEEN</td>
<td>BS</td>
</tr>
<tr>
<td>Clinical Laboratory Science CLSC</td>
<td>BS</td>
</tr>
<tr>
<td>Coastal and Marine System Science CMSS</td>
<td>PhD</td>
</tr>
<tr>
<td>Computer Science COSC</td>
<td>BS, MS</td>
</tr>
<tr>
<td>Electrical Engineering EEEN</td>
<td>BS</td>
</tr>
<tr>
<td>Environmental Science ESCI</td>
<td>BS, MS</td>
</tr>
<tr>
<td>Fisheries and Mariculture FAMA</td>
<td>MS</td>
</tr>
<tr>
<td>Geographic Information Science GISC</td>
<td>BS</td>
</tr>
<tr>
<td>Geography GEOG</td>
<td>(minor only)</td>
</tr>
<tr>
<td>Geology GEOL</td>
<td>BS</td>
</tr>
<tr>
<td>Geospatial Computing Sciences GCSC</td>
<td>PhD</td>
</tr>
<tr>
<td>Geospatial Surveying Engineering GSEN</td>
<td>MS</td>
</tr>
<tr>
<td>Industrial Engineering IEEN</td>
<td>BS</td>
</tr>
<tr>
<td>Marine Biology MARB</td>
<td>MS, PhD</td>
</tr>
<tr>
<td>Mathematics MATH</td>
<td>BS, MS</td>
</tr>
<tr>
<td>Mechanical Engineering MEEN</td>
<td>BS</td>
</tr>
<tr>
<td>Mechanical Engineering Technology ENTC</td>
<td>BS</td>
</tr>
<tr>
<td>Physics PHYS</td>
<td>BS</td>
</tr>
</tbody>
</table>
Science, Mathematics and Technology Education SMTE (teacher certification programs only, in 4-8 level Science, 8-12 level Life Science, 8-12 level Physical Science, and 8-12 level Mathematics)*

See the university Graduate Catalog for information on graduate programs.

*A teacher certification program in 4-8 level Mathematics is available through the College of Education and Human Development.

**Undergraduate Programs**

A minimum of 120 semester hours of credit are required. Most curricula require more. Please consult the academic advisor and/or faculty advisor for specific details.

Specific Requirements for the College of Science and Engineering

Each student entering the College must comply with the curriculum requirements of the University Core Curriculum Program and University degree requirements. Transfer students can meet some or all of these requirements by transfer of courses/core curricula taken and completed prior to entry. Please consult the University Core Curriculum Program advisors.

Upper-Division Hours

A minimum of 45 semester hours of upper-division credit (courses numbered in the 3000 and 4000 series) is required.

Residence Requirements

A minimum of 36 hours of upper-division course work required for graduation must be successfully completed in residence at Texas A&M University-Corpus Christi to obtain a baccalaureate degree. A minimum of 12 hours of these 36 hours must be in the major. See "Degree Requirements" in the general section of this catalog for additional university requirements.

Grade-Point Average

A minimum cumulative grade-point average of 2.0 ("C") on a 4 point scale (4.0 = A) in all work taken and a minimum grade-point average of 2.25 in all courses in the major field of study taken at this University are required. The courses in the major field of study are defined for each major, and can be found on the pages for that major. For teacher
certification, grade point average requirements are higher. Refer to "Teacher Certification Programs" in this section.

Directed Independent Study (DIS)

Each area of the College offers courses in directed independent study. These courses appear with 4X96 numbers in the course offerings of each discipline and may carry variable credit depending upon the course design. The student must register for a specific number of hours according to a course plan approved by the instructor, the Department Chairperson, and the Dean in advance of registration. The 4X96 courses may be repeated for credit.

Graduation Under a Particular Catalog

In accordance with general University policy, the student may receive the baccalaureate degree upon satisfying the requirements of the chosen degree area in the College of Science and Engineering, upon satisfying the requirements of the catalog under which credit was first earned in this university, or upon satisfying the requirements of the catalog governing any subsequent year in which credit was earned as a student in the university. In the case of courses which are no longer offered, the faculty will prescribe substitutions. Students who do not complete the degree to which they have been admitted within 6 years will be subject to review and may, if necessary, be required to update knowledge and meet catalog requirements currently in effect.

Teacher Certification Programs

Students seeking state certification to teach science and mathematics in Texas schools must major in an approved teaching field and complete all major study and related requirements for a baccalaureate degree in that field. They must also comply with teacher certification requirements. Prospective candidates for teacher certification are strongly urged to obtain current certification information from the College of Education and Human Development prior to formulating a degree plan or pursuing degree-specific course work.

Study programs at this university leading to teacher certification in science and mathematics are:

4-8 level Science
7-12 level Life Science
7-12 level Physical Science
4-8 level Mathematics (College of Education and Human Development)
7-12 level Mathematics

Major study and course requirements in teaching fields are detailed in the Science, Mathematics and Technology Education (SMTE) section of this catalog and the College of Education and Human Development section for the baccalaureate degree leading to 4-8 level Mathematics certification. For a complete listing of the available certification plans and details of the requirements for obtaining a teaching certificate, please consult the College of Education and Human Development section of this catalog.

Teacher preparation is considered to be an integral role of the College; therefore, all certification requirements are integrated into the degree requirements for those who desire teacher certification.

In addition to the academic specialization discussed above, teacher certification programs require the completion of general education courses, including the core curriculum, and professional development courses. A student who seeks a teaching certificate should contact a Certification Officer in the College of Education and Human Development about requirements and procedures that must be met to obtain the certificate. The professional development sequence of required courses must be taken in a specific order and it is recommended that students contact the College of Education and Human Development early in their academic careers for specific details on these courses.

Grade Point Average for Students Seeking Middle School (Grades 4-8) and/or High School (Grades 7-12) Certification

A minimum grade point average of 2.50 (4.0 = A) in all work attempted, a minimum grade point average of 2.75 in all science, math, or specialization areas, and no grade below "C" in any science or math course on a student's degree plan and/or education courses within the professional education block of courses are required. (See Requirements for Programs Leading to Teacher Certification)

Alteration of a Certification Plan

Any amendment to a degree plan originally filed must be approved by the student's academic advisor, the Department Chair, the Dean of the College of Science and Engineering, and the Certification Officer of the College of Education and Human Development for the degree to be granted.

Minors
Course requirements for a minor are determined by the faculty in each corresponding academic discipline, and variations in the minor requirements are subject to the approval of the faculty in that area. Therefore, the student should consult the description of the minor in the section of the catalog dedicated to that discipline. Questions about the minor course work should be directed to the appropriate advisor within the minor discipline.

Contact Information

College of Science and Engineering, Texas A&M University-Corpus Christi, Corpus Christi, TX 78412-5806. Phone: (361) 825-5777. Web: http://www.sci.tamucc.edu/

School of Engineering and Computing Sciences

Bachelor of Science

Civil Engineering, BS

Civil engineers oversee large construction projects, including designing, constructing, supervising, and maintaining road systems and the accompanying infrastructure, buildings, airports, and systems for water treatment, hydroelectricity, and more. Because there are so many different aspects of civil engineering, many civil engineers choose to pursue a specialty. Popular specialties include construction engineering, geotechnical engineering, structural engineering, geospatial surveying engineering, environmental engineering, water resources engineering, transportation engineering, and coastal engineering. The Civil Engineering curriculum prepares graduates to apply knowledge of mathematics through differential equations, calculus-based physics, chemistry, and at least one additional area of basic science; to apply probability and statistics to address uncertainty; to analyze and solve problems in technical areas appropriate to civil engineering; to conduct experiments in technical areas of civil engineering and analyze and interpret the resulting data; to design a system, component, or process in civil engineering contexts; to include principles of sustainability in design; to explain basic concepts in project management, business, public policy, and leadership; and to analyze issues in professional ethics.

Program Educational Objectives

In accordance with ABET accreditation requirements, the Program Educational Objectives (PEOs) describe the professional accomplishments that Civil Engineering graduates are expected to achieve, within a few years of graduation. The PEOs are:
1. Within one year of graduation from TAMU-CC, our graduates will be working in industry, government, construction, or other professional service as civil engineers, or will be pursuing graduate degrees in civil engineering or post-baccalaureate degrees in other fields, such as law, business, or medicine.

2. Within five years of graduation from TAMU-CC our graduates will have
   - advanced in their careers as indicated by obtaining promotions and positions of leadership, awards, recognitions as subject matter experts, and/or registration as professional engineers or in other professional disciplines; or by entrepreneurial activities, products or processes developed, patents, and/or publications;
   - demonstrated the ability to increase their knowledge and expertise through continuing education or advanced degrees; and
   - contributed to the improvement of the profession and of society through research, national and/or international collaboration, and/or professional and public service including mentoring.

Student Learning Outcomes

Graduates will have:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Degree Requirements

The Civil Engineering curriculum consists of a minimum of 123 credit hours. It can be divided into five main
areas:

<table>
<thead>
<tr>
<th>Area</th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>First-Year Seminars (as applicable)*</td>
<td>(2)</td>
</tr>
<tr>
<td>II. Common Engineering, Math and Science courses</td>
<td>51</td>
</tr>
<tr>
<td>III. Required Civil Engineering courses</td>
<td>18</td>
</tr>
<tr>
<td>IV. Capstone Project</td>
<td>3</td>
</tr>
<tr>
<td>V. Technical Elective Block</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>123 (125)</td>
</tr>
</tbody>
</table>

University Core Curriculum and other General Education Requirements

See "Core Curriculum Program" in this catalog. Civil Engineering students should take the following courses in fulfillment of the mathematics and natural science components of the University Core Curriculum:

- CHEM 1411 - General Chemistry I* 4 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs.
- MATH 2414 - Calculus II 4 sem. hrs.
- PHYS 2425 - University Physics I 4 sem. hrs.

Note:

The 3 lecture hours in MATH 2413, CHEM 1411, and PHYS 2425 satisfy the required 3 and 6 core curriculum hours in math and science, respectively. The 1 lab hour from each of these three courses, and the 3 lecture hours from MATH 2414, satisfy the 6-hour component area option requirement in the core curriculum. Students transferring to Texas A&M University - Corpus Christi from other institutions may have various means for fulfilling the core curriculum. Please refer to the "General Education Requirement" in the catalog section entitled "Undergraduate Programs."

Full-time, first-year students are required to take the following courses:
• UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
• UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Common Engineering, Math and Science Courses

Note: 15 of the 66 hours of courses listed in this section are used to satisfy University Core Curriculum requirements, as described above.

• CHEM 1411 - General Chemistry I* 4 sem. hrs.
• COSC 1330 - Programming for Scientists, Engineers, and Mathematicians 3 sem. hrs.
• ENGR 1211 - Introduction to Engineering 2 sem. hrs.
• ENGR 1312 - Engineering Graphics I 3 sem. hrs.
• ENGR 2325 - Statics 3 sem. hrs.
• ENGR 2326 - Dynamics 3 sem. hrs.
• ENGR 2460 - Circuit Analysis 4 sem. hrs.
• ENGR 3315 - Fluid Mechanics 3 sem. hrs.
• ENGR 3316 - Thermodynamics 3 sem. hrs.
• ENGR 3320 - Strength of Materials 3 sem. hrs.
• ENGR 3322 - Materials Science 3 sem. hrs.
• ENGR 4240 - Project Management 2 sem. hrs.
• ENGR 4420 - Engineering Lab Measurements 4 sem. hrs.
• MATH 2413 - Calculus I 4 sem. hrs.
• MATH 2414 - Calculus II 4 sem. hrs.
• MATH 2415 - Calculus III 4 sem. hrs.
• MATH 3315 - Differential Equations 3 sem. hrs.
• MATH 3342 - Applied Probability and Statistics* 3 sem. hrs.
• PHYS 2425 - University Physics I 4 sem. hrs.
• PHYS 2426 - University Physics II 4 sem. hrs.

Required Civil Engineering Courses

• CEEN 2315 - Geomatics and Surveying Engineering 3 sem. hrs.
• CEEN 3320 - Geotechnical Engineering I 3 sem. hrs.
• CEEN 3330 - GIS for Civil and Environmental Engineering 3 sem. hrs.
• CEEN 4304 - Civil and Construction Materials 3 sem. hrs.
• CEEN 4306 - Transportation Engineering 3 sem. hrs.
• CEEN 4324 - Structural Engineering 3 sem. hrs.

Technical Electives Block
These electives provide students with the option to take courses that apply to their field of study.

Select three courses (9 sem. hrs. total) from the following list.

- CEEN 4310 - Water Resources Engineering 3 sem. hrs.
- CEEN 4312 - Principles of Hydraulics and Hydrology 3 sem. hrs.
- CEEN 4322 - Geotechnical Engineering II – Coastal Environment 3 sem. hrs.
- CEEN 4330 - Introduction to Bridge and Pavement Engineering 3 sem. hrs.
- CEEN 4332 - Traffic Engineering 3 sem. hrs.
- CEEN 4342 - Construction Management 3 sem. hrs.
- MEEN 3335 - Introduction to Unmanned Aircraft Systems 3 sem. hrs.

Capstone Project

All civil engineering students must complete a senior-level capstone project in ENGR 4370 (3 sem. hrs.). Students will work with practicing engineers and engineering faculty. The Capstone Project will give engineering students practical, professional experience to prepare them for careers in civil engineering.

- ENGR 4370 - Capstone Projects 3 sem. hrs.

Fundamentals of Engineering (FE) Exam

All civil engineering students are encouraged to take the Fundamentals of Engineering (FE) exam. This exam is an important step toward licensure as a Professional Engineer (P.E.), which many civil engineers find useful and necessary in their careers. Close to the end of the B.S. degree program is an excellent time to take the exam, because the student has the best preparation for the exam at that point in the student's academic career.

Master of Business Administration (MBA) Option

Civil engineering students who have completed 96 credit hours toward the Civil Engineering B.S. degree and earned a cumulative GPA of 3.0 or higher may elect the MBA option in senior year. Students who elect the MBA option are required to take three MBA foundation courses to satisfy the Technical Elective Block requirements:

- ACCT 5312 - Foundations of Accounting 3 sem. hrs.
- ECON 5311 - Foundations in Economics 3 sem. hrs.
Students who plan to elect the MBA Option are encouraged to have summer internship experience before senior year, and will be able to complete an MBA degree study with 2 regular semesters and 1 summer session beyond a Civil Engineering B.S. degree study.

**Computer Science, BS**

The computer science degree program is applied in nature and is designed to prepare students to begin or advance computing careers in business, industry, government, or education, or to pursue further study in computer science. The curriculum is thorough, current, and oriented toward the technical competencies required of a modern computer professional with emphasis on the development, evaluation, and integration of software systems.

**Mission**

The mission of the Computer Science program is to educate undergraduate and graduate students in the principles of computer science and to extend the understanding and use of those principles by conducting research and service in support of the people and economy of south Texas, the state of Texas as a whole, and the nation, consistent with the program's function within a Hispanic-serving institution.

**Program Educational Objectives**

Based on the mission statements of the university, college, department, and program, we have derived the following objectives for the computer science undergraduate program. The objectives are to graduate students from the baccalaureate program in computer science who:

1. Contribute productively in a computer science discipline using state of the art technologies and progress towards their career goals and/or pursue their academic goals in graduate education.
2. Communicate effectively and interact or collaborate productively with team members of diverse backgrounds, such as race, religion, culture, ethnicity, and gender.
3. Continually improve their knowledge and skills in technical areas and broadening their global perspective of the field of computer science.
4. Uphold and enhance their sense of professional ethics and responsibilities towards individuals, organizations, and society.

**Student Learning Outcomes**
In order to prepare students to attain the program educational objectives, the BS CS degree program has been structured to ensure that all students, by the time of their graduation, will have been enabled to meet the following outcomes:

1. Analyze a complex computing problem, and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply computer science theory and software development fundamentals to produce computing-based solutions.

The requirements for a Bachelor of Science degree in Computer Science include a total of 120-122 semester hours. The total is divided among the following groups: University Core Curriculum, Major Curriculum, and Electives.

There are four options for the degree, the Systems Programming Option, the Cyber Security and Infrastructure Option, the Computer Game Programming Option, and the Computer Information Systems Option. Besides the University Core Curriculum, all options also share a common major curriculum that consists of 38 semester hours in computer science and mathematics.

For information about the minor, please see the Computer Science Minor section.

Curricular Requirements for Computer Science

A summary of the required hours follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. First-Year Seminars (when applicable)</td>
<td>(2)</td>
</tr>
<tr>
<td>I. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>II. Major Curriculum for All Options</td>
<td>38</td>
</tr>
<tr>
<td>III. Courses Specific to Each Option</td>
<td>39-40</td>
</tr>
<tr>
<td>IV. Electives as needed to fulfill university graduation minimum</td>
<td>0-1</td>
</tr>
</tbody>
</table>
|_______________________________________________________________________|_________________________________________________________________
The specific requirements for each option of the Bachelor of Science degree in Computer Science follow:

O. First-Year Seminars (when applicable) (2)

Full-time, first-year students are required to take

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

I. Core Curriculum Program 42 sem. hrs.

(See "Core Curriculum Program")

All Computer Science options require one or more courses that also satisfy the University Core curriculum. Before choosing a course to satisfy your University Core, verify that you will not be satisfying that part of the core with a required course.

Specific requirements for this degree:

- MATH 2413 - Calculus I 4 sem. hrs.
- Other 38 sem. hrs.

II. Major Curriculum for All Options 38 sem. hrs.

- COSC 1100 - Skills for Computing Professionals I 1 sem. hrs.
- COSC 1435 - Introduction to Problem Solving with Computers I 4 sem. hrs.
- COSC 1436 - Introduction to Problem Solving with Computers II 4 sem. hrs.
- COSC 2334 - Computer Architecture 3 sem. hrs.
- COSC 2437 - Data Structures 4 sem. hrs.
- COSC 3336 - Introduction to Database Systems 3 sem. hrs.
- COSC 3346 - Operating Systems 3 sem. hrs.
- COSC 3370 - Software Engineering 3 sem. hrs.
- COSC 4100 - Skills for Computing Professionals II 1 sem. hrs.
- COSC 4354 - Senior Capstone Project 3 sem. hrs.
- ENGL 3310 - Technical and Professional Writing for Computer Science 3 sem. hrs.
- * MATH 2305 - Discrete Mathematics I 3 sem. hrs.
- * MATH 2413 - Calculus I 4 sem. hrs. (included in University Core)
Choose one of

- * MATH 3345 - Statistical Modeling and Data Analysis 3 sem. hrs.

Note:

*These are supporting courses that can be used toward a Mathematics Minor.

III. Courses Specific to Each Option 39-40

A. Systems Programming Option 40 sem. hrs.

This option is for those who intend to pursue careers as systems programmers or pursue advanced study in computer science. The degree program has an emphasis in system software programming and requires a one-year sequence in a physical science with a laboratory component.

- COSC 2360 - Cyber Security 3 sem. hrs.
- COSC 3324 - Object-oriented Programming 3 sem. hrs.
- COSC 3353 - Survey of Programming Languages 3 sem. hrs.
- COSC 3373 - Software Project Management 3 sem. hrs.
- COSC 3385 - Numerical Methods 3 sem. hrs.
- COSC 4342 - Computer Networks 3 sem. hrs.
- COSC 4343 - Algorithms 3 sem. hrs.
- COSC 4348 - Systems Programming 3 sem. hrs.
- Approved upper-division Computer Science electives 12 sem. hrs.
- MATH 2414 - Calculus II 4 sem. hrs. (3 hrs included in University Core)

Choose one course from:

- COSC 4353 - Compiler Construction 3 sem. hrs.
- COSC 4360 - Theory of Programming Languages 3 sem. hrs.
- COSC 4370 - Models of Computation 3 sem. hrs.

Science sequence (included in University Core)

You must take a year long science sequence that includes laboratory work. You can choose from any of the below science sequences.

Biology

- BIOL 1406 - Biology I 4 sem. hrs.
• BIOL 1407 - Biology II 4 sem. hrs.

Chemistry

• CHEM 1411 - General Chemistry I* 4 sem. hrs.
• CHEM 1412 - General Chemistry II 4 sem. hrs.

Geology

• GEOL 1403 - Physical Geology 4 sem. hrs.
• GEOL 1404 - Historical Geology 4 sem. hrs.

Physics

• PHYS 2425 - University Physics I 4 sem. hrs.
• PHYS 2426 - University Physics II 4 sem. hrs.

B. Cyber Security and Infrastructure Option 39 sem. hrs.

This option is for those who intend to pursue careers in network administration, system administration, web administration and cyber security experts. The degree program has an emphasis on gaining these skills.

• COSC 2348 - Introduction to Scripting 3 sem. hrs.
• COSC 2465 - Linux Systems 4 sem. hrs.
• COSC 2466 - Network Systems 4 sem. hrs.
• COSC 3351 - Internet Programming 3 sem. hrs.
• COSC 3372 - Network Security 3 sem. hrs.
• COSC 3474 - Cyber Defense I 4 sem. hrs.
• COSC 4310 - Digital Forensics 3 sem. hrs.
• COSC 4365 - Windows Security 3 sem. hrs.
• COSC 4367 - Firewall and Intrusion Detection Systems 3 sem. hrs.
• COSC 4368 - Cyber Defense II 3 sem. hrs.
• Approved upper-division Computer Science electives 6 sem. hrs.

C. Computer Game Programming Option 40 sem. hrs.

This option is for those who intend to pursue careers as game programmers. The degree program has an emphasis on the skills necessary for creating and programing computer games.

• COSC 2325 - Game Design 3 sem. hrs.
• COSC 2360 - Cyber Security 3 sem. hrs.
• COSC 3324 - Object-oriented Programming 3 sem. hrs.
• COSC 3325 - Game Programming 3 sem. hrs.
• COSC 3385 - Numerical Methods 3 sem. hrs.
• COSC 4325 - Advanced Game Programming 3 sem. hrs.
• COSC 4328 - Computer Graphics 3 sem. hrs.
• COSC 4330 - Introduction to Artificial Intelligence 3 sem. hrs.
• COSC 4342 - Computer Networks 3 sem. hrs.
• COSC 4343 - Algorithms 3 sem. hrs.
• MATH 2414 - Calculus II 4 sem. hrs. (3 hrs. included in University Core)
• MATH 3311 - Linear Algebra 3 sem. hrs.
• PHYS 2425 - University Physics I 4 sem. hrs. (included in University Core)
• PHYS 2426 - University Physics II 4 sem. hrs. (included in University Core)
• Approved upper-division Computer Science electives 3 sem. hrs.

choose one course from:

• COSC 4353 - Compiler Construction 3 sem. hrs.
• COSC 4360 - Theory of Programming Languages 3 sem. hrs.
• COSC 4370 - Models of Computation 3 sem. hrs.

D. Computer Information Systems Option 40 sem. hrs.

The Computer Information Systems option is intended for those who want to develop and maintain information systems. In this option, the student learns to develop software systems and function as a computer professional. The student should choose electives to link the application-independent foundations and processes of computing and information systems to the needs of a particular application area. The student will gain knowledge of the particular application area by choosing a minor in an academic discipline highly related to the application area.

The minor should be appropriate as an application area for computer information systems and must consist of at least 18 semester hours. The coursework that satisfies the minor is determined by the faculty in the minor subject.

• COSC 2470 - COBOL Programming 4 sem. hrs.
• COSC 3324 - Object-oriented Programming 3 sem. hrs.
• COSC 4342 - Computer Networks 3 sem. hrs.
• Approved upper-division Computer Science electives 12 sem. hrs.
• Minor Courses 18 sem. hrs.

Fast Track from Bachelor's to Master's Degree
Computer Science, BS and Computer Science, MS

The university allows the opportunity for high-achieving students to count a select number of graduate credits toward their undergraduate degree and thereby obtain a graduate degree at an accelerated pace. Students interested in the Fast Track in Computer Science must meet the following application criteria:

- Currently seeking a BS in Computer Science at A&M-Corpus Christi.
- Minimum of a 3.0 GPA in the last 60 SCH at the time of Fast Track application.
- Classified as a Senior with successful completion of at least 90 SCH, including MATH 2413, COSC 2334, COSC 2437, and COSC 3346.

Students accepted into the Fast Track program will be given permission to enroll in up to six hours of prescribed graduate courses during their last semester of undergraduate studies. The hours for these graduate courses will "double-count" toward both the undergraduate and graduate programs. The BS and MS degrees will be awarded sequentially (i.e., upon completion of each degree) and not simultaneously. Students will be allowed to continue enrollment in the graduate program upon successful completion of the undergraduate degree.

Admissions Requirements

Applicants must provide the following at the time of application:

- A completed application form. Application fees are waived for Fast Track applicants.
- Official transcripts of all college and university coursework.
- An essay (500-1000 words) discussing why you wish to get a Master's degree and your areas of interest.
- Identify a faculty member willing to serve as their graduate advisor. Applicants will not be admitted to the program without a graduate advisor.

No criterion is weighted more heavily than any other criterion. Applications received or completed after the deadline for admission during one semester may be considered for admission in the following semester at the applicant's request. Applicants will be notified of the outcome of their application by email.

Academic Preparation

A student entering the program is expected to have adequate preparation in computer science and mathematics from their undergraduate degree. For computer science, this preparation must include successful completion of coursework in data structures, a high level programming language, computer architecture, operating systems, and software
engineering. In mathematics, students must have successfully completed course work in discrete mathematics, calculus, plus one additional junior level or higher mathematics course such as linear algebra, numerical analysis, or applied probability and statistics.

Fast Track Curriculum in the Senior Year

BS Computer Science students accepted in the Fast Track will have up to six hours of undergraduate elective credit replaced with six hours of graduate credit during the final semester of the senior year. A Fast Track student can choose from any of the classes in the MS Computer Science degree plan, as long as the prerequisites are met.

See the Graduate Catalog for a complete description of the degree requirements for the MS in Computer Science.

Electrical Engineering, BS

Electrical Engineers develop electrical systems using knowledge of physics, mathematics, circuit design, electromagnetic theory, communication theory, control systems and signal processing. Electrical engineering historically involved how the generation, transmission and utilization of electrical energy. Today, electrical engineering applications also include control systems, robotics, automation, plasma, sensors, computers and imaging. The Bachelor of Science in Electrical Engineering (BSEE) program emphasizes service, systems-based knowledge, and sustainability with an eye toward the interface of traditional electrical engineering with new and emerging fields, in particular unmanned aircraft systems, maritime sciences and marine biology that directly impact the Gulf Coast.

Program Educational Objectives

The Program Educational Objectives (PEOs) describe the professional accomplishments that Electrical Engineering graduates are expected to achieve, within a few years of graduation. The PEOs are:

- Practice the electrical engineering discipline successfully within accepted professional standards.
- Continue to develop teamwork and communications skills to support a successful career in electrical engineering, including the ability to work with a diverse group of co-workers and others inside and outside the profession.
- Fulfill professional and ethical responsibilities in the practice of electrical engineering, including social, environmental and economic considerations.
• Engage in professional service, such as participation in professional society and community service.
• Engage in life-long learning activities, such as graduate studies or professional workshops, and develop mentee and mentor relationships.
• Become a leader of his/her chosen profession, including the assumption of management roles.
• Achieve recognition as a subject matter expert in electrical engineering, particularly by obtaining licensure as a professional engineer.

Student Learning Outcomes

Graduates will have:

1. an ability to apply knowledge of mathematics, science, and engineering
2. an ability to design and conduct experiments, as well as to analyze and interpret data
3. an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
4. an ability to function on multidisciplinary teams
5. an ability to identify, formulate, and solve engineering problems
6. an understanding of professional and ethical responsibility
7. an ability to communicate effectively
8. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
9. a recognition of the need for, and an ability to engage in life-long learning
10. a knowledge of contemporary issues
11. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice
12. an ability to analyze and design complex electrical and electronic devices, software and systems containing hardware and software components

Degree Requirements

The Electrical Engineering curriculum consists of a minimum of 128 credit hours. It can be divided into four main areas:

<table>
<thead>
<tr>
<th>I. Core Curriculum Program</th>
<th>42</th>
</tr>
</thead>
</table>
First-Year Seminars (as applicable)* (2)

II. Common Engineering, Math and Science courses 43

III. Required Electrical Engineering courses 34

IV. Technical Elective Block 9

Total 128 (130)

*Transfer students with 24 or more hours are exempt from First-Year Seminar Fundamentals of Engineering Exam

Students are encouraged to take the NCEES (National Council for Examiners for Engineering and Surveying) Fundamentals of Engineering (FE) exam during their senior year. The FE exam is the first step in the process that leads to licensure as a Professional Engineer (P.E.).

University Core Curriculum and other General Education Requirements

See "Core Curriculum Program" in this catalog. Electrical Engineering students should take the following courses in fulfillment of the mathematics and natural science components of the University Core Curriculum:

- MATH 2413 Calculus I 4 sem. hrs.
- PHYS 2425 University Physics I 4 sem. hrs.
- PHYS 2426 University Physics II 4 sem. hrs.

Note:

Electrical Engineering students must take two courses in physics even if the natural science portion of the core curriculum is satisfied by other means. Students transferring to Texas A&M University - Corpus Christi from other institutions may have various means for fulfilling the core curriculum. Please refer to the "General Education Requirement" in the catalog section entitled "Undergraduate Programs."

Full-time, first-year students are required to take the following courses:

- UNIV 1101 First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 First-Year Seminar II* 1 sem. hrs.
Common Engineering, Math and Science Courses

Note: 15 of the 58 hours of courses listed in this section are used to satisfy University Core Curriculum requirements.

- CHEM 1411 - General Chemistry I* 4 sem. hrs.
- COSC 1320 - C Programming 3 sem. hrs.
- ENGR 1211 - Introduction to Engineering 2 sem. hrs.
- ENGR 2106 - Digital Systems Laboratory 1 sem. hrs.
- ENGR 2306 - Digital Systems 3 sem. hrs.
- ENGR 3316 - Thermodynamics 3 sem. hrs.
- ENGR 3322 - Materials Science 3 sem. hrs.
- ENGR 2325 - Statics 3 sem. hrs.
- ENGR 2460 - Circuit Analysis 4 sem. hrs.
- MATH 2305 - Discrete Mathematics I 3 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs.
- MATH 2414 - Calculus II 4 sem. hrs.
- MATH 2415 - Calculus III 4 sem. hrs.
- MATH 3311 - Linear Algebra 3 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.
- MATH 3345 - Statistical Modeling and Data Analysis 3 sem. hrs.
- PHYS 2425 - University Physics I 4 sem. hrs.
- PHYS 2426 - University Physics II 4 sem. hrs.

Required Electrical Engineering Courses

- EEEN 3310 - Electromagnetic Theory 3 sem. hrs.
- EEEN 3315 - Electrical Circuits II 3 sem. hrs.
- EEEN 3320 - Introduction to Communication Theory and Systems 3 sem. hrs.
- EEEN 3330 - Control Systems I 3 sem. hrs.
- EEEN 3350 - Electronic Systems Design 3 sem. hrs.
- EEEN 3418 - Microprocessors and Microcontrollers 4 sem. hrs.
- EEEN 4310 - Signal Processing 3 sem. hrs.
- EEEN 4333 - Machine Vision and Image Processing 3 sem. hrs.
- ENGR 4240 - Project Management 2 sem. hrs.
- ENGR 4420 - Engineering Lab Measurements 4 sem. hrs.

Technical Electives Block

These electives provide students with the option to take courses that apply to their field of study.
Select three courses (9 sem. hrs. total) from the following list.

- EEEN 4330 - Introduction to Plasma Engineering and Applications sem. hrs.
- EEEN 4390 - Special Topics 3 sem. hrs.
- ENTC 4496 - Directed Independent Study 1-4 sem. hrs.
- MEEN 3335 - Introduction to Unmanned Aircraft Systems 3 sem. hrs.
- MEEN 4335 - Introduction to Aircraft Aerodynamics and Performance 3 sem. hrs.
- MEEN 4350 - Controls, Automation and Robotics 3 sem. hrs.
- MEEN 4375 - Fuel Cells 3 sem. hrs.
- MEEN 4380 - Renewable Energy 3 sem. hrs.
- EEEN 3345 - Electronic Devices and Circuits 3 sem. hrs.
- EEEN 4331 - Power Transmission and Distribution 3 sem. hrs.
- EEEN 4332 - Power Protection Systems 3 sem. hrs.

Capstone Project

All electrical engineering students must complete a senior-level capstone project in ENGR 4370. Students will work with practicing engineers and mechanical engineering faculty. The Capstone Project will give engineering students practical, professional experience to prepare them for careers in electrical engineering.

Master of Business Administration (MBA) Option

Electrical engineering students who have completed 96 credit hours toward the Electrical Engineering B.S. degree and earned a cumulative GPA of 3.0 or higher may elect the MBA option in senior year. Students who elect the MBA option are required to take three MBA foundation courses to satisfy the Technical Elective Block requirements:

- ACCT 5312 - Foundations of Accounting 3 sem. hrs.
- ECON 5311 - Foundations of Economics 3 sem. hrs.

Students who plan to elect the MBA Option are encouraged to have summer internship experience before senior year, and will be able to complete an MBA degree study with 2 regular semesters and 1 summer session beyond an Electrical Engineering B.S. degree study.

Geographic Information Science, BS

The Geographic Information Science Program will prepare graduates with knowledge and skills for a variety of career paths related to the acquisition, analysis, and
management of geospatial data and information. Career paths include education towards advanced degrees and employment in the fields of Geomatics and Geographic Information Systems.

Program Objectives

- Geographic Information Science program graduates will demonstrate growth and advancement in the surveying profession or geospatial sciences.
- All Students are capable of continuing paths towards graduate studies and/or employment in the fields of Geomatics and Geographic Information Systems.
- All Students are prepared to become Registered Professional Land Surveyors, however, not all graduates will choose this option.

Student Learning Outcomes

Graduates of the program will have:

- An understanding of the basic principles of mathematics, physics, and computer science; the professional skills and modern tools for professional practice in the geospatial sciences as well as for graduate education.
- An understanding of the principles in geospatial sciences and understanding of professional practice and ethical issues, including the ability to design and conduct experiments, as well as to analyze and interpret data.
- The ability to work in a team and develop problem-solving skills that include oral and written communication skills to effectively communicate geospatial information.
- An awareness and utilization of external organizations and institutions that provide useful geospatial data sets and their relationships to traditional and contemporary societal issues.
- A recognition of the need for continued learning and development of leadership skills through involvement in volunteer professional organizations and societies.

Program

Geomatics is a field of activity that uses a systematic approach to integrate all means of capturing and managing spatial data required for scientific, administrative, legal, and technical operations involved in the production and management of spatial information. These activities include, but are not limited to, cartography, control surveying, digital mapping, geodesy, geographic information systems, hydrography, land information management, land surveying, mining surveying, photogrammetry, and remote sensing.
Geographic Information Systems is a professional discipline that focuses on the computer-based solutions to problems involving the collection, synthesis, analysis, and communication of spatially related information within a geographic jurisdiction or area. Local, State, and Federal government agencies and private industries have been rapidly converting paper-based systems used to manage spatially referenced data and information to highly automated graphics systems that integrate digital mapping with computerized databases.

Each student will complete a Capstone Project related to one of the above areas of interest. The Capstone Project will be evaluated under the Geospatial Systems Project GISC 4351 course.

Degree Requirements

A summary of the hours necessary for graduation is as follows:

1. University requirements
First-Year Seminars: Full-time, first-year students must take
UNIV 1101 and UNIV 1102 (2)

2. Core Curriculum Program
3. Foundations Required for the Geographic Information Science Program
4. Core Required for the Geographic Information Science Program
5. Designated Electives

Total 126

The specific requirements for each emphasis of the Bachelor of Science degree in Geographic Information Science are indicated on the following pages.

I. Core Curriculum Program

(See "Core Curriculum Program")

- Including MATH 2413 - Calculus I 4 sem. hrs.
- Including MATH 2414 - Calculus II 4 sem. hrs. (lecture component) Credits / Units: 3
- Including PHYS 2425 - University Physics I 4 sem. hrs.
- Including PHYS 2426 - University Physics II 4 sem. hrs.

Core Curriculum Program: 42
II. Foundations Required for the Geographic Information Science Program

- MATH 2414 - Calculus II 4 sem. hrs. (laboratory component) Credits / Units: 1
- COSC 1435 - Introduction to Problem Solving with Computers I 4 sem. hrs.

Total (Geographic Information Science Foundations): 8

III. Core Required for the Geographic Information Science Program

- GISC 1336 - Digital Drafting and Design 3 sem. hrs.
- GISC 1470 - Geospatial Systems I 4 sem. hrs.
- GISC 2250 - Field Camp I 2 sem. hrs.
- GISC 2301 - Geospatial Systems II 3 sem. hrs.
- GISC 2438 - Geospatial Software Systems I 4 sem. hrs.
- GISC 3300 - Geospatial Mathematical Techniques 3 sem. hrs.
- GISC 3325 - Geodetic Science 3 sem. hrs.
- GISC 3412 - Geospatial Plane Measurement II 4 sem. hrs.
- GISC 3420 - Geospatial Software Systems II 4 sem. hrs.
- GISC 3421 - Visualization for GIS 4 sem. hrs.
- GISC 4180 - Geospatial Systems Internship^ 1 sem. hrs.
- GISC 4305 - Legal Aspects of Spatial Information 3 sem. hrs.
- GISC 4315 - Satellite Positioning 3 sem. hrs.
- GISC 4318 - Cadastral Systems 3 sem. hrs.
- GISC 4335 - Geospatial Systems III 3 sem. hrs.
- GISC 4340 - Geospatial Computations and Adjustment 3 sem. hrs.
- GISC 4350 - Field Camp II 3 sem. hrs.
- GISC 4351 - Geospatial Systems Project 3 sem. hrs.
- GISC 4371 - History of Texas Land Ownership 3 sem. hrs.
- GISC 4431 - Remote Sensing 4 sem. hrs.

6 hours of mathematics and/or sciences:
Math can be any division math courses. Note: The course(s) satisfies a Mathematics Minor is a good choice.
- MATH 2305 - Discrete Mathematics I 3 sem. hrs.
- MATH 2415 - Calculus III 4 sem. hrs.
- MATH 3311 - Linear Algebra 3 sem. hrs.

Or one upper division MATH elective 3 sem. hrs.
Science can be any Natural Science course (based on scientific method) above 2000, or any Natural Science course that satisfies the laboratory science group (cannot satisfy both).

Total (Core Required for the Geographic Information Science Program): 73
IV. Designated Electives (choose one 3 hour credit course)

- GISC 4320 - Hydrography 3 sem. hrs.
- GISC 4590 - Selected Topics 1-5 sem. hrs. (Approved by GIS faculty)

Total for Geographic Information Science Degree: 126 Sem. Hrs.

Fast Track BS and MS Degree Plan

This Degree Plan is designed to enrich exceptionally gifted undergraduate students to include six hours of master's level courses in their undergraduate degree plans, thereby reducing the total number of hours to receive the Geospatial Systems Engineering (GSEN) MS degree by those six hours. When a student enter their junior-senior year with a GPA of at least 3.0, in their last 60 hours of coursework, they may apply into the Fast Track Degree Plan. If accepted into the Fast Track Plan, student will receive notification from the Admissions Office that they can enroll in Fast Track courses during the last semester of undergraduate studies. Students will be awarded their BS and MS sequentially as each degree is completed.

Degree Requirements

1. University requirements
First-Year Seminars: Full-time, first-year students must take
UNIV 1101 and UNIV 1102 (2)

I. Core Curriculum Program 42
II. Foundations Required for the Geographic Information Science Program 8
III. Core Required for the Fast Track Degree Plan 30
IV. Master of Science in Geospatial Systems Engineering 70
Total 150

I. Core Curriculum Program

Core Curriculum Program

II. Foundations Required for the Geographic Information Science Program
See section II above.

III. Core Required for the Fast Track BS and MS Degree Plan

To reach the required 70 credit hours, in addition to the courses listed below, 6 additional credit hours must be chosen from the GSEN MS Degree and should be included in the last semester of the student's undergraduate study. The student must consult with their graduate faculty advisor to determine which courses will be used to satisfy these 6 credit hours.

- GISC 1336 - Digital Drafting and Design 3 sem. hrs.
- GISC 1470 - Geospatial Systems I 4 sem. hrs.
- GISC 2250 - Field Camp I 2 sem. hrs.
- GISC 2301 - Geospatial Systems II 3 sem. hrs.
- GISC 2438 - Geospatial Software Systems I 4 sem. hrs.
- GISC 3300 - Geospatial Mathematical Techniques 3 sem. hrs.
- GISC 3325 - Geodetic Science 3 sem. hrs.
- GISC 3412 - Geospatial Plane Measurement II 4 sem. hrs.
- GISC 3420 - Geospatial Software Systems II 4 sem. hrs.
- GISC 3421 - Visualization for GIS 4 sem. hrs.
- GISC 4180 - Geospatial Systems Internship^ 1 sem. hrs.
- GISC 4305 - Legal Aspects of Spatial Information 3 sem. hrs.
- GISC 4315 - Satellite Positioning 3 sem. hrs.
- GISC 4318 - Cadastral Systems 3 sem. hrs.
- GISC 4335 - Geospatial Systems III 3 sem. hrs.
- GISC 4340 - Geospatial Computations and Adjustment 3 sem. hrs.
- GISC 4350 - Field Camp II 3 sem. hrs.
- GISC 4371 - History of Texas Land Ownership 3 sem. hrs.
- GISC 4431 - Remote Sensing 4 sem. hrs.

Total: 70

IV. Master of Science Geospatial Systems Engineering

The total credit hours required to complete the MS in Geospatial Systems Engineering (GSEN) will be reduced from 36 to 30 in the Fast Track Program due to the counting of 6 credit hours of graduate courses during the student's last semester of undergraduate study. Refer to the Graduate Catalog for further details of the GSEN Program.
Fast Track from Bachelor's to Master's Degree

Geographic Information Science BS to Geospatial Systems Engineering MS

The university allows the opportunity for high-achieving students to count a select number of graduate credits toward their undergraduate degree and thereby obtain a graduate degree at an accelerated pace. Students interested in the Fast Track in Geospatial Systems Engineering must meet the following application criteria:

- Currently seeking a BS in Geographic Information Science at A&M-Corpus Christi.
- Minimum of a 3.0 GPA in the last 60 SCH at the time of Fast Track application.
- Classified as a Senior with successful completion of at least 90 SCH, including GISC 3421, GISC 3412, and GISC 3300.

Students accepted into the Fast Track program will be given permission to enroll in up to six hours of prescribed graduate courses during their last semester of undergraduate studies. The hours for these graduate courses will "double-count" toward both the undergraduate and graduate programs. The BS and MS degrees will be awarded sequentially (i.e., upon completion of each degree) and not simultaneously. Students will be allowed to continue enrollment in the graduate program upon successful completion of the undergraduate degree.

Admissions Requirements

Applicants must provide the following at the time of application:

- A completed application form. Application fees are waived for Fast Track applicants.
- Official transcripts of all college and university coursework.
- An essay (500-1000 words) discussing why you wish to get a Master's degree and your areas of interest.
• Identify a faculty member willing to serve as their graduate advisor. Applicants will not be admitted to the program without a graduate advisor. No criterion is weighted more heavily than any other criterion. Applications received or completed after the deadline for admission during one semester may be considered for admission in the following semester at the applicant's request. Applicants will be notified of the outcome of their application by email.

Academic Preparation

A student entering the program is expected to have adequate preparation in geographic information science and mathematics from their undergraduate degree. For geographic information systems, this preparation must include successful completion of coursework in geospatial mathematical techniques, geodetic science, and visualization for GIS. In mathematics, students must have successfully completed coursework in calculus I and calculus II.

Fast Track Curriculum in the Senior Year

BS Geographic Information Science students accepted in the Fast Track will have up to six hours of undergraduate elective credit replaced with six hours of graduate credit during the final semester of the senior year. A Fast Track student can choose from any of the classes in the MS Geospatial Systems Engineering degree plan, as long as the prerequisites are met.

See the Graduate Catalog for a complete description of the degree requirements for the MS in Geospatial Systems Engineering.

Industrial Engineering, BS

The Industrial Engineering curriculum prepares graduates to design, develop, implement, and improve integrated systems that include people, materials, information, equipment and energy. The curriculum includes in-depth instruction to accomplish the integration of systems using appropriate analytical, computational, and experimental practices.

Industrial Engineering, BS

Industrial Engineers apply science, mathematics, and engineering methods to complex system integration and operations. Because these systems are so large and complex, IEs need to have knowledge and skills in a wide variety of disciplines, the ability to work well with people, and a broad, systems perspective. Industrial engineers use their knowledge and skills to improve systematic processes through the use of
statistical analysis, interpersonal communication, design, planning, quality control, operations management, computer simulation, and problem solving. The Industrial Engineering curriculum prepares graduates to design, develop, implement, and improve integrated systems that include people, materials, information, equipment and energy. The curriculum includes in-depth instruction to accomplish the integration of systems using appropriate analytical, computational, and experimental practices.

Program Educational Objectives

In accordance with ABET accreditation requirements, the Program Educational Objectives (PEOs) describe the professional accomplishments that Industrial Engineering graduates are expected to achieve, within a few years of graduation. The PEOs are:

1. Within one year of graduation from TAMU-CC, our graduates will be working in industry, government, construction, or other professional service as industrial engineers, or will be pursuing graduate degrees in industrial engineering or post-baccalaureate degrees in other fields, such as law, business, or medicine.
2. Within five years of graduation from TAMU-CC our graduates will have
   • advanced in their careers as indicated by obtaining promotions and positions of leadership, awards, recognitions as subject matter experts, and/or registration as professional engineers or in other professional disciplines; or by entrepreneurial activities, products or processes developed, patents, and/or publications;
   • demonstrated the ability to increase their knowledge and expertise through continuing education or advanced degrees; and
   • contributed to the improvement of the profession and of society through research, national and/or international collaboration, and/or professional and public service including mentoring.

Student Learning Outcomes

Graduates will have:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Degree Requirements

The Industrial Engineering curriculum consists of a minimum of 123 credit hours. It can be divided into five main areas:

I. Core Curriculum Program - 42 sem. hrs.
   First-Year Seminars (as applicable) - (2 sem. hrs.)

II. Common Engineering, Math, and Science Courses - 48 sem. hrs

III. Required Industrial Engineering Courses - 21 sem. hrs.

IV. Capstone Project - 3 sem. hrs.

V. Technical Elective Block - 9 sem. hrs.

Total: 123 (125) sem. hrs.

University Core Curriculum and other General Education Requirements

See "Core Curriculum Program" in this catalog. Industrial Engineering students should take the following courses in fulfillment of the mathematics and natural science components of the University Core Curriculum:

- CHEM 1411 - General Chemistry I* 4 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs.
- MATH 2414 - Calculus II 4 sem. hrs.
- PHYS 2425 - University Physics I 4 sem. hrs.

MATH 2413 satisfies math core requirement; MATH 2414 satisfies component area option requirement in core; CHEM 1411 and PHYS 2425 satisfy core science requirements

Note
The 3 lecture hours in MATH 2413, CHEM 1411, and PHYS 2425 satisfy the required 3 and 6 core curriculum hours in math and science, respectively. The 1 lab hour from each of these three courses, and the 3 lecture hours from MATH 2414, satisfy the 6-hour component area option requirement in the core curriculum. Students transferring to Texas A&M University - Corpus Christi from other institutions may have various means for fulfilling the core curriculum. Please refer to the "General Education Requirement" in the catalog section entitled "Undergraduate Programs."

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Common Engineering, Math and Science Courses

Note: 15 of the 63 hours of courses listed in this section are used to satisfy University Core Curriculum requirements, as described above.

- CHEM 1411 - General Chemistry I* 4 sem. hrs.
- COSC 1330 - Programming for Scientists, Engineers, and Mathematicians 3 sem. hrs.
- ENGR 1211 - Introduction to Engineering 2 sem. hrs.
- ENGR 1312 - Engineering Graphics I 3 sem. hrs.
- ENGR 3316 - Thermodynamics 3 sem. hrs.
- ENGR 3322 - Materials Science 3 sem. hrs.
- ENGR 2325 - Statics 3 sem. hrs.
- ENGR 2460 - Circuit Analysis 4 sem. hrs.
- ENGR 3350 - Manufacturing Processes 3 sem. hrs.
- ENGR 4240 - Project Management 2 sem. hrs.
- ENGR 4420 - Engineering Lab Measurements 4 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs.
- MATH 2414 - Calculus II 4 sem. hrs.
- MATH 2415 - Calculus III 4 sem. hrs.
- MATH 3311 - Linear Algebra 3 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.
- PHYS 2425 - University Physics I 4 sem. hrs.
- PHYS 2426 - University Physics II 4 sem. hrs.

Required Industrial Engineering Courses
- IEEN 2302 - Engineering Economics 3 sem. hrs.
- IEEN 3302 - Operations Research 3 sem. hrs.
- IEEN 3320 - Human Factors 3 sem. hrs.
- IEEN 3324 - Human Computer Interface 3 sem. hrs.
- IEEN 3330 - Robotics and Automation 3 sem. hrs.
- IEEN 4312 - Experimental Design and Analysis 3 sem. hrs.
- IEEN 4330 - Digital Systems Simulation 3 sem. hrs.

Technical Electives Block

These electives provide students with the option to take courses that apply to their fields of study. Select three courses (9 sem. hrs. total) from the following list:

- IEEN 4310 - Process Engineering 3 sem. hrs.
- IEEN 4322 - Cognitive Ergonomics 3 sem. hrs.
- IEEN 4324 - Human Factors and Autonomous Systems 3 sem. hrs.
- IEEN 4326 - Airborne Design of Experiments 3 sem. hrs.
- IEEN 4332 - Distribution Center Design and Operation 3 sem. hrs.
- IEEN 4334 - Scheduling and Sequencing 3 sem. hrs.
- MEEN 3335 - Introduction to Unmanned Aircraft Systems 3 sem. hrs.
- PSYC 3342 - Cognitive Psychology* 3 sem. hrs.
- PSYC 4352 - Physiological Psychology* 3 sem. hrs.

Note: IEEN 4342 is cross-listed with CEEN 4342 Construction Management)

Capstone Project

All industrial engineering students must complete a senior-level capstone project in ENGR 4370 Capstone Projects. Students will work with practicing engineers and engineering faculty. The Capstone Project will give engineering students practical, professional experience to prepare them for careers in electrical engineering.

- ENGR 4370 - Capstone Projects 3 sem. hrs.

Master of Business Administration (MBA) Option

Industrial engineering students who have completed 96 credit hours toward the Industrial Engineering B.S. degree and earned a cumulative GPA of 3.0 or higher may elect the MBA option in senior year. Students who elect the MBA option are required to take three MBA foundation courses to satisfy the Technical Elective Block requirements:

ACCT 5312 - Foundations of Accounting 3 sem. hrs.
ECON 5311 - Foundations in Economics 3 sem. hrs.


Students who plan to elect the MBA Option are encouraged to have summer internship experience before senior year, and will be able to complete an MBA degree study with 2 regular semesters and 1 summer session beyond an Industrial Engineering B.S. degree study.

Fundamentals of Engineering (FE) Exam

All engineering students are encouraged to take the Fundamentals of Engineering (FE) exam. This is exam is an important step toward licensure as a Professional Engineer (P.E.), which many engineers find useful and necessary in their careers. Close to the end of the B.S. degree program is an excellent time to take the exam, because the student has the best preparation for the exam at that point in the student's academic career.

Mechanical Engineering Technology, BS

Engineering Technology

The Engineering Technology Council of the American Society for Engineering Education defines Engineering Technology as the profession in which knowledge of mathematics and natural sciences gained by higher education, experience, and practices is devoted primarily to the implementation and extension of existing technology for the benefit of humanity. Engineering technology focuses on the applied aspects of science and engineering to prepare graduates for practice in product improvement, manufacturing, and engineering operational functions. Engineering technologists are suited for industries that deal with application, manufacturing, implementation, engineering operation, sales, and production.

The Mechanical Engineering Technology degree is offered in both the traditional face-to-face format and an online format for the upper-division courses. The fully-online courses form a competency-based education program in which students receive credit for courses when specific competencies are demonstrated, and receive the degree when all degree-level competencies are demonstrated. In some cases, students may be able to take traditional courses for credit in the competency-based education program.

The goal of Engineering Technology is to prepare well educated, highly skilled, and socially and professionally responsible engineering technologists from a diverse population of students to create productive and rewarding careers. Graduates will be well
grounded in the fundamentals of engineering, mathematics, science, communications, and problem solving. To create continuous improvement, the program uses input from employers, alumni, and the Industrial Advisory Committee. Engineering Technology is accredited by the Engineering Technology Accreditation Commission (ETAC) of ABET, www.abet.org.

Contact Information

Engineering Technology Program, Texas A&M University-Corpus Christi, Corpus Christi, TX 78412-5797. Phone: (361) 825-5849. Web: http://entc.tamucc.edu/

Mechanical Engineering Technology

Mechanical Engineering Technology graduates will exemplify the attributes previously described.

Student Learning Outcomes

- Practical, highly qualified engineering technologists.
- Employed in professional careers where they will solve problems using technical and hands-on skills developed during their studies.
- Employed by companies to apply their knowledge in the design, manufacture, sales, installation, operation and/or maintenance of complex, high-value systems.
- Socially and professionally responsible, possessing skills for life-long learning.

Graduates will have:

- an ability to select and apply knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities.
- an ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies.
- an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes
- an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives
- an ability to function effectively as a member or leader on a technical team.
- ability to identify, analyze, and solve broadly-defined engineering technology problems
• an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature
• an understanding of the need for and an ability to engage in self-directed continuing professional development
• an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity
• a knowledge of the impact of engineering technology solutions in a societal and global context
• a commitment to quality, timeliness and continuous improvement
• knowledge, problem solving ability and hands-on skills to enter careers in Mechanical Engineering Technology
• can apply specific program principles to the analysis, design, development, implementation, or oversight of more advanced mechanical systems or processes
• prepared to enter careers in materials, applied mechanics, computer-aided drafting/design, manufacturing, experimental techniques/procedure, analysis of engineering data, machine/mechanical design/analysis, power generation, fluid power, thermal/fluid system design/analysis, plant operation maintenance, technical sales, instrumentation/control systems, heating, ventilation and air conditioning (HVAC)

Academic advisors and faculty mentors are available to assist students with their academic endeavors.

A summary of the hours necessary for graduation follows:

<table>
<thead>
<tr>
<th></th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>*First-Year Seminar</td>
<td>(2)</td>
</tr>
<tr>
<td>2. Common Engineering Technology courses</td>
<td>31</td>
</tr>
<tr>
<td>3. Required Mechanical Engineering Technology courses</td>
<td>36</td>
</tr>
<tr>
<td>4. Technical Elective Block</td>
<td>12 to 13</td>
</tr>
<tr>
<td>Total</td>
<td>121-122 (123 - 124)*</td>
</tr>
</tbody>
</table>

*Transfer students with 24 or more hours are exempt from First-Year Seminar.
The specific requirements for each aspect of the Bachelor of Science degree in Mechanical Engineering Technology are indicated below.

The courses that are considered to be in the major field of study are all MATH, CHEM, PHYS, COSC, ENTC, ENGR, EEEN, and MEEN courses in the curriculum listed below (any ENGR, MEEN, or EEEN courses taken to fulfill MCET degree requirements must be approved by the program coordinator and the department chair).

Note:

*Transfer students with 24 or more hours are exempt from First-Year Seminar.

** Transfer students with 24 or more hours

The specific requirements for each aspect of the Bachelor of Science degree in Mechanical Engineering Technology are indicated below. Students are encouraged to take the NCEES (National Council of Examiners for Engineering and Surveying) Fundamentals of Engineering (FE) exam during their senior year. The FE exam, http://ncees.org/exams/fe-exam/, is the first step in the process that leads to the P.E. license.

I. University Core Curriculum and other General Education Requirements

See "Core Curriculum Program" in this catalog. Engineering Technology students are to take the following University Core Curriculum courses:

- MATH 2413 - Calculus I 4 sem. hrs. (3-hour lecture component)
- PHYS 2425 - University Physics I 4 sem. hrs. (3-hour lecture component)
- PHYS 2426 - University Physics II 4 sem. hrs. (3-hour lecture component)

Note:

Engineering Technology students must take two courses in Physics even if the natural science portion of the core curriculum is satisfied by other means. Students transferring to A&M-Corpus Christi from other institutions may have various means for fulfilling the core curriculum. Please refer to the "General Education Requirement" in the catalog section entitled "Undergraduate Programs." Three hours of the Component Area Option of the University Core Curriculum are satisfied by the fourth (lab) hour of each of MATH 2413, PHYS 2425, and PHYS 2426 (the first three lecture hours of each are used to satisfy the mathematics and natural science components of the Core, as described above). The other three hours of the Component Area Option of the Core are satisfied by the three lecture hours of MATH 2423 Calculus II.
II. Common Engineering Technology Courses

- MATH 2413 - Calculus I 4 sem. hrs. (1 hour laboratory component)
- PHYS 2425 - University Physics I 4 sem. hrs. (1 hour laboratory component)
- PHYS 2426 - University Physics II 4 sem. hrs. (1 hour laboratory component)
- MATH 2414 - Calculus II 4 sem. hrs.
- ENGR 1211 - Introduction to Engineering 2 sem. hrs.
- ENGR 1312 - Engineering Graphics I 3 sem. hrs.
- COSC 1330 - Programming for Scientists, Engineers, and Mathematicians 3 sem. hrs.
- CHEM 1411 - General Chemistry I* 4 sem. hrs.
- ENTC 2414 - Circuit Analysis I 4 sem. hrs.
- ENTC 3320 - Thermodynamics 3 sem. hrs.
- ENTC 4446 - Control Systems I 4 sem. hrs.
- ENTC 4415 - Project Justification and Management 4 sem. hrs.
- ENTC 4350 - Capstone Projects 3 sem. hrs.

Total: 31 hours

Note: Fifteen of the 46 hours of courses listed in this section are used to satisfy University Core Curriculum requirements as discussed above.

III. Required Mechanical Engineering Technology Courses

- ENTC 3302 - Manufacturing Processes 3 sem. hrs.
- ENTC 2325 - Statics 3 sem. hrs.
- ENTC 2326 - Dynamics 3 sem. hrs.
- ENTC 3220 - Thermal-Fluids Laboratory 2 sem. hrs.
- ENTC 3306 - Fluid Mechanics 3 sem. hrs.
- ENTC 3308 - Strength of Materials 3 sem. hrs.
- ENTC 3350 - Human Factors Engineering 3 sem. hrs.
- ENTC 3410 - Material Science 4 sem. hrs.
- ENTC 3455 - Solid Modeling and Finite Elements 4 sem. hrs.
- ENTC 4210 - Solid Mechanics Laboratory 2 sem. hrs.
- ENTC 4320 - Heat Transfer 3 sem. hrs.
- ENTC 4330 - Solid Mechanics 3 sem. hrs.

Total: 36 hours
IV. Technical Elective Block (select four courses from the following list)

Students choose one from:

Any upper division 3-credit hour Math, Science or Mechanical Engineering courses.

And choose three of the following courses:

- ENTC 3323 - Robotics and Automation 3 sem. hrs.
- ENTC 4322 - Programmable Logic Controllers 3 sem. hrs.
- ENTC 4335 - Energy Conversion 3 sem. hrs.
- ENTC 4360 - Mechanical System Design 3 sem. hrs.
- ENTC 4490 - Selected Topics 3-4 sem. hrs.

Total: 12 to 13 hours

Competency-Based Education Program for BS Mechanical Engineering Technology (CBE MCET)

A competency-based education (CBE) program is one in which specific, concrete competencies are defined. The top-level competencies are the ABET student learning outcomes listed above. Subject-specific sub-competencies are identified and assessed in each of the CBE MCET courses. When a student demonstrates the competencies for a specific course, the student passes the course. When all of the competencies for the degree have been demonstrated, the student receives the degree. The CBE MCET program is being offered for the upper-division (3000- and 4000-level) courses. Once a student has completed the first two years of the traditional MCET BS program as described above, the student may opt for the CBE MCET program. Each of the courses in the CBE MCET program, with the exception of certain laboratory classes described below, may be completed online.

A student must apply for the CBE program in MCET. The student

- Must be admitted as a student to TAMU-CC.
- Must indicate a positive decision to apply for the CBE MCET program, either through ApplyTexas or a change of major form if student is already at TAMU-CC.
• Must have completed all core courses and all lower-division courses as listed below under "Prior Course Completion."
• Must have a 2.5 GPA in all coursework that applies to the program (core courses and lower-division courses that will be counted towards the program), whether taken at TAMU-CC or elsewhere.

Credit By Examination: Some courses will have an online pre-test that students can take to earn college credit for that course. The test will be the equivalent of a comprehensive final exam that will test students on all competencies related to the course. The pre-test will be proctored according to the same standard as all other tests taken in the course. If students pass the pre-test, they will receive credit and not be required to take the course. The fee for taking the pre-test in each course must be paid by the student and may range up to $300 per exam. The student should contact the office of the Department of Engineering or the Office of Distance Education and Learning Technologies at TAMU-CC to determine the exact cost of the pre-test.

Credit By Portfolio: For the courses listed below, it is possible that through experience on the job (such as running a process unit in a plant or working in a machine shop), the student might have acquired the competencies in a particular course and therefore be able to obtain credit by submitting examples of work, certified by a supervisor, that illustrate the competencies in the course. The competencies for these courses may be found on the program website, and students given the opportunity to submit portfolios for evaluation (at the cost of an evaluation fee up to $300). The supervisor must be approved by the Engineering faculty as having the necessary qualifications to validate the work submitted by the student. The portfolio(s) submitted by the student must demonstrate that the student has mastered the competencies in the class, as published on the program website.

• ENTC 3220 Thermal / Fluids Laboratory
• ENTC 3302 Manufacturing Processes (shop / lab component)
• ENTC 4210 Solid Mechanics Laboratory
• ENTC 4415 Project Justification and Management
• ENTC 4350 Capstone Projects

Because of the nature of the last two courses, credit by portfolio must be obtained for both courses and cannot be obtained for each course individually.

Student Learning Outcomes

The student learning outcomes for the CBE MCET program are the same as for the traditional BS in MCET. These student outcomes will be met by the demonstration of specific competencies in each of the courses in the CBE MCET program.

Prior Course Completion
Prior to being admitted to the program, the student must complete all TAMU-CC core curriculum requirements and the following courses or their equivalents (those courses which satisfy the core requirements for mathematics, life and physical sciences, and the component area option (CAO) are also listed, for completeness).

- CHEM 1411 - General Chemistry I* 4 sem. hrs.
- ENGR 1211 - Introduction to Engineering 2 sem. hrs.
- ENGR 1312 - Engineering Graphics I 3 sem. hrs.
- ENTC 2325 - Statics 3 sem. hrs.
- ENTC 2326 - Dynamics 3 sem. hrs.
- ENTC 2414 - Circuit Analysis I 4 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs.
- MATH 2414 - Calculus II 4 sem. hrs.
- PHYS 2425 - University Physics I 4 sem. hrs.
- PHYS 2426 - University Physics II 4 sem. hrs.
- COSC 1330 - Programming for Scientists, Engineers, and Mathematicians 3 sem. hrs.

I. Common Engineering Technology Courses – CBE

- ENTC 3320 - Thermodynamics 3 sem. hrs.
- ENTC 4415 - Project Justification and Management 4 sem. hrs.
- ENTC 4446 - Control Systems I 4 sem. hrs.

Total: 11 hours

II. Required Mechanical Engineering Technology Courses – CBE

- ENTC 3306 - Fluid Mechanics 3 sem. hrs.
- ENTC 3308 - Strength of Materials 3 sem. hrs.
- ENTC 3350 - Human Factors Engineering 3 sem. hrs.
- ENTC 3410 - Material Science 4 sem. hrs.
- ENTC 3455 - Solid Modeling and Finite Elements 4 sem. hrs.
- ENTC 4320 - Heat Transfer 3 sem. hrs.
- ENTC 4330 - Solid Mechanics 3 sem. hrs.

Total: 23 hours

III. Chemical Process Industry Elective Block – CBE

- ENTC 4331 - Unit Processes 3 sem. hrs.
- ENTC 4332 - Process Modeling and Control 3 sem. hrs.
- ENTC 4333 - Chemical Reaction Engineering 3 sem. hrs.
- ENTC 4335 - Energy Conversion 3 sem. hrs.
  Or, the student may choose 4 courses from upper-division, traditional format ENTC and MEEN courses.

Total: 12 hours

IV. On-campus block

Because of their nature, the following courses must be completed in a traditional face-to-face format on campus or have a face-to-face component, if credit is not obtained by portfolio (see above). The two lab classes will be taught during the same five-week summer school term, in the first term of the summer. ENTC 3302 Manufacturing Processes and ENTC 4350 Capstone Projects courses will be taught as hybrids, with online and face-to-face components. The face-to-face laboratory component of ENTC 3302 will be taught during a five-week summer term. Because of the team nature of capstone projects, the online CBE version of ENTC 4350 will last 14 weeks and will be synchronized with spring and fall semester offerings of the traditional face-to-face version of ENTC 4350. The capstone project in ENTC 4350 will be completed as subsystems by subgroups or individuals off campus and integrated on campus at the end of the semester, with arrangements made for team presentations.

- ENTC 3220 - Thermal-Fluids Laboratory 2 sem. hrs.
- ENTC 3302 - Manufacturing Processes 3 sem. hrs.
- ENTC 4210 - Solid Mechanics Laboratory 2 sem. hrs.
- ENTC 4350 - Capstone Projects 3 sem. hrs.

Total: 10 hours

Bachelor of Science in Mechanical Engineering

Mechanical Engineering, BS

Mechanical Engineering is an engineering discipline that requires an understanding of mechanics, kinematics, thermodynamics and energy, and involves the application of principles of physics and mathematics to develop mechanical systems. The American Society of Mechanical Engineers (ASME) defines mechanical engineering as the branch of engineering that serves society through the analysis, design, and manufacture of systems that convert a source of energy to useful work. The Bachelor of Science in Mechanical Engineering (BSME) program emphasizes service, systems-based
knowledge, and sustainability with an eye toward the interface of traditional mechanical engineering with new and emerging fields, in particular unmanned aircraft systems, maritime sciences and marine biology that directly impact the Gulf Coast.

The program educational objectives of this program are:

1. Within one year of graduation from TAMU-CC, our graduates will be working in industry, government, construction, or other professional service as mechanical engineers, or will be pursuing graduate degrees in mechanical engineering or post-baccalaureate degrees in other fields, such as law, business, or medicine.
2. Within five years of graduation from TAMU-CC our graduates will have
   - advanced in their careers as indicated by obtaining promotions and positions of leadership, awards, recognitions as subject matter experts, and/or registration as professional engineers or in other professional disciplines; or by entrepreneurial activities, products or processes developed, patents, and/or publications;
   - demonstrated the ability to increase their knowledge and expertise through continuing education or advanced degrees; and
   - contributed to the improvement of the profession and of society through research, national and/or international collaboration, and/or professional and public service including mentoring.

Student Learning Outcomes

Graduates will have:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
3. an ability to communicate effectively with a range of audiences
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
Degree Requirements

The mechanical engineering curriculum consists of a minimum of 126 credit hours and can be divided into four main areas: University Core requirements, mathematics and science requirements, engineering requirements, and technical electives.

Because courses in mechanical engineering tend to be sequential, it is very important that students have the proper prerequisites. When in doubt, students should check with their faculty mentor.

A summary of the hours necessary for graduation follows:

<table>
<thead>
<tr>
<th></th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>First-Year Seminars (when applicable)*</td>
<td>(2)</td>
</tr>
<tr>
<td>2. Common Engineering and Math courses</td>
<td>45</td>
</tr>
<tr>
<td>3. Required Mechanical Engineering courses</td>
<td>29</td>
</tr>
<tr>
<td>4. Technical Elective Block</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>128 (130)</strong>*</td>
</tr>
</tbody>
</table>

*Transfer students with 24 or more hours are exempt from First-Year Seminar

The courses that are considered to be in the major field of study are all MATH, CHEM, PHYS, COSC, ENGR, MEEN, EEEN, and ENTC courses in the curriculum listed below (any EEEN or ENTC courses taken to fulfill MEEN degree requirements must be approved by the program coordinator and the department chair). Students who have been admitted as pre-mechanical engineering (PREM) majors must have a cumulative GPA of at least 2.5 in all MATH, CHEM, PHYS, COSC, and ENGR courses taken from the list below before they will be allowed to transfer into the Mechanical Engineering BS program and to take any upper-division (3000-level or above) ENGR, MEEN, or EEEN courses.

Note:

The specific requirements of the Bachelor of Science in Mechanical Engineering degree are indicated below. Students are encouraged to take the NCEES (National Council of Examiners for Engineering and Surveying) Fundamentals of Engineering (FE) exam during their senior year. The FE exam, http://ncees.org/exams/fe-exam/, is the first step in the process that leads to the P.E. license.
I. University Core Curriculum and other General Education Requirements

See "Core Curriculum Program" in this catalog. Mechanical engineering students should take the following courses in fulfillment of the mathematics and natural science components of the University Core Curriculum:

- MATH 2413 - Calculus I 4 sem. hrs. (3 hour lecture component)
- PHYS 2425 - University Physics I 4 sem. hrs. (3 hour lecture component)
- PHYS 2426 - University Physics II 4 sem. hrs. (3 hour lecture component)

Note:

Mechanical engineering students must take two courses in physics even if the natural science portion of the core curriculum is satisfied by other means. Students transferring to A&M-Corpus Christi from other institutions may have various means for fulfilling the core curriculum. Please refer to the "General Education Requirement" in the catalog section entitled "Undergraduate Programs."

Three hours of the Component Area Option of the University Core Curriculum are satisfied by the fourth (lab) hour of each of MATH 2413, PHYS 2425, and PHYS 2426 (the first three lecture hours of each are used to satisfy the mathematics and natural science components of the Core, as described above). The other three hours of the Component Area Option of the Core are satisfied by the three lecture hours of MATH 2414 Calculus II.

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

II. Common Engineering, Math and Science Courses

- MATH 2413 - Calculus I 4 sem. hrs. (1 hour laboratory component)
- PHYS 2425 - University Physics I 4 sem. hrs. (1 hour laboratory component)
- PHYS 2426 - University Physics II 4 sem. hrs. (1 hour laboratory component)
- MATH 2414 - Calculus II 4 sem. hrs.
- MATH 2415 - Calculus III 4 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.
- ENGR 1211 - Introduction to Engineering 2 sem. hrs.
- ENGR 1312 - Engineering Graphics I 3 sem. hrs.
• COSC 1330 - Programming for Scientists, Engineers, and Mathematicians 3 sem. hrs.
• CHEM 1411 - General Chemistry I* 4 sem. hrs.
• ENGR 3316 - Thermodynamics 3 sem. hrs.
• ENGR 3322 - Materials Science 3 sem. hrs.
• ENGR 2325 - Statics 3 sem. hrs.
• ENGR 2326 - Dynamics 3 sem. hrs.
• ENGR 2460 - Circuit Analysis 4 sem. hrs.
• ENGR 3315 - Fluid Mechanics 3 sem. hrs.
• ENGR 3320 - Strength of Materials 3 sem. hrs.
• ENGR 3350 - Manufacturing Processes 3 sem. hrs.

Total: 45

Note: Fifteen of the 60 hours of courses listed in this section are used to satisfy University Core Curriculum requirements as discussed above.

III. Required Mechanical Engineering Courses

• MEEN 3310 - Engineering Analysis for Mechanical Engineering 3 sem. hrs.
• MEEN 3330 - Solid Mechanics for Mechanical Engineering 3 sem. hrs.
• MEEN 3230 - Solid Mechanics Laboratory 2 sem. hrs.
• MEEN 3345 - Heat Transfer 3 sem. hrs.
• ENGR 4240 - Project Management 2 sem. hrs.
• MEEN 4351 - Dynamical Systems Analysis and Modeling 3 sem. hrs.
• MEEN 4360 - Thermal Systems Design 3 sem. hrs.
• MEEN 4365 - Mechanical Systems Design 3 sem. hrs.
• ENGR 4370 - Capstone Projects 3 sem. hrs.
• ENGR 4420 - Engineering Lab Measurements 4 sem. hrs.

Total: 29

IV. Technical Electives Block (select four courses, or 12 sem. hrs., from the following list)

These electives provide students the option to take courses that apply to their field of interest or to the Coastal Bend region. Many of the electives address issues related to ships, offshore platforms, offshore wind turbines, and sea floor mapping.

Students choose one from:
Any upper division 3-credit hour math/physics/chemistry/biology course (MATH 3342 Probability and Statistics preferred).

And choose three of the following courses:

- EEEN 4333 - Machine Vision and Image Processing 3 sem. hrs.
- MEEN 3335 - Introduction to Unmanned Aircraft Systems 3 sem. hrs.
- MEEN 3340 - Solid Modeling and Finite Elements 3 sem. hrs.
- MEEN 4325 - Energy Conversion 3 sem. hrs.
- MEEN 4330 - Introduction to Plasma Engineering and Applications 3 sem. hrs.
- MEEN 4335 - Introduction to Aircraft Aerodynamics and Performance 3 sem. hrs.
- MEEN 4345 - Sensors and Systems^ 3 sem. hrs.
- MEEN 4350 - Controls, Automation and Robotics 3 sem. hrs.
- MEEN 4355 - Marine Fabrication 3 sem. hrs.
- MEEN 4375 - Fuel Cells 3 sem. hrs.
- MEEN 4380 - Renewable Energy 3 sem. hrs.
- MEEN 4385 - Offshore Energy Management 3 sem. hrs.
- MEEN 4390 - Introduction to Computational Fluid Dynamics 3 sem. hrs.
- MEEN 4395 - Offshore Water Exploration and Desalination Systems 3 sem. hrs.
- ENGR 4390 - Special Topics in Engineering 1-3 sem. hrs.
- ENTC 4496 - Directed Independent Study 1-4 sem. hrs.

Capstone Project

All mechanical engineering students must complete a senior-level capstone project in ENGR 4370. Students will work with practicing engineers and mechanical engineering faculty. The capstone project will give engineering students practical, professional experience to prepare them for careers in mechanical engineering.

Master of Business Administration (MBA) Option

Mechanical Engineering students who have completed 96 credit hours toward the Mechanical Engineering B.S. degree and earned a cumulative GPA of 3.0 or higher may elect the MBA option in senior year. To satisfy the Technical Elective Block requirements, students who elect the MBA option are required to take (a) any upper division 3-credit hour math/physics/chemistry/biology course (MATH 3342 Probability and Statistics preferred) and (b) three MBA foundation courses:

ACCT 5312 - Foundations of Accounting 3 sem. hrs.
ECON 5311 - Foundations in Economics 3 sem. hrs.


Students who plan to elect the MBA Option are encouraged to have summer internship experience before senior year, and will be able to complete an MBA degree study with 2 regular semesters and 1 summer session beyond a Mechanical Engineering B.S. degree study.

Post-Baccalaureate Certificate

Geographic Information Systems Certificate

The Post-Baccalaureate Certificate in Geographic Information Systems (GIS) is designed for students who hold a bachelor's degree or master's degree in fields other than GIS and desire to continue their education in Geographic Information Systems. Candidates for the certificate are required to complete 32 credit hours of GIS related courses; 20 of these credit hours must be taken at Texas A&M University-Corpus Christi. Students are required to meet all other academic standards. The Coordinator of the Geographic Information Systems program or a designee may waive certain courses if a student has previously completed appropriate GIS courses. Students must apply for the certificate and complete a Certificate Plan approved by the Coordinator of the Geographic Information Systems program or a designee.

33 Credit Hour Certificate in Geographic Information Systems

Required GISC courses (33 Semester Hours)

- GISC 1336 - Digital Drafting and Design 3 sem. hrs.
- GISC 1470 - Geospatial Systems I 4 sem. hrs.
- GISC 2301 - Geospatial Systems II 3 sem. hrs.
- GISC 2438 - Geospatial Software Systems I 4 sem. hrs.
- GISC 3300 - Geospatial Mathematical Techniques 3 sem. hrs.
- GISC 3420 - Geospatial Software Systems II 4 sem. hrs.
- GISC 3421 - Visualization for GIS 4 sem. hrs.
- GISC 4431 - Remote Sensing 4 sem. hrs.
- COSC 1435 - Introduction to Problem Solving with Computers I 4 sem. hrs.

Note:

Students must earn at least a 2.0 overall grade point average in all GISC courses.
Geomatics Certificate

The Post-Baccalaureate Certificate in Geomatics is designed for students who hold a bachelor's degree or master's degree in fields other than Geomatics or Geographic Information Science and desire to continue their education to prepare for the Texas Board of Professional Land Surveying examination to become a Registered Professional Land Surveyor in Texas. Candidates for the certificate are required to complete 32 credit hours of surveying related courses; 20 of these credit hours must be taken at Texas A&M University-Corpus Christi. The Coordinator of the Geographic Information Science program or a designee may waive certain courses if a student has previously completed appropriate surveying courses. Students must apply for the certificate and complete a Certificate Plan approved by the Coordinator of the Geographic Information Science program or a designee.

33 Credit Hour Certificate in Geomatics

Required GISC courses (33 Semester Hours)

- GISC 1336 - Digital Drafting and Design 3 sem. hrs.
- GISC 3325 - Geodetic Science 3 sem. hrs.
- GISC 3412 - Geospatial Plane Measurement II 4 sem. hrs.
- GISC 4315 - Satellite Positioning 3 sem. hrs.
- GISC 4318 - Cadastral Systems 3 sem. hrs.
- GISC 4340 - Geospatial Computations and Adjustment 3 sem. hrs.
- GISC 4350 - Field Camp II 3 sem. hrs.
- GISC 4371 - History of Texas Land Ownership 3 sem. hrs.
- GISC 1470 - Geospatial Systems I 4 sem. hrs.

Note:
Students must earn at least a 2.0 overall grade point average in all GISC courses.

For Additional Information

Website: http://gisc.tamucc.edu/

Mailing Address: Geographic Information Science Program, Unit 5868
College of Science and Engineering
Texas A&M University-Corpus Christi
6300 Ocean Drive, Corpus Christi, Texas 78412-5868

Minor

Computer Science Minor

Students majoring in other academic fields who wish to complete a minor in computer science must complete at least 18 hours of computer science, of which at least 6 semester hours must be at or above the 3000 level. The content of the course work for the minor must include the equivalent of:

Required Courses

- COSC 1435 - Introduction to Problem Solving with Computers I 4 sem. hrs.
- COSC 1436 - Introduction to Problem Solving with Computers II 4 sem. hrs.
- COSC 2437 - Data Structures 4 sem. hrs. *
- Approved† Computer Science electives (at or above the 3000 level) 6 sem. hrs.

Total: 18

Note:

*It is assumed that the student has completed all mathematics prerequisites and corequisites for the required courses.

†Any 3000 level COSC course will satisfy except: COSC 3305, COSC 3342, COSC 3371, COSC 3400, COSC 4100, COSC 4354, or COSC 4690.

Geographic Information Science Minor
Students majoring in other academic fields who wish to earn a minor in Geographic Information Science must complete the following courses:

- GISC 1336 - Digital Drafting and Design 3 sem. hrs.
- GISC 1470 - Geospatial Systems I 4 sem. hrs.
- GISC 2301 - Geospatial Systems II 3 sem. hrs.
- GISC 3421 - Visualization for GIS 4 sem. hrs.

One of the following courses:

- GISC 4305 - Legal Aspects of Spatial Information 3 sem. hrs.
- GISC 4431 - Remote Sensing 4 sem. hrs.
- GISC 4590 - Selected Topics 1-5 sem. hrs. (Approved by GIS faculty)

Total (Geographic Information Science Minor): 20 (21)

Geography Minor

I. Introduction

An Interdisciplinary Geography minor offers undergraduate students in-depth study of Geography. The purpose of the Geography minor is to give students an understanding of the breadth of the discipline of geography, the tools of geography, and an appreciation for human and environmental spatial interactions. Students electing a minor in Geography should, prior to completing 6 hours of course work for the program, contact the College of Science and Engineering to be assigned an advisor for the minor. The advisor will aid the student in filing a minor plan.

Requirements for a Minor in Geography

The minor must contain at least 19 semester hours of course work from the below courses. All courses used to satisfy the minor requirement must be passed with a grade of "C" or better.

II. Minor in Geography

The following courses are required for a minor in geography:

- GISC 1301 - Physical Geography 3 sem. hrs.
• GEOG 1300 - World Geography 3 sem. hrs.
• GISC 1470 - Geospatial Systems I 4 sem. hrs.
• MATH 3342 - Applied Probability and Statistics* 3 sem. hrs.
  or
• MATH 1442 - Statistics for Life* 4 sem. hrs.

Electives:

To complete the geography minor, students must take at least six hours of upper division courses from electives.

• GISC 2301 - Geospatial Systems II 3 sem. hrs.
• GISC 3421 - Visualization for GIS 4 sem. hrs.
• GEOG 3331 - Geography of North America 3 sem. hrs.
• ESCI 1401 - Environmental Science I: Intro to Environmental Science 4 sem. hrs.
• ESCI 3403 - Introduction to Meteorology 4 sem. hrs.
• SOCI 3301 - Cultural Anthropology 3 sem. hrs.
• SOCI 3312 - Racial and Ethnic Relations 3 sem. hrs.
• SOCI 3370 - Native Americans in North America 3 sem. hrs.

Mechanical Engineering Technology Minor

This minor is designed to serve students who are interested in supplementing their major with technical skills in alternative energy technologies. A minimum of 12 hours must be taken at Texas A&M University-Corpus Christi. For additional information contact an academic advisor in the College of Science and Engineering.

Required courses:

• ENTC 3302 - Manufacturing Processes 3 sem. hrs.
• ENTC 2325 - Statics 3 sem. hrs.
• ENTC 2326 - Dynamics 3 sem. hrs.
• ENTC 3415 - Circuit Analysis II 4 sem. hrs.
• ENTC 3320 - Thermodynamics 3 sem. hrs.
• ENTC 4335 - Energy Conversion 3 sem. hrs.

Total: 19 hours

Certificates

Unmanned Aircraft Systems Applications Certificate
The Certificate in Unmanned Aircraft Systems Applications is designed to provide students with a basic background in the technologies and applications of unmanned aircraft systems that will prepare them to work in various fields related to unmanned aircraft. Candidates are required to complete 16 credit hours, including 10 hours of required courses and 6 hours chosen from a list of designated electives. All students admitted into the UAS certificate program must meet the undergraduate admission requirements for TAMU-CC and must satisfy all prerequisites for courses in the certificate program. Students working toward an undergraduate degree in engineering, computer science, or geospatial information science may obtain this certificate while completing their degrees, but this may require completing more credit hours than those required for the undergraduate degree. Transfer credit for some required courses may be considered, as may credit for previous experience. Students are expected to meet all other academic standards. Students must apply for the certificate and complete a Certificate Plan approved by the Director of the School of Engineering and Computing Sciences or a designee.

16 Credit Hour Certificate in UAS Applications

Required Courses (10 Semester Hours)

- MEEN 3335 - Introduction to Unmanned Aircraft Systems 3 sem. hrs.
- COSC 3335 - Programming for Unmanned Aircraft Systems 3 sem. hrs.
- GISC 4431 - Remote Sensing 4 sem. hrs.

Elective Courses (6 Semester Hours)

Choose two course from the following list:

- MEEN 4335 - Introduction to Aircraft Aerodynamics and Performance 3 sem. hrs.
- MEEN 4345 - Sensors and Systems 3 sem. hrs.
- EEEN 3330 - Control Systems I 3 sem. hrs.
- COSC 3360 - Human-computer Interaction 3 sem. hrs.
- COSC 4330 - Introduction to Artificial Intelligence 3 sem. hrs.
- MEEN 4336 - Introduction to UAS for Agricultural Applications 3 sem. hrs.
- IEEN 3324 - Human Computer Interface 3 sem. hrs.
- IEEN 4324 - Human Factors and Autonomous Systems 3 sem. hrs.
- IEEN 4326 - Airborne Design of Experiments 3 sem. hrs.

Note
Students must earn at least a 2.5 overall grade point average in certificate courses.

For Additional Information

Website: http://encs.tamucc.edu

Mailing Address: School of Engineering and Computing Sciences, Unit 5797

College of Science and Engineering

Texas A&M University - Corpus Christi

6300 Ocean Drive, Corpus Christi, TX 78412-5797

Fast Track from Bachelor's to Master's Degree

Fast Track Computer Science, BS and Computer Science, MS

Computer Science, BS and Computer Science, MS

The university allows the opportunity for high-achieving students to count a select number of graduate credits toward their undergraduate degree and thereby obtain a graduate degree at an accelerated pace. Students interested in the Fast Track in Computer Science must meet the following application criteria:

- Currently seeking a BS in Computer Science at A&M-Corpus Christi.
- Minimum of a 3.0 GPA in the last 60 SCH at the time of Fast Track application.
- Classified as a Senior with successful completion of at least 90 SCH, including MATH 2413, COSC 2334, COSC 2437, and COSC 3346.

Students accepted into the Fast Track program will be given permission to enroll in up to six hours of prescribed graduate courses during their last semester of undergraduate studies. The hours for these graduate courses will "double-count" toward both the undergraduate and graduate programs. The BS and MS degrees will be awarded sequentially (i.e., upon completion of each degree) and not simultaneously. Students will be allowed to continue enrollment in the graduate program upon successful completion of the undergraduate degree.

Admissions Requirements

Applicants must provide the following at the time of application:
• A completed application form. Application fees are waived for Fast Track applicants.
• Official transcripts of all college and university coursework.
• An essay (500-1000 words) discussing why you wish to get a Master's degree and your areas of interest.
• Identify a faculty member willing to serve as their graduate advisor. Applicants will not be admitted to the program without a graduate advisor.

No criterion is weighted more heavily than any other criterion. Applications received or completed after the deadline for admission during one semester may be considered for admission in the following semester at the applicant's request. Applicants will be notified of the outcome of their application by email.

Academic Preparation

A student entering the program is expected to have adequate preparation in computer science and mathematics from their undergraduate degree. For computer science, this preparation must include successful completion of coursework in data structures, a high level programming language, computer architecture, operating systems, and software engineering. In mathematics, students must have successfully completed course work in discrete mathematics, calculus, plus one additional junior level or higher mathematics course such as linear algebra, numerical analysis, or applied probability and statistics.

Fast Track Curriculum in the Senior Year

BS Computer Science students accepted in the Fast Track will have up to six hours of undergraduate elective credit replaced with six hours of graduate credit during the final semester of the senior year. A Fast Track student can choose from any of the classes in the MS Computer Science degree plan, as long as the pre requisites are met.

See the Graduate Catalog for a complete description of the degree requirements for the MS in Computer Science.

Department of Life Sciences

Bachelor of Science

Biology, BS

Purpose of Biology Program
The biology program provides diverse training for careers in the biological sciences. The biology curriculum includes content courses required for (1) teacher certification in life science, (2) acceptance to post-graduate studies, and (3) pre-professional studies in preparation for admission to professional schools.

Students will acquire content and skills to enter a variety of biology-related careers such as research, marine biology, wildlife and coastal management, environmental protection, laboratory technician, biotechnology industry, medical or environmental microbiology, technical writing, pharmaceutical sales, careers in the medical, dental, and allied health fields, and science education.

Field and laboratory courses emphasize the development of practical skills in using special materials and equipment. Focus is on enhancement of critical thinking skills, which will prepare the student for careers in the biological sciences as well as in other general areas of employment.

Student Learning Outcomes

Students will:

- Possess a broad understanding of biology.
- Understand the scientific method and use it to develop and conduct biological experiments.
- Have the skills necessary to successfully communicate biological information to a range of audiences.

The Honors Program

The Honors Program (admission by application only) offers highly motivated students from any academic discipline an enriched program of study in which to develop global perspectives. Appropriate courses approved by both a student's Biology faculty mentor and Honors advisor may count toward the Biology degree. Thus, a Biology student in the Honors track can usually graduate with no additional course work. For more information, consult the section entitled "Honors Program" near the front of this catalog.

Requirements of the Undergraduate Biology Major

The Bachelor of Science in Biology degree requires a minimum of 120 semester credit hours: 42 are designated University Core Curriculum Program courses, 43 are from biology core courses and 35 are from biology career track courses. The biology core provides students with a broad biological background and includes coursework in four
key areas: mathematics, the chemistry of life/cell biology, form and function, and organismal biology. In each of these areas students select one course from a list of appropriate courses, depending on their interests and choice of biology career track. The biology career track areas are: (A) Ecology, (B) Marine Biology, (C) Cell/Molecular Biology, (D) Microbiology, (E) Organismal Biology and (F) Integrative Biology. Students should select a biology career track as soon as possible after they complete their freshman year and well before they begin their junior year.

**Degree Requirements**

<table>
<thead>
<tr>
<th>Sem. Hrs.</th>
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<tbody>
<tr>
<td>• First-Year Seminars</td>
</tr>
<tr>
<td>• Core Curriculum Program</td>
</tr>
<tr>
<td>• Biology Core Courses</td>
</tr>
<tr>
<td>• Biology Career Track Courses</td>
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<tr>
<td><strong>Total 120 (122)</strong></td>
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II. University Core Curriculum Program

*For 4 of the four-hour science and mathematics courses that are required for all Biology students, some or all of the hours may be counted as part of the University Core requirement. For BIOL 1406, BIOL 1407, and MATH 2413, the 3 lecture hours of each will be counted in the Life and Physical Sciences or Mathematics Foundational Areas; and each one-hour laboratory component will be counted in the Component Area Option of the University Core Curriculum. For CHEM 1411, the 3 lecture hours will be counted in the Component Area Option of the University Core Curriculum, but the 1 laboratory hour will be counted as part of the Biology Core.

The First-Year Seminars (UNIV 1101 and UNIV 1102) will not count towards the 120 hour minimum requirements to graduate.

Total: 42

III. Biology Core Courses

- BIOL 1406 - Biology I 4 sem. hrs. (included in University Core)
- BIOL 1407 - Biology II 4 sem. hrs. (included in University Core)
- BIOL 2300 - Science Communication 3 sem. hrs.
• BIOL 2416 - Genetics 4 sem. hrs.
• BIOL 2421 - Microbiology 4 sem. hrs.
• BIOL 2371 - Principles of Evolution 3 sem. hrs.
• BIOL 3428 - Principles of Ecology 4 sem. hrs.
• CHEM 1411 - General Chemistry I* 4 sem. hrs. (The 3 lecture hours of this course count in the Component Area Option of the University Core. The 1 laboratory hour counts as part of the Biology Core.)
• CHEM 1412 - General Chemistry II 4 sem. hrs.
• CHEM 3411 - Organic Chemistry I 4 sem. hrs.
• CHEM 3412 - Organic Chemistry II 4 sem. hrs.
• MATH 2413 - Calculus I 4 sem. hrs. (included in University Core)

Students who are not eligible to enroll in MATH 2413 Calculus I will need to take additional prerequisite courses (3-9 sem. hrs.) depending on their math placement level (i.e., MATH 0300 Developmental Math, MATH 1314 College Algebra and MATH 1316 Trigonometry, or MATH 2312 Precalculus).

Select 1 course from the following list to fulfill the Statistics requirement
• BIOL 3325 - Biostatistics 3 sem. hrs.
• MATH 3342 - Applied Probability and Statistics* 3 sem. hrs.

Select 1 course from the following list to fulfill the Chemistry of Life/Cell Biology requirement
• BIOL 3403 - Molecular Biology 4 sem. hrs.
• BIOL 3410 - Cell Biology 4 sem. hrs.
• CHEM 4401 - Biochemistry I 4 sem. hrs.

Select 1 course from the following list to fulfill the Form and Function requirement
• BIOL 3425 - Functional Anatomy 4 sem. hrs.
• BIOL 3430 - Physiology 4 sem. hrs.
• BIOL 3455 - Plant form and Function 4 sem. hrs.

Select 1 course from the following list to fulfill the Organismal Biology requirement
• BIOL 2472 - Principles of Botany^ 4 sem. hrs.
• BIOL 3413 - Invertebrate Zoology 4 sem. hrs.
• BIOL 3414 - Vertebrate Zoology 4 sem. hrs.

Total: 43

Note:

Students must complete 34-35 additional hours in one of the Biology Tracks to earn the 120 hours necessary for graduation. A minimum of 45 hours of upper-division credit (courses numbered 3000 or 4000) is required to graduate. A minimum grade point
average of 2.5 in the major field of study (biology core + biology track) is required to graduate. No "D" or "F" grades will be accepted as credit within the biology core or biology track courses.

IV. Biology Career Tracks

Each biology career track is designed to provide specific background in a biological discipline. The integrative biology track provides a broad background in the biological sciences.

Any track will prepare a student for entry-level biological careers in a variety of academic, governmental, or private sector settings, but many careers will require training beyond the BS degree. A student should consult their faculty mentor to determine the track that is the best fit for their career goals.

Each track consists of 34-35 hours, including a core of required courses and electives. Students are strongly encouraged to consult their faculty mentor for guidance in choosing the electives.

A. Ecology Track

The Ecology Track focuses on interactions between organisms and between organisms and the physical environment. Students choosing this track will be preparing for careers in fields such as agriculture, environmental protection, conservation, natural resource management, and public education.

I. Ecology Core Courses (8 Sem. Hrs.):

Select 2 advanced ecology courses from the following list:

- BIOL 3479 - Plant Ecology 4 sem. hrs.
- BIOL 4405 - Limnology 4 sem. hrs.
- BIOL 4408 - Microbial Diversity and Ecology 4 sem. hrs.
- BIOL 4436 - Marine Ecology 4 sem. hrs.
- BIOL 4446 - Tropical Ecosystems & Conservation 4 sem. hrs.

II. Ecology Electives (27 Sem. Hrs.)

Choose 27 hours of upper division electives. A total of at least 120 hours is required to graduate with the B.S. degree.

B. Marine Biology Track
The Marine Biology track focuses on organisms in marine and coastal systems. Students choosing this track will be preparing for careers in fisheries and aquaculture, coastal/marine resource management and conservation, outdoor recreation, and aquatic science.

I. Marine Biology Core Courses (10-11 Sem. Hrs.):

- BIOL 4436 - Marine Ecology 4 sem. hrs.
  Select 1 of the following courses to fulfill the Marine Organisms requirement
- BIOL 4319 - Marine Mammals 3 sem. hrs.
- BIOL 4429 - Marine Botany 4 sem. hrs.
- BIOL 4432 - Ichthyology 4 sem. hrs.
  Students choosing BIOL 4432 Ichthyology should take BIOL 3414 Vertebrate Zoology as part of the Biology Core (Organismal Biology requirement).
- BIOL 4444 - Estuarine Organisms 4 sem. hrs.
  Students choosing BIOL 4444 Estuarine Organisms should take BIOL 3413 Invertebrate Zoology as part of the Biology Core (Organismal Biology requirement).

II. Marine Biology Electives (23-24 Sem. Hrs.)

Choose 23-24 hours of upper division electives. A total of at least 120 hours is required to graduate with the B.S. degree.

C. Cell/Molecular Biology Track

The Cell/Molecular Biology track focuses on the chemical, cellular, and tissue levels of biological organization. Students choosing this track will be preparing for careers in biotechnology and healthcare professions, research laboratories, biological/pharmaceutical manufacturing and quality control, agricultural testing, and health- or biotechnology-related sales. This track also prepares students for graduate studies in biology, biotechnology and health-related sciences.

I. Cell/Molecular Biology Core Courses (15 Sem. Hrs.):

- BIOL 3403 - Molecular Biology 4 sem. hrs. (Include in the Biology Core)
- BIOL 3410 - Cell Biology 4 sem. hrs.
- BIOL 4340 - Genomics, Proteomics and Bioinformatics 3 sem. hrs.
• CHEM 4401 - Biochemistry I 4 sem. hrs.
• CHEM 4402 - Biochemistry II 4 sem. hrs.

II. Cell/Molecular Biology Electives (20 Sem. Hrs.)

Choose 20 hours of upper division electives. A total of at least 120 hours is required to graduate with the B.S. degree.

D. Microbiology Track

This Microbiology track focuses on bacteria, viruses, fungi and protozoa. Many of these organisms are important to industry, agriculture, and health care. Students choosing this track will be preparing for careers in industrial, environmental, medical, public health, and agricultural laboratories, industrial quality control, health care professions, research, biotechnology, and microbiology-related sales.

I. Microbiology Core Courses (23 Sem. Hrs.):

• BIOL 3403 - Molecular Biology 4 sem. hrs. (Include in the Biology Core)
• BIOL 4406 - Immunology 4 sem. hrs.
• BIMS 4374 - Medical Microbiology 3 sem. hrs.
• CHEM 4401 - Biochemistry I 4 sem. hrs.
• CHEM 4402 - Biochemistry II 4 sem. hrs.

Students must complete 8 sem. hrs. of Physics
• PHYS 1401 - General Physics I 4 sem. hrs. AND
• PHYS 1402 - General Physics II 4 sem. hrs.
OR
• PHYS 2425 - University Physics I 4 sem. hrs. AND
• PHYS 2426 - University Physics II 4 sem. hrs.

II. Microbiology Electives (12 Sem. Hrs.)

Choose 12 hours of upper division electives. A total of at least 120 hours is required to graduate with the B.S. degree.

E. Organismal Biology Track

The Organismal Biology track focuses on the natural history, ecology, structure, and function of plants and/or animals. Students can choose to emphasize plants or animals, or take courses that result in a broad understanding of both. Students choosing this track will be preparing for careers that include, but are not limited to, wildlife management, fisheries, natural resource management, parks and recreation, biodiversity and
conservation, habitat restoration, and agriculture or horticulture. This track also prepares
students for graduate studies in biology, wildlife and fisheries sciences, wildlife
management, forestry, or taxonomy and systematics.

I. Organismal Biology Core Courses (8 Sem. Hrs.):

   Plant Emphasis
   - BIOL 2472 - Principles of Botany^ 4 sem. hrs. (Include in Biology Core)
   - BIOL 3455 - Plant form and Function 4 sem. hrs. (Include in Biology Core)
   - BIOL 3479 - Plant Ecology 4 sem. hrs.
   - BIOL 4422 - Plant Taxonomy 4 sem. hrs.

   Animal Emphasis
   - BIOL 3413 - Invertebrate Zoology 4 sem. hrs. (Include in Biology Core)
   - BIOL 3414 - Vertebrate Zoology 4 sem. hrs.
   - BIOL 4411 - Animal Behavior 4 sem. hrs.
   Select 1 of the following courses (include in Biology Core)
   - BIOL 3425 - Functional Anatomy 4 sem. hrs. OR
   - BIOL 3430 - Physiology 4 sem. hrs.

   Broad Emphasis
   Students choosing this emphasis should take one 4 sem. hour course from the Animal Emphasis
   and one 4 sem. hour course from the Plant Emphasis, including any Biology Core course listed in
   either Plant or Animal emphasis that was not taken to fulfill Biology Core requirements.

II. Organismal Biology Electives (27 Sem. Hrs.)

   Choose 27 hours of upper division electives. A total of at least 120 hours is required to
   graduate with the B.S. degree.

F. Integrative Biology Track

The Integrative Biology track emphasizes the integration of physical factors, cells,
tissues, organs, and organ systems in producing functional organisms. Students choosing
this track will be preparing for careers in health care, government or academic research,
agriculture, or biology sales. This track is also a good choice for students planning to
attend graduate school because it provides a great deal of flexibility depending on the
student's interests and career goals.

I. Integrative Biology Core Courses (12 Sem. Hrs.):

   - BIOL 3410 - Cell Biology 4 sem. hrs. (Include in the Biology Core)
   - BIOL 3425 - Functional Anatomy 4 sem. hrs. (Include in the Biology Core)
   - BIOL 3430 - Physiology 4 sem. hrs.
Students must complete 8 sem. hrs. of Physics
- PHYS 1401 - General Physics I 4 sem. hrs. AND
- PHYS 1402 - General Physics II 4 sem. hrs.
OR
- PHYS 2425 - University Physics I 4 sem. hrs. AND
- PHYS 2426 - University Physics II 4 sem. hrs.

II. Integrative Biology Electives (23 Sem. Hrs.)

Choose 23 hours of upper division electives. A total of at least 120 hours is required to graduate with the B.S. degree.

V. Approved Electives

BIOL 2472 Principles of Botany, or any 3000- or 4000-level Biology course (except BIOL 3471 Padre Island Ecology and BIOL 3472 Marine Biology) can be taken for elective credit. In addition to upper-division Biology (BIOL prefix) courses, students may select courses from the list below. Note that approval of a faculty mentor is required for certain courses (BIOL 4590 Selected Topics or BIOL 4396 Directed Independent Study). Up to 4 semester hours of science electives not on this list can be taken with mentor approval.

I. List of Electives

Any upper division Biology course (BIOL 3XXX or 4XXX) may be taken as an elective. The upper division Biomedical (BIMS) courses that are listed below may be taken as electives for the BS Biology degree without seeking approval. The lower division courses listed may be taken as electives, but no more than 8 hours will be counted toward the degree, and students should be cognizant of the 45-hour minimum of upper division coursework that is required to graduate. Upper division coursework from other science disciplines (e.g., Environmental Science) may be taken with approval, but no more than 8 hours will be counted toward the degree.

- BIMS 3401 - Pathophysiology 4 sem. hrs.
- BIMS 4311 - Biology of Cancer 3 sem. hrs.
- BIMS 4323 - Neurobiology 3 sem. hrs.
- BIMS 4327 - Introduction to Toxicology 3 sem. hrs.
- BIMS 4330 - Biological Basis of Aging 3 sem. hrs.
- BIMS 4333 - Medical Entomology 3 sem. hrs.
- BIMS 4334 - Human Genetics 3 sem. hrs.
- BIMS 4335 - Endocrinology 3 sem. hrs.
- BIMS 4374 - Medical Microbiology 3 sem. hrs.
Fast Track from Bachelor's to Master's Degree

Biology, BS and Biology, MS

The university allows the opportunity for high-achieving students to count a select number of graduate credits toward their undergraduate degree and thereby obtain a graduate degree at an accelerated pace. Students interested in the Fast Track in Biology must meet the following application criteria:

- Currently seeking a BS in Biology at A&M-Corpus Christi.
- Minimum of a 3.0 GPA (with 3.4 GPA in math and science courses) in the last 60 SCH at the time of Fast Track application.
- Classified as a Senior with successful completion of at least 90 SCH, including BIOL 1406, BIOL 1407, BIOL 2371, BIOL 2416, BIOL 2421, BIOL 3428, CHEM 1411, CHEM 1212, MATH 2413, and UCCP 1101-1102 or BIOL 2200.

Students accepted into the Fast Track program will be given permission to enroll in up to six hours of prescribed graduate courses during their last semester of undergraduate studies. The hours for these graduate courses will "double-count" toward both the (120-hour) undergraduate and (36-hour) graduate programs. The BS and MS degrees will be awarded sequentially (i.e., upon completion of each degree) and not simultaneously. Students will be allowed to continue enrollment in the graduate program upon successful completion of the 120-hour undergraduate degree.

Admissions Requirements

Applicants must provide the following at the time of application:

- A completed application form. Application fees are waived for Fast Track applicants.
- Official transcripts of all college and university coursework.
- A faculty member must be willing to serve as the chair of the applicant's Graduate Advisory Committee and the applicant must include a summary of discussions
with faculty members in their essay. Students must contact potential advisors prior to and during the application process to discuss research opportunities in faculty member labs.

- An essay (not more than 1000 words) describing educational and career goals and interests as they relate to program faculty.
- Applicants who do not have a faculty member willing to serve as their committee chair at the time of the transition from BS to MS cannot remain in the program.
- Official GRE scores by the time the student is reclassified to MS.

No criterion is weighted more heavily than any other criterion. Applications received or completed after the deadline for admission during one semester may be considered for admission in the following semester at the applicant's request. Applicants will be notified of the outcome of their application by email.

Academic Preparation

A degree candidate who lacks adequate academic preparation may be required by his or her Graduate Advisory Committee to complete undergraduate course work prior to the completion of the MS degree. Such course work (4000-sequence or lower) will be regarded as foundation or prerequisite work and will not count as credit towards the total required for completion of the degree.

Fast Track Curriculum in the Senior Year

During their last semester of undergraduate studies, BS Biology students accepted into the Fast Track will take up to six hours of approved graduate courses. The hours for these graduate courses will "double-count" toward both the (120-hour) undergraduate and (36-hour) graduate programs.

See the Graduate Catalog for a complete description of the degree requirements for the MS in Biology.

Biomedical Sciences, BS

Purpose of the Biomedical Sciences Program

The Biomedical Sciences Program serves the Coastal Bend region, the state of Texas, and the nation by preparing students for biomedical career opportunities including health services, research, forensic science, genetic engineering, biotechnology, bioinformatics, product sales, and services dealing with analysis, assessment and inspection. A few biomedical careers are available to a student with a baccalaureate degree, but most will require the student to complete post-baccalaureate course work or to earn a graduate
degree. Core courses in biology and chemistry provide students with critical thinking skills in the pure sciences; specific courses allow students to further develop these skills and utilize them in solving problems. This unique combination provides students with a strong conceptual framework and also allows students to focus upon applied biomedical sciences. The two options in the Biomedical Sciences Program prepare students

- to enter post-baccalaureate or graduate programs in the health professions (e.g., medicine, dentistry, pharmacy, physician assistant, physical therapy, occupational therapy, etc.) or in related sciences.
- for careers and/or graduate training in forensic science and related areas.

Student Learning Outcomes

Students will:

- Possess a broad understanding of science and its in-depth application to their specific option within the biomedical sciences major.
- Demonstrate critical thinking skills
- Practice the oral and written communication skills necessary to share biomedical information with a range of audiences and in a variety of venues.

The Honors Program

The Honors Program (admission by application only) offers highly motivated students from any academic discipline an enriched program of study in which to develop global perspectives. Appropriate courses approved by both a student's BIMS faculty mentor and Honors advisor may count toward the BIMS degree. BIMS students wishing to participate in the Honors track may require some additional course work. For more information, consult the section entitled "Honors Program" near the front of this catalog.

Related Programs

Numerous undergraduate programs complement a major in Biomedical Sciences. In addition to the "traditional" partners (Biology, Chemistry, Physics), students should also examine courses in the Department of Computing Sciences, the Department of Mathematics and Statistics and the College of Nursing and Health Sciences. Students should also consider courses in the College of Liberal Arts (social sciences, languages, criminal justice), in the College of Business, and in the College of Education and Human Development (kinesiology). Details of these programs are available in their respective sections of this catalog.
Requirements of the Biomedical Sciences Major

The Bachelor of Science in Biomedical Sciences degree requires a minimum of 120 semester hours: 42 are from designated Core Curriculum Program courses, 17 are from biomedical sciences core courses, and 61 are from biomedical sciences option courses. Students select one of two biomedical sciences options: (A) Pre-Professional Option or (B) Forensic Science Option. A student should select an option after completion of a minimum of 35 semester hours of university course work, but before the completion of 50 semester hours. After their sophomore year (60 semester hours), students must have (and maintain) a cumulative GPA of 2.50 or above in their course work, with no course work older than 5 years. No "D" or "F" grades will be accepted as credit within the biomedical sciences core or option courses.

Grade-Point Average

A minimum cumulative grade-point average of 2.0 ("C") on a 4 point scale (4.0 = A) in all work taken and a minimum grade-point average of 2.25 in all courses in the major field of study taken at this University are required. The courses in the major field of study are defined for each major, and can be found on the pages for that major. For teacher certification, grade point average requirements are higher. Refer to "Teacher Certification Programs" in the College of Science and Engineering.

General Requirements

Sem. Hrs.

1. First-Year Seminars OR Professional Skills 2
2. Core Curriculum Program ** 42
3. Biomedical Sciences Core Courses 17
4. Biomedical Sciences Option Courses 59-61

Total 120-122

I. First Year Seminars/Professional Skills

First-Year Seminars

Full-time, first-year students are required to take these First-Year Seminar courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.
Students entering with some college credit

Students entering with some college credit may not be required to take one or both of the First-Year Seminar courses (see The First Year Learning Communities Program for rules and exceptions concerning these courses). Students in the Pre-Professional or Forensic Science options who are not required to take these First-Year Seminar courses must take BIMS 2200 Professional Skills (see below).

- BIMS 2200 - Professional Skills 2 sem. hrs. (for Biomedical Science or Forensic Science options ONLY)

Total: 2

Note:

**Three 4-hour science and mathematics courses are required for all Biomedical Sciences students: BIOL 1406, BIOL 1407, and MATH 1442). Only the 3 lecture hours of each will apply to the Core Curriculum Program. Each one-hour laboratory component will be counted in the Component Area Option of the University Core Curriculum. The 3 lecture hours of General Chemistry I (CHEM 1411) will also be counted in the Component Area Option of the University Core Curriculum, but the 1 laboratory hour will be counted as part of the Biomedical Science core.

II. University Core Curriculum

Total: 42

III. Biomedical Sciences Core Courses

- BIOL 1406 - Biology I 4 sem. hrs. Included in University Core
- BIOL 1407 - Biology II 4 sem. hrs. Included in University Core
- BIOL 2416 - Genetics 4 sem. hrs.
- BIOL 2421 - Microbiology 4 sem. hrs.
- CHEM 1411 - General Chemistry I* 4 sem. hrs. 3 Lecture hours count in Component Area Option; 1 lab hour counts as BIMS core
- CHEM 1412 - General Chemistry II 4 sem. hrs.
- CHEM 3411 - Organic Chemistry I 4 sem. hrs.

Total: 17

IV. Biomedical Sciences Options
Each multi-disciplinary option provides specific background in an area of biomedical sciences that corresponds to the student's career choice. For the baccalaureate degree, an option consists of requirements and electives totaling 59-61 semester hours of coursework.

A. Pre-Professional Option

This option is designed for students who plan to continue their education in a professional school (e.g., medicine, dentistry, veterinary medicine, pharmacy, physical therapy, occupational therapy, physician assistant, etc.) or graduate school. Students in this option must choose either Statistics for Life (MATH 1442) or Calculus I (MATH 2413) to satisfy the University Core requirement in mathematics, and they must complete the Major Field Test in Biology (BIMS 4085) during their senior year, prior to graduation.

Pre-Professional Option—Requirements:

- BIMS 4085 - Major Field Test in Biology 0 sem. hrs.
- CHEM 3412 - Organic Chemistry II 4 sem. hrs.
- MATH 1442 - Statistics for Life* 4 sem. hrs.
  The 3 lecture hours count as Math foundations in the University core. The 1 hour of lab counts in the Component Area Option

Total: 5

Pre-Professional Option—Electives

Choose 49 semester credit hours from the electives listed below:

- BIMS 2171 - Medical Terminology 1 sem. hrs.
- BIMS 3300 - Animal Nutrition 3 sem. hrs.
- BIMS 3301 - Introduction to Animal Science 3 sem. hrs.
- BIMS 3401 - Pathophysiology 4 sem. hrs.
- BIMS 3403 - Molecular Biology 4 sem. hrs.
- BIMS 4170 - Biomedical Seminar 1 sem. hrs.
- BIMS 4295 - Biomedical Practicum 2 sem. hrs.
- BIMS 4296 - Clinical Research 2 sem. hrs.
- BIMS 4299 - Directed Independent Research 1-2 sem. hrs.
- BIMS 4311 - Biology of Cancer 3 sem. hrs.
- BIMS 4323 - Neurobiology 3 sem. hrs.
- BIMS 4327 - Introduction to Toxicology 3 sem. hrs.
- BIMS 4330 - Biological Basis of Aging 3 sem. hrs.
- BIMS 4331 - Health Disparities 3 sem. hrs.
• BIMS 4333 - Medical Entomology 3 sem. hrs.
• BIMS 4334 - Human Genetics 3 sem. hrs.
• BIMS 4335 - Endocrinology^ 3 sem. hrs.
• BIMS 4374 - Medical Microbiology 3 sem. hrs.
• BIMS 4375 - Mechanisms of Microbial Pathogenesis^ 3 sem. hrs.
• BIMS 4396 - Directed Independent Study 1-3 sem. hrs.
• BIMS 4406 - Immunology 4 sem. hrs.
• BIMS 4410 - Histology 4 sem. hrs.
• BIMS 4590 - Selected Topics^ 1-5 sem. hrs. (with approval of faculty mentor)
• BIOL 3345 - Cell Physiology 3 sem. hrs.
• BIOL 3410 - Cell Biology 4 sem. hrs.
• BIOL 3425 - Functional Anatomy 4 sem. hrs.
• BIOL 3430 - Physiology 4 sem. hrs.
• BIOL 4301 - Embryology 3 sem. hrs.
• BIOL 4304 - Biology of Viruses 3 sem. hrs.
• BIOL 4340 - Genomics, Proteomics and Bioinformatics 3 sem. hrs.
• BIOL 4350 - Research and Design 3 sem. hrs.
• BIOL 4408 - Microbial Diversity and Ecology 4 sem. hrs.
• BIOL 4433 - Parasitology 4 sem. hrs.
• BIOL 4435 - Biological Microtechniques 4 sem. hrs.
• CHEM 4320 - Drugs, Toxins and Natural Products Chemistry 3 sem. hrs.
• CHEM 4401 - Biochemistry I 4 sem. hrs.
• CHEM 4402 - Biochemistry II 4 sem. hrs.
• MATH 2413 - Calculus I 4 sem. hrs. (if not counted in the university core)
• MATH 3342 - Applied Probability and Statistics^ 3 sem. hrs. (unless student has credit for MATH 1442)
• PHYS 1401 - General Physics I 4 sem. hrs.
• PHYS 1402 - General Physics II 4 sem. hrs.
• Other approved elective(s) 12 sem. hrs.

Additional Information

This option has flexible degree requirements with many electives to accommodate the different professional schools' diverse entrance requirements. In the list of electives above, however, not every course is appropriate for every student and some courses are best taken at a particular time. For example:

Students should take basic science courses such as BIMS 3403, BIMS 4406, BIOL 3425, BIOL 3430, CHEM 4401, CHEM 4402, PHYS 1401, PHYS 1402 before they attempt standardized admissions tests (usually at the end of their junior year). Most professional schools encourage applicants to have a broad background in the basic sciences, and these
courses are helpful even if they are not specifically required for admission to a particular career area.

To decide which electives to choose, students should:

- consult their faculty mentor and academic advisor who can also provide information about the "other mentor approved electives" which may include nonlisted courses in natural sciences (biology, biomedical sciences, chemistry, physics), social sciences (psychology, sociology), computer science, health sciences, criminal justice, kinesiology, or business.
- contact the appropriate school(s) to determine their specific entrance requirements.
- obtain a sample degree plan for a particular career field. These are available on the BIMS web site, from the student's faculty mentor or academic advisor, or through the Pre-professional website (http://prepro.tamucc.edu).

B. Forensic Science Option

This interdisciplinary option allows students to prepare for careers in forensic science (including entrance into graduate programs in forensic science and related areas). Prospective students should be aware that employers in forensic science typically require employees to meet personal suitability requirements (e.g., honesty, integrity, and scientific objectivity). Background checks and drug tests similar to those required for law enforcement officers are likely to be a condition of employment. Students in this option must choose Calculus I (MATH 2413) to satisfy the University Core requirement in mathematics. Elective courses allow the student to begin to specialize in an emphasis area such as forensic biology (mainly biology and biomedical sciences courses), forensic chemistry (mainly chemistry courses), or general forensic science. A student's degree plan may include a maximum of six hours of internship, research, or independent study (e.g., BIMS 4295, BIMS 4299, BIMS 4396, or BIOL 4350). Students in this option must take a standardized assessment test during their senior year, prior to graduation.

Forensic Science Option—Required Courses

- CLSC 3200 - Essentials for Applied Laboratory Sciences 2 sem. hrs.
- BIMS 3103 - Essentials Laboratory for Forensic Science 1 sem. hrs.
- BIMS 3320 - Survey of Forensic Science 3 sem. hrs.
- BIMS 3325 - Professional Practice in Forensic Science 3 sem. hrs.
- BIMS 4340 - Forensic Science in Criminal Law 3 sem. hrs.
- CHEM 3412 - Organic Chemistry II 4 sem. hrs.
- CHEM 3418 - Instrumental Analysis 4 sem. hrs.
- CRIJ 4340 - Criminal Investigation 3 sem. hrs.
• MATH 1442 - Statistics for Life*^ 4 sem. hrs. OR
• MATH 3342 - Applied Probability and Statistics*^ 3 sem. hrs.

• MATH 2413 - Calculus I 4 sem. hrs. 1 (3 hours included in University Core)

• PHYS 2425 - University Physics I 4 sem. hrs. (preferred) OR
• PHYS 1401 - General Physics I 4 sem. hrs.

• PHYS 2426 - University Physics II 4 sem. hrs. (preferred) OR
• PHYS 1402 - General Physics II 4 sem. hrs.

Total: 35-36

Forensic Science Option—Electives

Choose 18-19 semester credit hours from the electives listed below, including at least one course identified with an asterisk (*):

• BIMS 3401 - Pathophysiology 4 sem. hrs.
• BIMS 3403 - Molecular Biology 4 sem. hrs. *
• BIMS 4295 - Biomedical Practicum^ 2 sem. hrs.
• BIMS 4299 - Directed Independent Research 1-2 sem. hrs.
• BIMS 4395 - Forensic Science Internship 3 sem. hrs.
• CLSC 4325 - Clinical Chemistry I 3 sem. hrs.
• CLSC 4326 - Clinical Chemistry II 3 sem. hrs.
• BIMS 4327 - Introduction to Toxicology 3 sem. hrs.
• BIMS 4333 - Medical Entomology 3 sem. hrs.
• BIMS 4396 - Directed Independent Study 1-3 sem. hrs.
• BIMS 4406 - Immunology 4 sem. hrs.
• BIMS 4410 - Histology 4 sem. hrs.
• BIMS 4590 - Selected Topics^ 1-5 sem. hrs. (with approval of faculty mentor)
• BIOL 2472 - Principles of Botany^ 4 sem. hrs.
• BIOL 3410 - Cell Biology 4 sem. hrs. *
• BIOL 3425 - Functional Anatomy 4 sem. hrs.
• BIOL 3430 - Physiology 4 sem. hrs.
• BIOL 4340 - Genomics, Proteomics and Bioinformatics 3 sem. hrs.
• BIOL 4350 - Research and Design 3 sem. hrs.
• BIOL 4371 - Population Genetics 3 sem. hrs.
• BIOL 4433 - Parasitology 4 sem. hrs.
• BIOL 4435 - Biological Microtechniques 4 sem. hrs.
• CHEM 3417 - Quantitative Analysis 4 sem. hrs. *
• CHEM 4320 - Drugs, Toxins and Natural Products Chemistry 3 sem. hrs.
• CHEM 4401 - Biochemistry I 4 sem. hrs. *
• CHEM 4402 - Biochemistry II 4 sem. hrs.
• CHEM 4407 - Advanced Inorganic Chemistry 4 sem. hrs. *
• CHEM 4309 - Advanced Instrumental Analysis 3 sem. hrs.
• CHEM 4420 - Physical Biochemistry 4 sem. hrs.
• CHEM 4423 - Physical Chemistry I 4 sem. hrs.
• CHEM 4424 - Physical Chemistry II 4 sem. hrs.
• ENGL 3301 - Technical and Professional Writing 3 sem. hrs.
• MATH 2414 - Calculus II 4 sem. hrs. *
• Other approved elective(s) 12 sem. hrs.

Minor

Although Biomedical Sciences does not offer a minor, many upper-division BIMS courses may count toward the Biology Minor (see the Biology section of this catalog). Students majoring in Biomedical Sciences may not minor in Biology.

Clinical Laboratory Science, BS

The Bachelor of Science in CLS degree prepares students to function as clinical laboratory scientists in a wide variety of settings including hospital laboratories, clinics, research labs, physician office laboratories, public health laboratories and reference labs. The requirements the first 3 years include courses in biology, chemistry, math, social sciences, and humanities. The senior year includes advanced study in the CLS disciplines along with clinical practice in the clinical facilities.

Student Learning Outcomes

Students will:

• Possess a broad understanding of science and its in-depth applications, techniques, principles, and instruments used to their specific option within the clinical laboratory sciences major.
• Demonstrate critical thinking skills
• Practice the skills necessary to analyze and interpret test results through knowledge of physiological and pathological conditions that affect testing.

Requirements of the Clinical Laboratory Science Degree
The Bachelor of Science in Clinical Laboratory Science degree requires a minimum of 120 semester hours: 42 are from designated Core Curriculum Program courses, 17 are from clinical laboratory core courses, 8 are required Foundation courses and 51-53 are Clinical courses. After their sophomore year (60 semester hours), students must have (and maintain) a cumulative GPA of 2.70 or above in their course work, with no course work older than 6 years. No "D" or "F" grades will be accepted as credit within the clinical laboratory core or clinical courses (see Notes).

General Requirements

<table>
<thead>
<tr>
<th></th>
<th>Sem. Hrs.</th>
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<tr>
<td>First-Year Seminar OR Professional Skills (0-2)</td>
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<tr>
<td>Core Curriculum Program</td>
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<tr>
<td>Clinical Laboratory Core Courses</td>
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<td>Required Foundation Courses</td>
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<tr>
<td>Clinical Courses</td>
<td>51-53</td>
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<td><strong>Total</strong></td>
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</table>

First Year Seminar

Full-time, first-year students are required to take these First-Year Seminar courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Students entering with some college credit

Students entering with some college credit may not be required to take one or both of the First-Year Seminar courses (see The First Year Learning Communities Program for rules and exceptions concerning these courses). Clinical Laboratory Science students must take CLSC 4200 Professional Skills for Clinical Laboratory Scientists whether or not they have taken none, one or both First Year Seminars.

Total: 2

University Core Curriculum
Core Curriculum Program

Total: 42

Clinical Laboratory Science Core Courses

- BIOL 1406 - Biology I 4 sem. hrs.
- BIOL 1407 - Biology II 4 sem. hrs.
- BIOL 2416 - Genetics 4 sem. hrs.
- BIOL 2421 - Microbiology 4 sem. hrs.
- CHEM 1411 - General Chemistry I* 4 sem. hrs.
- CHEM 1412 - General Chemistry II 4 sem. hrs.
- CHEM 3411 - Organic Chemistry I 4 sem. hrs.

Total: 17

Required Foundation Courses

Although no specific courses are required, students will find familiarity with anatomy and/or physiology to be extremely beneficial.

- MATH 1442 - Statistics for Life*^ 4 sem. hrs.
  The 3 hours of lecture is included in the University Core of the Math Foundations area, and the 1 hour of lab is included in the Component Area Option.
- BIMS 4406 - Immunology 4 sem. hrs.
- CHEM 4401 - Biochemistry I 4 sem. hrs.

Total: 8

Clinical Courses

For generalist certification, students complete the 51-53 semester credit hours listed below:

- CLSC 3102 - Essentials Laboratory for Clinical Laboratory Science 1 sem. hrs.
- CLSC 3200 - Essentials for Applied Laboratory Sciences 2 sem. hrs.
- CLSC 4120 - Hemostasis 1 sem. hrs.
- CLSC 4182 - Seminar – Clinical Correlations 1 sem. hrs. *
- CLSC 4200 - Professional Skills for Clinical Laboratory Scientists 2 sem. hrs.
- CLSC 4280 - Introduction to the Clinical Laboratory Profession 2 sem. hrs. *
- CLSC 4297 - Professional Practicum I 2 sem. hrs. *
- CLSC 4325 - Clinical Chemistry I 3 sem. hrs.
- CLSC 4326 - Clinical Chemistry II 3 sem. hrs.
- CLSC 4370 - Clinical Microbiology I 3 sem. hrs.
- CLSC 4371 - Clinical Microbiology II 3 sem. hrs.
- CLSC 4382 - Advanced Medical Laboratory Procedures 3 sem. hrs. *
- CLSC 4420 - Hematology 4 sem. hrs.
- CLSC 4430 - Clinical Immunology 4 sem. hrs.
- CLSC 4598 - Professional Practicum II 5 sem. hrs. *
- CLSC 4599 - Professional Practicum III 5 sem. hrs. *

Notes:

1. Admission to courses identified with an asterisk (*) is limited to students who have a minimum GPA of 2.7, and who have a "C" or better in all prerequisite Biology, Chemistry, and Biomedical Sciences courses. Full-time students will be given preference for admission to these courses.
2. If a student earns a grade of D, F or W in a CLSC course, that course must be repeated. A course in which a grade of less than C (i.e., D, F or W-withdrawal) was earned may be repeated only once.
3. A student who has earned a grade of less than C (i.e., D, F or W-withdrawal) in two CLSC courses or who has earned a grade of less than C (D, F or W-withdrawal) twice in the same CLSC course will be dismissed from the CLSC program.
4. Students receiving a grade of D, F or W (withdrawal) or I (Incomplete) in a CLSC course may not progress to courses for which that course is a pre-requisite.
5. Following dismissal, students may apply for reinstatement to the CLSC program. Reinstatement is competitive and is based upon space availability.
6. In order for students to progress through the program, they must be in compliance with immunizations and hospital orientation regulations.

Total: 51-53

Clinical Laboratory Science Certification

The clinical laboratory scientist holds a key position in life-and-death matters involving the diagnosis and treatment of patients. Therefore, the practice of clinical laboratory science is regulated both from within the profession and, in some states, by law. In addition to the coursework for the baccalaureate degree, employment as a clinical laboratory scientist requires professional certification. A student may obtain one of three certifications in clinical laboratory science: generalist, clinical chemist, or medical microbiologist. Complete information (and an application for the certification examination in any area) may be obtained from the clinical laboratory science director.
To apply for certification, a student must earn a "C" or better in all CLSC courses; and an interview and reference letters also may be required.

Clinical Laboratory Science at Texas A&M University-Corpus Christi is approved through the National Accrediting Agency for Clinical Laboratory Science (NAACLS).

Post-Baccalaureate Certificate

Clinical Laboratory Science Certification

The Clinical Laboratory Science Certification and Post-Baccalaureate CLS Courses:

The clinical laboratory scientist holds a key position in life-and-death matters involving the diagnosis and treatment of patients. Therefore, the practice of clinical laboratory science requires professional certification that is regulated both from within the profession and, in some states, by law. Clinical Laboratory Science at Texas A&M University-Corpus Christi is approved through the National Accrediting Agency for Clinical Laboratory Science. In addition to the coursework for the baccalaureate degree, professional certification as a clinical laboratory scientist requires the completion of post-baccalaureate courses. A student who has a baccalaureate degree in Biology, Biomedical Sciences, Chemistry, or Microbiology, or who is completing the requirements for such a degree, may obtain one of three post-baccalaureate certifications in clinical laboratory science: generalist, clinical chemist, or medical microbiologist. To apply for certification in any area, a student must complete those Pre-Clinical Laboratory Science Option courses required for certification in that area. Complete information may be obtained from the clinical laboratory science program director.

To apply for clinical laboratory science certification examinations, a student must earn a "C" or better in all BIMS courses. Application for certification programs should be made directly to the clinical laboratory sciences office. An interview and reference letters may be required. Contact a clinical laboratory science faculty mentor for additional information.

Clinical Courses

- CLSC 3102 - Essentials Laboratory for Clinical Laboratory Science 1 sem. hrs.
- CLSC 3200 - Essentials for Applied Laboratory Sciences 2 sem. hrs.
- CLSC 4120 - Hemostasis 1 sem. hrs.
- CLSC 4182 - Seminar – Clinical Correlations 1 sem. hrs.
- CLSC 4200 - Professional Skills for Clinical Laboratory Scientists 2 sem. hrs.
- CLSC 4280 - Introduction to the Clinical Laboratory Profession 2 sem. hrs.
- CLSC 4297 - Professional Practicum I 2 sem. hrs.
- CLSC 4325 - Clinical Chemistry I 3 sem. hrs.
- CLSC 4326 - Clinical Chemistry II 3 sem. hrs.
- CLSC 4370 - Clinical Microbiology I 3 sem. hrs.
- CLSC 4371 - Clinical Microbiology II 3 sem. hrs.
- CLSC 4382 - Advanced Medical Laboratory Procedures 3 sem. hrs.
- CLSC 4420 - Hematology 4 sem. hrs.
- CLSC 4430 - Clinical Immunology 4 sem. hrs.
- CLSC 4598 - Professional Practicum II 5 sem. hrs.
- CLSC 4599 - Professional Practicum III 5 sem. hrs.

Total: 44

Minor

Biology Minor

The 20 hours that comprise the Biology Minor provide students from any discipline the opportunity to explore the life sciences beyond the University Core Curriculum. It is recommended that students who wish to take the Biology Minor use Biology I and Biology II to fulfill the Life and Physical Sciences requirement in the University Core Curriculum. All coursework in the Biology Minor must be from either the Biology BS program, or, with approval, the Biomedical BS program. Non-majors courses in either prefix (BIOL or BIMS) cannot be applied to the Biology Minor.

Students majoring in Biomedical Sciences MAY NOT minor in Biology.

Required Courses (11-12 hours)

- BIOL 1406 - Biology I 4 sem. hrs.
- BIOL 1407 - Biology II 4 sem. hrs.
  Choose one of the following 2000-level courses
- BIOL 2371 - Principles of Evolution 3 sem. hrs.
- BIOL 2416 - Genetics 4 sem. hrs.
- BIOL 2421 - Microbiology 4 sem. hrs.
- BIOL 2472 - Principles of Botany 4 sem. hrs.

To complete the minor, students must take 8-9 hours of upper-level electives.
A minor requires at least six hours of upper-division (3000-4000 level) courses. At least one course at the 2000-, 3000-, or 4000-level must include a laboratory component. With the exception of the courses listed below, any upper-division course with the BIOL prefix can be taken as an elective provided required prerequisites are met.

Upper division BIMS courses may be taken as electives with approval and if required prerequisites are met.

BIOL 4590 Selected Topics or BIMS 4590 Selected Topics may be taken with approval but no more than 4 hours of Selected Topics coursework can be applied to the Biology Minor.

The following courses will not count toward the Biology Minor:

- BIOL 4100 - Research Ethics and Professionalism 1 sem. hrs.
- BIOL 4299 - Directed Independent Research 1-2 sem. hrs. OR
- BIMS 4299 - Directed Independent Research 1-2 sem. hrs.
- BIOL 4350 - Research and Design 3 sem. hrs.
- BIOL 4396 - Directed Independent Study 1-3 sem. hrs. OR
- BIMS 4396 - Directed Independent Study 1-3 sem. hrs.

Total: 20 semester hours

Fast Track from Bachelor's to Master's Degree

Fast Track Biology BS to Biology MS

Biology, BS and Biology, MS

The university allows the opportunity for high-achieving students to count a select number of graduate credits toward their undergraduate degree and thereby obtain a graduate degree at an accelerated pace. Students interested in the Fast Track in Biology must meet the following application criteria:

- Currently seeking a BS in Biology at A&M-Corpus Christi.
- Minimum of a 3.0 GPA (with 3.4 GPA in math and science courses) in the last 60 SCH at the time of Fast Track application.
- Classified as a Senior with successful completion of at least 90 SCH, including BIOL 1406, BIOL 1407, BIOL 2371, BIOL 2416, BIOL 2421, BIOL 3428, CHEM 1411, CHEM 1212, MATH 2413, and UCCP 1101-1102 or BIOL 2200.

Students accepted into the Fast Track program will be given permission to enroll in up to six hours of prescribed graduate courses during their last semester of undergraduate
studies. The hours for these graduate courses will "double-count" toward both the (120-hour) undergraduate and (36-hour) graduate programs. The BS and MS degrees will be awarded sequentially (i.e., upon completion of each degree) and not simultaneously. Students will be allowed to continue enrollment in the graduate program upon successful completion of the 120-hour undergraduate degree.

Admissions Requirements

Applicants must provide the following at the time of application:

- A completed application form. Application fees are waived for Fast Track applicants.
- Official transcripts of all college and university coursework.
- A faculty member must be willing to serve as the chair of the applicant's Graduate Advisory Committee and the applicant must include a summary of discussions with faculty members in their essay. Students must contact potential advisors prior to and during the application process to discuss research opportunities in faculty member labs.
- An essay (not more than 1000 words) describing educational and career goals and interests as they relate to program faculty.
- Applicants who do not have a faculty member willing to serve as their committee chair at the time of the transition from BS to MS cannot remain in the program.
- Official GRE scores by the time the student is reclassified to MS.

No criterion is weighted more heavily than any other criterion. Applications received or completed after the deadline for admission during one semester may be considered for admission in the following semester at the applicant's request. Applicants will be notified of the outcome of their application by email.

Academic Preparation

A degree candidate who lacks adequate academic preparation may be required by his or her Graduate Advisory Committee to complete undergraduate course work prior to the completion of the MS degree. Such course work (4000-sequence or lower) will be regarded as foundation or prerequisite work and will not count as credit towards the total required for completion of the degree.

Fast Track Curriculum in the Senior Year

During their last semester of undergraduate studies, BS Biology students accepted into the Fast Track will take up to six hours of approved graduate courses. The hours for these graduate courses will "double-count" toward both the (120-hour) undergraduate and (36-hour) graduate programs.
See the Graduate Catalog for a complete description of the degree requirements for the MS in Biology.

Department of Mathematics and Statistics

Bachelor of Science

Mathematics, BS

The mission of the Mathematics Program at Texas A&M University-Corpus Christi is to increase the knowledge and use of mathematics by persons both at the University and in the surrounding area. We strive to educate students at the University so that they are prepared to use mathematics intelligently in their chosen fields of study and to understand mathematics as it affects their lives and participation in public affairs. In addition, the Mathematics Program provides its majors and graduate students with preparation for careers in education, science, and commerce, as well as providing a solid foundation for further study in mathematics. In support of the graduate program, the mathematics faculty pursues scholarship in mathematics, applications of mathematics, and instruction in mathematics. Finally, the Mathematics Program serves the community by providing its expertise to local schools, industry, and businesses.

Student Learning Outcomes

Students will:

- Demonstrate a command of principles of general mathematics at the undergraduate level.
- Recognize mathematics outside the realm of the classroom, and apply undergraduate level mathematical content as a matter of professional practice.
- Communicate mathematics effectively at the undergraduate level, in oral and written form, with appropriate use of technology.

There are three tracks for the degree: Secondary Mathematics Teaching, leading to teacher certification; Applied/Industrial Mathematics, preparing students for employment; and General Mathematical Studies; preparing students for further studies in mathematics. All options share a common core that consists of 32 hours of mathematics, physics and programming.

Placement and Prerequisites
Each new or transfer student entering Texas A&M University-Corpus Christi who plans to take a mathematics course will be evaluated by the University to determine the appropriate first mathematics course(s) for that student. For students who enter having successfully completed a college mathematics course, evaluation will normally be based on their college transcript. For a student who enters without having completed a college-level mathematics course, evaluation will normally be based on both that student's high-school transcript, and his or her score on standardized tests. For details on use of transcripts and scores for placement see the placement link on the Department webpage, http://math.tamucc.edu. Students may not enroll for their first mathematics course without having been placed into that course.

GPA in the major field of study for the BS in Mathematics is computed using those courses in the Mathematics Core, the Mathematics Track Requirements, and the Upper Level Math Electives.

The requirements for a Bachelor of Science degree in Mathematics include at least 120 semester hours with a minimum of 45 upper-division hours. The total is divided as follows:

I. The Mathematics Major

<table>
<thead>
<tr>
<th>Component</th>
<th>Sem. Hrs.</th>
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<tr>
<td>0. First Year Seminar</td>
<td>0-2</td>
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<tr>
<td>1. Core Curriculum Program</td>
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<tr>
<td>2. Mathematics Core</td>
<td>17</td>
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<td>3. Mathematics Track Electives</td>
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<td>4. Upper Math Electives</td>
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<tr>
<td>5. Minor or Career Emphasis</td>
<td>18-31</td>
</tr>
<tr>
<td>6. Electives (as needed to fulfill University graduation requirements)</td>
<td>6-19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

The following describes each of the components of the mathematics major in more detail.

0. First Year Seminars (when applicable)

Full-time, first-year students are required to take the following courses. After confirming with an advisor, others may take electives instead.

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.
1. University Core Curriculum

Mathematics major students will use the courses listed below to fulfill core requirements in the indicated areas.

The remaining 27 hours of coursework are to be selected from other Foundational Areas in the core. (see catalog section on University Core Curriculum Programs)

Life and Physical Sciences Foundational Component Area - 6 sem. hrs.

- PHYS 2425 - University Physics I (Lecture hours only. The 1 hour laboratory component applies to Component Area Option below)
- PHYS 2426 - University Physics II (Lecture hours only. The 1 hour laboratory component applies to component Area Option below.)

Mathematics Foundational Component Area - 3 sem. hrs.

- MATH 2413 - Calculus I (Lecture hours only. The 1 hour laboratory component applies to the Mathematics Core requirement.)

Component Area Option - 6 sem. hrs.

- MATH 2414 - Calculus II
- PHYS 2425 - University Physics I (Lab hour only.)
- PHYS 2426 - University Physics II (Lab hour only.)

2. Mathematics Core

The following courses are required of all mathematics majors.

- MATH 2305 - Discrete Mathematics I 3 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs. *
- MATH 2414 - Calculus II 4 sem. hrs. * †
- MATH 3311 - Linear Algebra 3 sem. hrs.
- MATH 3313 - Foundations of Number Theory 3 sem. hrs.
- MATH 2415 - Calculus III 4 sem. hrs. ♦
- COSC 1330 - Programming for Scientists, Engineers, and Mathematicians 3 sem. hrs.

Total: 17 (7 hours count in the Core Curriculum Program)

Note:
*May be waived with suitable placement; see placement section below for more details. Upper-division classes may be required to increase total upper-division hours to the university minimum. See the degree requirements section of the catalog for details.

† 3 hours of MATH 2413 - Calculus I apply to the University Core Curriculum. The 1 hour laboratory component applies to the Mathematics Core requirement.

♦ May substitute COSC 1435 Introduction to Problem Solving with Computers I or COSC 1436 Introduction to Problem Solving with Computers II

3. Mathematics Track Electives

Electives must be selected in consultation with the faculty mentor and with department chair approval.

Secondary Mathematics Teaching Track

- MATH 3312 - College Geometry 3 sem. hrs.
- MATH 3314 - Foundations of Real Numbers 3 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.
- MATH 4306 - Modern Algebra 3 sem. hrs.
- SMTE 4370 - Mathematics Education Topics I 3 sem. hrs.

Total: 18

Applied/Industrial Mathematics Track

- MATH 3314 - Foundations of Real Numbers 3 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.
- MATH 3345 - Statistical Modeling and Data Analysis 3 sem. hrs.
- COSC 3385 - Numerical Methods 3 sem. hrs.
- MATH 4301 - Introduction to Analysis 3 sem. hrs.
- MATH 4185 - Senior Mathematics Seminar 1 sem. hrs.
- MATH 4285 - Mathematics Major Capstone 2 sem. hrs.

Total: 18

General Mathematics Studies Track

- MATH 3314 - Foundations of Real Numbers 3 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.
• COSC 3385 - Numerical Methods 3 sem. hrs.
• MATH 4301 - Introduction to Analysis 3 sem. hrs.
• MATH 4306 - Modern Algebra 3 sem. hrs.
• MATH 4185 - Senior Mathematics Seminar 1 sem. hrs.
• MATH 4285 - Mathematics Major Capstone 2 sem. hrs.

Total: 18

4. Upper Math Electives

Upper elective courses are chosen to provide further depth of study in mathematics.

Secondary Mathematics Teaching and Applied/Industrial Tracks

• 6 sem. hrs. of upper-division mathematics

General Mathematics Studies Track

• 15 sem. hrs. of upper division mathematics

Total: 6 to 15

5. Minor or Career Emphasis

Students complete a major in mathematics with electives as needed. Mathematics majors must consult with a mathematics faculty mentor in choosing the electives and are advised to choose among two options. The first option is a minor, designed to provide a secondary concentration in an area of particular interest to the student, or of particular importance to his or her career plans. The second option designed for those students seeking secondary teaching certification, is a sequence of courses in Education. Details of each of these options are:

A minor consists of 18-23 specified semester hours in an approved subject. The student should consult the section of the catalog pertaining to the academic area of the minor for a description of the requirements in that discipline. If no description is provided, the minor is subject to the approval of the department containing the minor.

Twenty-seven hours of courses as specified by the College of Education and Human Development to meet SBEC requirements for certification. An additional 4 hours to complete a "Support Field" will be required. Consult the "Professional Development and Reading Sequence" of the BS in Mathematics—Grades 8-12 section of the SMTE portion of the catalog for more details.
6. Electives as needed to fulfill University graduation requirements.

Includes 2 hours of physics lab.

Total: 2-15 sem. hrs.

Teaching Certification in Mathematics

Students who wish to teach mathematics in grades 4-12 should explore the following certification options:

- Elementary Education, BS — Grades 4-8 with Mathematics Certification
- Mathematics, BS — Grades 7-12 Mathematics Education Concentration
- Mathematics, Grades 7-12 Teacher Certification Without a Mathematics Major

Fast Track from Bachelor's to Master's Degree

Mathematics, BS and Mathematics, MS

The university allows the opportunity for high-achieving students to count a select number of graduate credits toward their undergraduate degree and thereby obtain a graduate degree at an accelerated pace. Students interested in the Fast Track in Mathematics must meet the following application criteria:

- Currently seeking a BS in Mathematics at A&M-Corpus Christi.
- Minimum of a 3.25 GPA (no grades below C in math classes) in the last 60 SCH at the time of Fast Track application.
- Classified as a Senior with successful completion of at least 90 SCH, including MATH 4301 and MATH 4306.

Students accepted into the Fast Track program will be given permission to enroll in up to six hours of prescribed graduate courses during their last semester of undergraduate studies. The hours for these graduate courses will "double-count" toward both the undergraduate and graduate programs. The BS and MS degrees will be awarded sequentially (i.e., upon completion of each degree) and not simultaneously. Students will be allowed to continue enrollment in the graduate program upon successful completion of the undergraduate degree.

Admissions Requirements

Applicants must provide the following at the time of application:
• A completed application form. Application fees are waived for Fast Track applicants.
• Official transcripts of all college and university coursework.
• An essay, 300-500 words in length, should discuss the applicant's educational and professional goals, pertinent work and undergraduate experience, and other factors relating to the chosen option for graduate study.
• One or more letters of recommendation specifically addressing an applicant's ability to do graduate level study of mathematics may be submitted to strengthen an application. The letters should be submitted directly to the Department at the time of application.
• A note from a faculty member willing to serve as their graduate advisor. Applicants will not be admitted to the program without a graduate advisor.

No criterion is weighted more heavily than any other criterion. Applications received or completed after the deadline for admission during one semester may be considered for admission in the following semester at the applicant's request. Applicants will be notified of the outcome of their application by email.

Academic Preparation

Applicants are expected to enter the program with adequate academic preparation. If the graduate committee determines that an applicant's preparation is deficient, the individual will be required to complete course work to remedy these deficiencies. Such course work will be regarded as leveling work, and will not count as credit towards the total required for completion of the MS degree in mathematics.

Fast Track Curriculum in the Senior Year

BS, Mathematics students accepted in the Fast Track will substitute six semester credit hours their senior year. Students will take any two core courses applicable to the MS program Track for which they are applying.

See the Graduate Catalog for a complete description of the degree requirements for the MS in Mathematics.

Minor

Applied Mathematics Minor

Students majoring in other academic fields who wish to earn a minor in applied mathematics must complete the following courses.
Intro

Students majoring in other academic fields who wish to earn a minor in applied mathematics must complete the following courses:

Courses

- MATH 2413 - Calculus I 4 sem. hrs. *
- MATH 2414 - Calculus II 4 sem. hrs. *

Four of the following courses:
- COSC 3385 - Numerical Methods 3 sem. hrs.
- MATH 2415 - Calculus III 4 sem. hrs.
- MATH 3301 - Introduction to Complex Analysis 3 sem. hrs.
- MATH 3310 - Mathematical Analysis for Mechanical Engineering 3 sem. hrs.
- MATH 3311 - Linear Algebra 3 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.
- MATH 3342 - Applied Probability and Statistics*\(^\wedge\) 3 sem. hrs.

Waivable 3

* May be waived with suitable placement; see placement section below for more details. If needed, upper-level mathematics electives must be taken to bring the total to 19 hours.

Total: 19-21

Mathematics Minor

Students majoring in other academic fields who wish to earn a minor in mathematics must complete the following courses:

Students majoring in other academic fields who wish to earn a minor in mathematics must complete the following courses:

- MATH 2305 - Discrete Mathematics I 3 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs. *
- MATH 2414 - Calculus II 4 sem. hrs. *
- One MATH elective 3-4 sem. hrs.
- One upper division MATH elective 3 sem. hrs.
  One of:
- MATH 3313 - Foundations of Number Theory 3 sem. hrs.
- MATH 3314 - Foundations of Real Numbers 3 sem. hrs.

Note:

*May be waived with suitable placement; see placement section below for more details.

If needed, upper-level mathematics electives must be taken to bring the total to 18 hours.

Total: 19-21

Fast Track from Bachelor's to Master's Degree

Fast Track Mathematics, BS and Mathematics, MS

Mathematics, BS and Mathematics, MS

The university allows the opportunity for high-achieving students to count a select number of graduate credits toward their undergraduate degree and thereby obtain a graduate degree at an accelerated pace. Students interested in the Fast Track in Mathematics must meet the following application criteria:

- Currently seeking a BS in Mathematics at A&M-Corpus Christi.
- Minimum of a 3.25 GPA (no grades below C in math classes) in the last 60 SCH at the time of Fast Track application.
- Classified as a Senior with successful completion of at least 90 SCH, including MATH 4301 and MATH 4306.

Students accepted into the Fast Track program will be given permission to enroll in up to six hours of prescribed graduate courses during their last semester of undergraduate studies. The hours for these graduate courses will "double-count" toward both the undergraduate and graduate programs. The BS and MS degrees will be awarded sequentially (i.e., upon completion of each degree) and not simultaneously. Students will be allowed to continue enrollment in the graduate program upon successful completion of the undergraduate degree.

Admissions Requirements

Applicants must provide the following at the time of application:

- A completed application form. Application fees are waived for Fast Track applicants.
- Official transcripts of all college and university coursework.
• An essay, 300-500 words in length, should discuss the applicant's educational and professional goals, pertinent work and undergraduate experience, and other factors relating to the chosen option for graduate study.
• One or more letters of recommendation specifically addressing an applicant's ability to do graduate level study of mathematics may be submitted to strengthen an application. The letters should be submitted directly to the Department at the time of application.
• A note from a faculty member willing to serve as their graduate advisor. Applicants will not be admitted to the program without a graduate advisor.

No criterion is weighted more heavily than any other criterion. Applications received or completed after the deadline for admission during one semester may be considered for admission in the following semester at the applicant's request. Applicants will be notified of the outcome of their application by email.

Academic Preparation

Applicants are expected to enter the program with adequate academic preparation. If the graduate committee determines that an applicant's preparation is deficient, the individual will be required to complete course work to remedy these deficiencies. Such course work will be regarded as leveling work, and will not count as credit towards the total required for completion of the MS degree in mathematics.

Fast Track Curriculum in the Senior Year

BS, Mathematics students accepted in the Fast Track will substitute six semester credit hours their senior year. Students will take any two core courses applicable to the MS program Track for which they are applying.

See the Graduate Catalog for a complete description of the degree requirements for the MS in Mathematics.

Department of Physical and Environmental Sciences

Bachelor of Science

Atmospheric Sciences, BS

The Bachelor of Science program in Atmospheric Sciences addresses the needs of students interested in studying meteorology or climate science. The program provides students with an in-depth knowledge of the physical characteristics, motions and processes of air; as well as the interactions of this protective layer with the underlying
oceans and continents. The undergraduate program emphasizes a systems approach, combining traditional atmospheric sciences with emerging fields. In particular, the program focuses on the fields of tropical meteorology and oceanography that are directly linked to the Gulf of Mexico and surrounding coastal regions where the university is strategically located.

Student Learning Outcomes

Students will:

1. Possess a broad understanding of the field of atmospheric sciences in preparation for successful careers in related disciplines;
2. Gain experience and professional competence in the use of scientific method to develop and conduct atmospheric sciences related work;
3. Acquire the necessary skills to effectively communicate the meteorology and climate sciences information to a range of audiences and participate in community and/or professional service through various organizations.

Requirements of the Undergraduate Atmospheric Sciences Major

The Bachelor of Science in Atmospheric Sciences degree requires a minimum of 120 semester credit hours: 42 are from designated University Core Curriculum Program courses, 60 are from atmospheric sciences core courses and 18 are from career track courses. The atmospheric sciences core provides students with a broad background in meteorology and climate sciences, and satisfy the requirements for federal employment as a National Weather Service meteorologist (also referred to as NOAA GS1340 positions). The students can choose a career track in either general atmospheric sciences or the broadcast meteorology. Students should select a career track as soon as possible after they complete their freshman year and well before they begin their junior year.

Degree Requirements

| I. First-Year Seminars                      | (2) |
| II. Core Curriculum Program*              | 42  |
| III. Atmospheric Sciences Core Courses    | 60  |
IV. Atmospheric Sciences Career Track Courses - Electives

Total 120 (122)

I. First-Year Seminars

Full-time, first-year students are required to take these First-Year Seminar courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

II. University Core Curriculum

*The Core Curriculum includes 42 semester credit hours, within which, MATH 2413 (Calculus I), PHYS 2425 (University Physics I) and PHYS 2426 (University Physics II) are required by the ATSC program. These three 4 semester credit hours courses will result in 3 extra semester credit hours, which may be counted as part of the Component Area Option in the University Core Curriculum. The ATSC Freshmen are encouraged to take advantage of the First-Year Writing classes (COMM 1311 & ENGL 1302 ) as part of the First-year Learning Communities Program to give them opportunities to work together, get to know each other, and learn together.

Total: 42

III. Atmospheric Sciences Core Courses

Students are required to take the following core courses:

- ATSC 2403 - Introduction to Meteorology 4 sem. hrs.
- ATSC 2301 - Weather Observations 3 sem. hrs.
- ATSC 3305 - Physical Meteorology 3 sem. hrs.
- ATSC 3306 - Atmospheric Thermodynamics 3 sem. hrs.
- ATSC 3401 - Synoptic Meteorology 4 sem. hrs.
- ATSC 3402 - Mesoscale Meteorology 4 sem. hrs.
- ATSC 4301 - Dynamic Meteorology I 3 sem. hrs.
- ATSC 4305 - Remote Sensing 3 sem. hrs.
- CHEM 1411 - General Chemistry I* 4 sem. hrs.
- COSC 1330 - Programming for Scientists, Engineers, and Mathematicians 3 sem. hrs.
- ATSC 4335 - Climate and Climate Variability 3 sem. hrs.
IV. Career Tracks in Atmospheric Sciences

The atmospheric sciences program offers the general Atmospheric Sciences Track and the Broadcast Meteorologist Track. The students from both tracks will satisfy the requirements for federal employment as a National Weather Service meteorologist (also referred to as NOAA GS1340 positions). A total of 21 semester hours of electives courses are required for both career tracks.

A. Atmospheric Sciences Track

The students in the general atmospheric sciences track are required to take 21 Sem. Hrs. from the following electives.

- ESCI 1401 - Environmental Science I: Intro to Environmental Science 4 sem. hrs.
- ESCI 3351 - Oceanography 3 sem. hrs.
- GISC 1470 - Geospatial Systems I 4 sem. hrs.
- ATSC 4496 - Directed Independent Study 1-4 sem. hrs.
- ATSC 4590 - Selected Topics 1-5 sem. hrs.
- PHYS 1304 - Introduction to Astronomy: Solar System 3 sem. hrs.
- CHEM 1412 - General Chemistry II 4 sem. hrs.
- CHEM 3411 - Organic Chemistry I 4 sem. hrs.
- GEOL 4444 - Hydrogeology 4 sem. hrs.
- MATH 4315 - Partial Differential Equations 3 sem. hrs.
- GEOL 1403 - Physical Geology 4 sem. hrs.
- MATH 2305 - Discrete Mathematics I 3 sem. hrs.
- ATSC 4498 - Internship in Atmospheric Science sem. hrs.
- ATSC 4302 - Dynamic Meteorology II 3 sem. hrs.
- GISC 1301 - Physical Meteorology 3 sem. hrs.

Total: 21

B. Broadcast Meteorology Track
Those students interested in becoming broadcast meteorologists should follow the Broadcast Meteorology Track. Students in this track take COMM 1311 Foundations of Communication, ATSC 2101 Weathercasting and an additional 9 hours from the other electives listed below plus another 8 hours from the Atmospheric Sciences Track electives.

Students interested in English-only broadcasting need to take all 9 hours from the communication (COMM or MEDA) courses. Students interested in bilingual English-Spanish broadcasting must choose 3 hours from the communication (COMM or MEDA) courses, and 6 hours from the Spanish (SPAN) courses. An internship experience through ATSC 4498 is highly recommended for all broadcast meteorology students, preferably during their junior or senior years.

- ATSC 2101 - Weathercasting 1 sem. hrs.
- MEDA 2311 - Media Writing 3 sem. hrs.
- MEDA 2350 - Media Performance 3 sem. hrs.
- SPAN 2312 - Continuing Spanish 3 sem. hrs.
- SPAN 2313 - Spanish for Heritage Speakers 3 sem. hrs.
- SPAN 3302 - Spanish Composition 3 sem. hrs.
- SPAN 3303 - Spanish Conversation 3 sem. hrs.
- ATSC 4498 - Internship in Atmospheric Science sem. hrs.
- COMM 1311 - Foundation of Communication* 3 sem. hrs.

Total: 13**

**Note: additional 8 semester hours of the electives from the general Atmospheric Sciences Track will be needed to satisfy the 18 semester hours of electives requirement. Other MEDA/COMM courses may be substituted with faculty mentor approval.

Chemistry, BS

The chemistry faculty seeks to provide a high quality educational experience for students majoring in chemistry in preparation for industrial or government positions, for graduate study, and for entry to medical or dental schools. The program is also designed for those planning to teach chemistry or physics at the 7-12 level, or who need chemical knowledge and skills relevant to future studies in the sciences.

Student Learning Outcomes
Students will:

- Demonstrate a broad understanding of chemical concepts
- Analyze and interpret a variety of chemical data
- Communicate chemical information effectively at the undergraduate level, in oral and written form, with appropriate use of technology

The student who wishes to obtain a Bachelor of Science Degree in Chemistry may do so by following one of the four curriculum plans referred to as Concentrations. The options include general, environmental, biochemistry, and physical science education concentrations. Students who are pre-medical, pre-dental, pre-optometry, pre-pharmacy, or pre-veterinary medicine may follow the biochemistry concentration. In addition, the biochemistry concentration offers an option which would allow students to pursue certification in clinical chemistry while obtaining their Bachelors in Chemistry.

A prospective 7-12 physical science (chemistry or physics) teacher could obtain a BS in Chemistry while following the physical science education concentration. Details on the requirements for the physical science education concentration and for obtaining a teaching certificate are in the College of Science and Engineering: Science, Mathematics and Technology Education section of this catalog.

The BS in Chemistry requires at least 120 semester hours with a university required minimum number of 45 upper-division hours. Students may have to take additional hours to meet university general education requirements such as First-Year Seminar courses. The major consists of at least 52 semester hours (24 upper-division), some of which may be designated courses outside of chemistry. Every candidate for the BS in Chemistry following the general, environmental, or biochemistry concentration must complete the CHEM 4085 - Major Field Test in Chemistry during their senior year, prior to graduation. The details of the general, environmental, and biochemistry concentrations follow.

General Requirements

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<tr>
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<th>Sem. Hrs.</th>
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<tbody>
<tr>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>1. First-Year Seminars (when applicable)</td>
<td>42</td>
</tr>
<tr>
<td>2. Core Curriculum Program</td>
<td></td>
</tr>
<tr>
<td>3. Special Foundations</td>
<td>21</td>
</tr>
<tr>
<td>4. Chemistry Major</td>
<td>45-46*</td>
</tr>
<tr>
<td>5. Electives</td>
<td>9-10*</td>
</tr>
</tbody>
</table>
I. First Year Seminars

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

II. Core Curriculum Program

Students majoring in chemistry should take General Chemistry I and II to fulfill the Life and Physical Sciences component of the University Core Curriculum and Calculus I to fulfill the mathematics requirement of the University Core Curriculum. Additionally, the student should take Calculus II to complete the reminder of the 6 hours of the Component Area Option of the University Core Curriculum. [Note for 4 hours courses such as General Chemistry and Calculus that are taken as Foundational Component Area requirements, students may count the extra 1 credit hour of each course as part of the Component Area Option (to a maximum of three credit hours)]. See catalog section on University Core Curriculum Programs.

Total: 42

III. Special Foundations

A. General Concentration

- PHYS 2425 - University Physics I 4 sem. hrs.
- PHYS 2426 - University Physics II 4 sem. hrs.
- Biology, Geology, or Environmental Science 8 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs. *
- MATH 2414 - Calculus II 4 sem. hrs. †
- MATH 2415 - Calculus III 4 sem. hrs.

Total: 21*†

B. Environmental Concentration
Physics, one year with laboratory 8 sem. hrs.
Biology, Geology, or Environmental Science 8 sem. hrs.
MATH 1442 - Statistics for Life*^ 4 sem. hrs.
MATH 2413 - Calculus I 4 sem. hrs. *
MATH 2414 - Calculus II 4 sem. hrs. †

Total: 21*†

C. Biochemistry / Preprofessional Concentration

Physics, one year with laboratory 8 sem. hrs.
BIOL 1406 - Biology I 4 sem. hrs.
BIOL 1407 - Biology II 4 sem. hrs.
MATH 1442 - Statistics for Life*^ 4 sem. hrs.
MATH 2413 - Calculus I 4 sem. hrs. *
MATH 2414 - Calculus II 4 sem. hrs. †

Total: 21*†

Note:

* Nine of the 12 hours from General Chemistry I & II and Calculus I should be used to fulfill the University Core Curriculum Life and Physical Sciences and the Math components of the University Core Curriculum requirements. The other three hours of the lab portion of those courses should be used to fulfill three hours of the Component Area Option of the University Core Curriculum requirements.

† Calculus II should be used to fulfill the other 3 hours of the Component Area Option. See catalog section on University Core Curriculum Programs.

IV. Chemistry Major

A. Chemistry General Concentration

CHEM 1411 - General Chemistry I* 4 sem. hrs. (included in Core)
CHEM 1412 - General Chemistry II 4 sem. hrs. (included in Core)
CHEM 3411 - Organic Chemistry I 4 sem. hrs.
CHEM 3412 - Organic Chemistry II 4 sem. hrs.
CHEM 3417 - Quantitative Analysis 4 sem. hrs.
CHEM 3418 - Instrumental Analysis 4 sem. hrs.
CHEM 4085 - Major Field Test in Chemistry 0 sem. hrs.
• CHEM 4423 - Physical Chemistry I 4 sem. hrs.
• CHEM 4424 - Physical Chemistry II 4 sem. hrs.
• CHEM 4292 - Senior Chemistry Seminar 2 sem. hrs.
• CHEM 4401 - Biochemistry I 4 sem. hrs.
• CHEM 4407 - Advanced Inorganic Chemistry 4 sem. hrs.

Students should select 12 hours from the following courses:

• CHEM 4320 - Drugs, Toxins and Natural Products Chemistry 3 sem. hrs.
• CHEM 4344 - Chemical Oceanography 3 sem. hrs.
• CHEM 4350 - Polymer Chemistry 3 sem. hrs.
• CHEM 4402 - Biochemistry II 4 sem. hrs.
• CHEM 4309 - Advanced Instrumental Analysis 3 sem. hrs.
• CHEM 4443 - Environmental Chemistry 4 sem. hrs.
• CHEM 4490 - Special Topics 1-4 sem. hrs.
• CHEM 4696 - Directed Independent Study 1-6 sem. hrs.

Total: 46

B. Environmental Chemistry Concentration

• CHEM 1411 - General Chemistry I* 4 sem. hrs. (included in Core)
• CHEM 1412 - General Chemistry II 4 sem. hrs. (included in Core)
• CHEM 3411 - Organic Chemistry I 4 sem. hrs.
• CHEM 3412 - Organic Chemistry II 4 sem. hrs.
• CHEM 3417 - Quantitative Analysis 4 sem. hrs.
• CHEM 3418 - Instrumental Analysis 4 sem. hrs.
• CHEM 4085 - Major Field Test in Chemistry 0 sem. hrs.
• CHEM 4292 - Senior Chemistry Seminar 2 sem. hrs.
• CHEM 4344 - Chemical Oceanography 3 sem. hrs.
• CHEM 4423 - Physical Chemistry I 4 sem. hrs.
• CHEM 4424 - Physical Chemistry II 4 sem. hrs.
• CHEM 4443 - Environmental Chemistry 4 sem. hrs.

Students should select 12 hours from the following courses:

• CHEM 4350 - Polymer Chemistry 3 sem. hrs.
• CHEM 4407 - Advanced Inorganic Chemistry 4 sem. hrs.
• CHEM 4309 - Advanced Instrumental Analysis 3 sem. hrs.
• CHEM 4490 - Special Topics 1-4 sem. hrs.
• CHEM 4696 - Directed Independent Study 1-6 sem. hrs.
• ESCI 4301 - Environmental Regulations 3 sem. hrs.
• ESCI 4230 - Oil Spill Prevention and Response Theory 2 sem. hrs.

Total: 45

C. Biochemistry / Preprofessional Concentration

• CHEM 1411 - General Chemistry I* 4 sem. hrs. (included in Core)
• CHEM 1412 - General Chemistry II 4 sem. hrs. (included in Core)
• BIOL 2416 - Genetics 4 sem. hrs.
• BIOL 2421 - Microbiology 4 sem. hrs.
• CHEM 3411 - Organic Chemistry I 4 sem. hrs.
• CHEM 3412 - Organic Chemistry II 4 sem. hrs.
• CHEM 3417 - Quantitative Analysis 4 sem. hrs.
• CHEM 3418 - Instrumental Analysis 4 sem. hrs.
• CHEM 4085 - Major Field Test in Chemistry 0 sem. hrs.
• CHEM 4292 - Senior Chemistry Seminar 2 sem. hrs.
• CHEM 4401 - Biochemistry I 4 sem. hrs.
• CHEM 4402 - Biochemistry II 4 sem. hrs.
• CHEM 4423 - Physical Chemistry I 4 sem. hrs.

Students should select at least 7 hours from the following courses:

• MATH 2415 - Calculus III 4 sem. hrs.
• CHEM 4320 - Drugs, Toxins and Natural Products Chemistry 3 sem. hrs.
• CHEM 4350 - Polymer Chemistry 3 sem. hrs.
• CHEM 4407 - Advanced Inorganic Chemistry 4 sem. hrs.
• CHEM 4420 - Physical Biochemistry 4 sem. hrs.
• CHEM 4424 - Physical Chemistry II 4 sem. hrs.
• CHEM 4443 - Environmental Chemistry 4 sem. hrs.

Total: 45

D. Physical Science Education Concentration

Information on the physical science education concentration and requirements for teaching certification can be found in the College of Science and Engineering: Science, Mathematics and Technology Education section of the catalog.
V. Electives

Courses may be selected from any area to accumulate a total of 120 semester hours with the required number of upper-division hours. In some cases these hours may be used to obtain a minor in another subject.

Environmental Science, BS

Introduction

The mission of the Bachelor of Science program in Environmental Science is to educate students to succeed in their chosen careers, to transfer environmental knowledge to the community and to peers, and to provide an environmentally literate workforce and citizenry. The program is intended to provide the environmental science major with a broad foundation in the sciences and mathematics, as well as specialized knowledge in Marine and Coastal Resources, Earth System Science, Environmental Health and Monitoring, Policy and Regulations, and Science Education concentration areas. The environmental science curriculum prepares students for career positions in environmental science or science education, or for further professional development.

Student learning outcomes

Students will:

- Demonstrate a command of environmental science concepts and principles at the undergraduate level.
- Analyze and interpret a variety of environmental science data, and
- Communicate environmental science information effectively at the undergraduate level, in oral and written form, with appropriate use of technology.

Students who wish to obtain a Bachelor of Science degree in Environmental Science may do so by following one of five curriculum plans referred to as concentrations. The concentration options include Earth Systems Science, Marine and Coastal Resources, Environmental Health and Monitoring, Policy and Regulations, and Science Education. A prospective 4-8 level science teacher could obtain a BS in Environmental Science while following the science education concentration. Information on the BS in Environmental Science - Science Education Concentration is found in the College of Science and Engineering Science, Mathematics and Technology Education section of the catalog. Details of the requirements for obtaining a teaching certificate are provided in the College of Education and Human Development section of this catalog.
Earth Systems Science, Marine and Coastal Resources, Environmental Health and Monitoring, and Policy and Regulations Concentrations

The minimum requirement for a Bachelor of Science Degree in Environmental Science with a concentration in Earth Systems Science, Marine and Coastal Resources, Environmental Health and Monitoring, or Policy and Regulations is a total of 120 hours.

The degree requirements are divided among the following areas:

<table>
<thead>
<tr>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Core Curriculum Program</td>
</tr>
<tr>
<td>2. First-Year Seminars (when applicable)</td>
</tr>
<tr>
<td>3. Foundation Courses</td>
</tr>
<tr>
<td>4. Major Requirements</td>
</tr>
<tr>
<td>5. Concentration Area</td>
</tr>
<tr>
<td>6. Electives as needed</td>
</tr>
<tr>
<td>Total 120 (122)</td>
</tr>
</tbody>
</table>

A. University Core Curriculum

See Core Curriculum Program. It is recommended that the Science component area courses be ESCI 1401 - Environmental Science I: Intro to Environmental Science and BIOL 1406 - Biology I and the component area course be GEOL 1403 - Physical Geology. It is recommended that the mathematics course be MATH 1442 - Statistics for Life* or MATH 2413 - Calculus I, depending on concentration area. Please consult your faculty mentor or academic advisor for specific details.

If these courses are not taken in the University Core, they will still need to be completed.

Total: 42

B. First-Year Seminars
Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Total: (2)

C. Foundation Courses

No foundation courses may be taken on a pass/no pass (P/NP) basis.

- CHEM 1411 - General Chemistry I* 4 sem. hrs.
- CHEM 1412 - General Chemistry II 4 sem. hrs.
- GISC 1470 - Geospatial Systems I 4 sem. hrs.

Choose one – depends on concentration:

- PHYS 1401 - General Physics I 4 sem. hrs.
  or
- PHYS 2425 - University Physics I 4 sem. hrs.

Total: 16

D. Major Requirements

- ESCI 3202 - Professional Skills 2 sem. hrs.
- ESCI 3351 - Oceanography 3 sem. hrs.
- ESCI 3403 - Introduction to Meteorology 4 sem. hrs.
- ESCI 4335 - Climate and Climate Variability 3 sem. hrs.
- ESCI 4498 - Internship in Environmental Science 2 sem. hrs. *
- ESCI 4202 - Issues in Environmental Science 2 sem. hrs.

*The program requires a minimum of 2 hours of ESCI 4498 - Internship in Environmental Science to satisfy the Major Requirements; however additional hours of credit may be applied towards the Designated Electives in a Concentration Area, with approval of the student's faculty mentor.

Choose two (requires written approval of faculty mentor): 8

- ESCI 3443 - Environmental Biology 4 sem. hrs.
- GEOL 3443 - Environmental Geology 4 sem. hrs.
- CHEM 4443 - Environmental Chemistry 4 sem. hrs.

Total: 24
E. Concentration Area

Students must take a total of 27-31 semester hours in prescribed courses and electives to complete a concentration in Earth Systems Science, Marine and Coastal Resources, Environmental Health and Monitoring, or Policy and Regulations. Designated electives must be approved in writing by the student's faculty mentor. Students are strongly encouraged to consult their faculty mentor regularly.

1. Earth System Science Concentration

This concentration is appropriate for students preparing for careers in earth system science, meteorology, or other fields. Students preparing for graduate school are strongly encouraged to take additional hours in consultation with their faculty mentor. Additional courses in Mathematics are strongly recommended.

In addition to the courses listed below, it is recommended that students choosing this concentration take Calculus I (MATH 2413) as part of the University Core requirements and University Physics I (PHYS 2425) as part of the Foundations requirements.

Requirements - 14 hours

- MATH 2414 - Calculus II 4 sem. hrs.
- MATH 3311 - Linear Algebra 3 sem. hrs.

One of the following:

- CHEM 3411 - Organic Chemistry I 4 sem. hrs. OR
- CHEM 4423 - Physical Chemistry I 4 sem. hrs.

Designated electives - 13 hours

Additional hours selected from the following list, with written approval of a student's faculty mentor. Must include at least 7 upper-level hours.

- BIOL 3428 - Principles of Ecology 4 sem. hrs.
- ESCI 4360 - Physical Oceanography 3 sem. hrs.
- MATH 2305 - Discrete Mathematics I 3 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.
- MATH 2415 - Calculus III 4 sem. hrs.
- GEOL 3442 - Geomorphology 4 sem. hrs.
- GEOL 4316 - Marine Geoscience 3 sem. hrs.
- GEOL 4411 - Sedimentation and Stratigraphy 4 sem. hrs.
GEOL 4444 - Hydrogeology 4 sem. hrs.
GISC 3421 - Visualization for GIS 4 sem. hrs.
Approved elective 1-5 sem. hrs.

Total: 27

2. Marine and Coastal Resources Concentration

This concentration is appropriate for students planning careers in marine and coastal resources research or management. Students preparing for graduate school are strongly encouraged to take additional hours in consultation with their faculty mentor.

In addition to the courses listed below, it is recommended that students choosing this concentration take either Statistics for Life (MATH 1442) or Calculus I (MATH 2413) as part of the University Core requirements and take either Physics I (PHYS 1401) or University Physics I (PHYS 2425) as part of the Foundations requirements. MATH 2413 is strongly recommended for students anticipating graduate school or research careers; also, it is a prerequisite to some of the optional courses listed below under the concentration. If MATH 1442 is not taken, then MATH 3342 is required from the designated elective hours.

Requirements - 7 hours

- BIOL 1407 - Biology II 4 sem. hrs.
- ESCI 4301 - Environmental Regulations 3 sem. hrs.

Designated Electives - 24 hours

Additional hours selected from the following list, with written approval of a student's faculty mentor. Must include at least 18 upper-level hours.

- BIOL 2421 - Microbiology 4 sem. hrs.
- BIOL 3428 - Principles of Ecology 4 sem. hrs.
- BIOL 4405 - Limnology 4 sem. hrs.
- BIOL 4436 - Marine Ecology 4 sem. hrs.
- BIOL 4444 - Estuarine Organisms 4 sem. hrs.
- CHEM 3411 - Organic Chemistry I 4 sem. hrs.
- CHEM 3412 - Organic Chemistry II 4 sem. hrs.
- ESCI 4230 - Oil Spill Prevention and Response Theory 2 sem. hrs.
- CHEM 4344 - Chemical Oceanography 3 sem. hrs.
- CHEM 4443 - Environmental Chemistry 4 sem. hrs.
- ESCI 4360 - Physical Oceanography 3 sem. hrs.
• ESCI 4498 - Internship in Environmental Science 2 sem. hrs.
• GEOL 3442 - Geomorphology 4 sem. hrs.
• GEOL 4411 - Sedimentation and Stratigraphy 4 sem. hrs.
• GEOL 4436 - Introduction to Petroleum Geology 4 sem. hrs.
• GEOL 4444 - Hydrogeology 4 sem. hrs.
• GISC 2301 - Geospatial Systems II 3 sem. hrs.
• GISC 3421 - Visualization for GIS 4 sem. hrs.
• MATH 3342 - Applied Probability and Statistics\(^*\) 3 sem. hrs.
• PHYS 1402 - General Physics II 4 sem. hrs.
• Approved electives 1-5 sem. hrs.

Total: 31

3. Environmental Health and Monitoring Concentration

This concentration is appropriate for students planning careers in environmental health, environmental assessment and remediation, and environmental management. Students preparing for graduate school are strongly encouraged to take additional hours in consultation with their faculty mentor.

In addition to the courses listed below, it is recommended that students choosing this concentration take either Statistics for Life (MATH 1442) or Calculus I (MATH 2413) as part of the University Core requirements and take either Physics I (PHYS 1401) or University Physics I (PHYS 2425) as part of the Foundations requirements. MATH 2413 is strongly recommended for students anticipating graduate school or research careers; also, it is a prerequisite to some of the optional courses listed below under the concentration. If MATH 1442 is not taken, then MATH 3342 is required from the designated-elective hours.

Requirements - 18 hours

• BIOL 1407 - Biology II 4 sem. hrs.
• BIOL 2421 - Microbiology 4 sem. hrs.
• ESCI 4301 - Environmental Regulations 3 sem. hrs.
• ESCI 4320 - Environmental Health 3 sem. hrs.
• CHEM 3411 - Organic Chemistry I 4 sem. hrs.

Designated electives -13 hours

Additional hours selected from the following list, with written approval by a student's faculty mentor. Must include at least 11 upper-level hours.
• BIOL 3430 - Physiology 4 sem. hrs.
• BIOL 4408 - Microbial Diversity and Ecology 4 sem. hrs. OR
• ESCI 4408 - Environmental Microbiology 4 sem. hrs.

• BIOL 4406 - Immunology 4 sem. hrs. OR
• BIMS 4406 - Immunology 4 sem. hrs.

• BIOL 4433 - Parasitology 4 sem. hrs.
• BIOL 4436 - Marine Ecology 4 sem. hrs.
• BIMS 4327 - Introduction to Toxicology 3 sem. hrs.
• CHEM 3412 - Organic Chemistry II 4 sem. hrs.
• CHEM 3417 - Quantitative Analysis 4 sem. hrs.
• CHEM 3418 - Instrumental Analysis 4 sem. hrs.
• ESCI 4230 - Oil Spill Prevention and Response Theory 2 sem. hrs.
• MATH 3342 - Applied Probability and Statistics* 3 sem. hrs.
• Approved electives 1-5 sem. hrs

Total: 31

4. Policy and Regulations Concentration

This concentration is appropriate for students anticipating careers in environmental or natural resource regulation or environmental law. Students preparing for graduate school are strongly encouraged to take additional hours in consultation with their faculty mentor.

In addition to the courses listed below, it is recommended that students choosing this concentration take either Statistics for Life (MATH 1442) or Calculus I (MATH 2413) as part of the University Core requirements and take either Physics I (PHYS 1401) or University Physics I (PHYS 2425) as part of the Foundations requirements. MATH 2413 is strongly recommended for students anticipating graduate school or research careers; also, it is a prerequisite to some of the optional courses listed below under the concentration. If MATH 1442 is not taken, then MATH 3342 is required from the designated-elective hours.

Requirements - 6 hours

• ESCI 4301 - Environmental Regulations 3 sem. hrs.
• ESCI 4320 - Environmental Health 3 sem. hrs.

Designated Electives - 21 hours
Additional hours selected from the following list; with written approval by a student's faculty mentor. Must include at least 15 upper-level hours.

- BIOL 1407 - Biology II 4 sem. hrs.
- BIOL 3428 - Principles of Ecology 4 sem. hrs.
- ESCI 4230 - Oil Spill Prevention and Response Theory 2 sem. hrs.
- POLS 3313 - The Legislative Process 3 sem. hrs.
- POLS 3342 - Introduction to Public Policy 3 sem. hrs.
- Approved electives 6-9 sem. hrs.

Total: 27

Science Education Concentration

Information on the Bachelor of Science Degree in Environmental Science with a science education concentration is found in the College of Science and Engineering, Science, Mathematics and Technology Education section of the catalog.

F. Electives as needed (7-11 hours)

Fast Track from Bachelor's to Master's Degree

Environmental Science, BS and Environmental Science, MS

The university allows the opportunity for high-achieving students to count a select number of graduate credits toward their undergraduate degree and thereby obtain a graduate degree at an accelerated pace. Students interested in the Fast Track in Environmental Science must meet the following application criteria:

- Currently seeking a BS in Environmental Science at A&M-Corpus Christi.
- Minimum of a 3.0 GPA in the last 60 SCH (and a 3.0 GPA in all science and math courses) at the time of Fast Track application.
- Classified as a Senior with successful completion of at least 90 SCH, including BIOL 1406, CHEM 1411, CHEM 1412, ESCI 1401, ESCI 3202, GEOL 1403, MATH 1442 or MATH 2413, and PHYS 1401 or PHYS 2425.

Students accepted into the Fast Track program will be given permission to enroll in up to six hours of prescribed graduate courses during their last semester of undergraduate studies. The hours for these graduate courses will "double-count" toward both the undergraduate and graduate programs. The BS and MS degrees will be awarded
sequentially (i.e., upon completion of each degree) and not simultaneously. Students will be allowed to continue enrollment in the graduate program upon successful completion of the undergraduate degree.

Admissions Requirements

Applicants must provide the following at the time of application:

- A completed application form. Application fees are waived for Fast Track applicants.
- Official transcripts of all college and university coursework.
- An essay of at least 300 words describing their educational and career interests, goals, and challenges.
- Three letters of evaluation from persons knowledgeable about their potential for success in graduate studies.
- Identify a faculty member willing to serve as their graduate advisor. Applicants will not be admitted to the program without a graduate advisor.
- Official GRE scores by the time the student is reclassified to MS.

No criterion is weighted more heavily than any other criterion. Applications received or completed after the deadline for admission during one semester may be considered for admission in the following semester at the applicant's request. Applicants will be notified of the outcome of their application by email.

Academic Preparation

Students accepted to the degree program with insufficient background in science, computer science, mathematics, or communication skills will be required to take undergraduate or graduate prerequisite courses prescribed by their advisory committees. These courses may or may not apply towards the total required for the master's degree.

BS, Environmental Science students accepted in the Fast Track will have up to six hours of undergraduate elective credit replaced with six hours of graduate credit during the final semester of the senior year. A Fast Track student, in consultation with the faculty adviser, will be able to substitute six hours of undergraduate courses from BIOL, CHEM, COSC, ESCI GEOL, GISC, MATH, PHYS, or other disciplines as approved.

In place of the six hours of undergraduate courses, the student will take the following graduate courses instead:

- ESCI 5302 OR ESCI 5360 OR BLAW 5330
- An approved graduate elective.
See the Graduate Catalog for a complete description of the degree requirements for the MS in Environmental Science.

Geology, BS

The mission of the Geology Program is to provide integrated and process-oriented curricula, based on fundamental scientific principles and processes that enable graduates to pursue challenging careers and maintain lifelong learning. The Geology Program is designed to serve students majoring in geology and environmental science as well as students in other fields who are interested in adding to their knowledge of the Earth. Members of the geoscience faculty provide majors with a broad overview of geologic processes while offering the opportunity to pursue specialized knowledge in selected areas of geoscience in preparation for graduate study and careers in government, industry, or academia.

Students can earn a Bachelor of Science degree in Geology by following the degree plan for geology majors as described below. Students considering certification for 4-8 level science teaching should consult the Science, Mathematics and Technology Education (SMTE) section of this catalog.

Student learning outcomes

Students will:

- show competence in scientific inquiry, writing, and oral presentation;
- demonstrate a broad understanding of major concepts central to the geological sciences;
- demonstrate competency and be able to apply field and laboratory methods, perform data analysis, and utilize computer applications relevant to the geological sciences;
- be employable in geology-related fields, or able to continue their education in graduate programs;
- be able to evaluate and critically discuss issues related to geology that impact society.

Geology Major

The minimum requirement for a Bachelor of Science Degree in Geology is a total of 120 hours, divided among the following areas:
I. University Core Curriculum

See catalog section on the 42 SCH Core Curriculum Program. Please consult the faculty advisor for specific details.

Students majoring in Geology use the following courses to fulfill parts of the University Core Curriculum:

- MATH 2413 - Calculus I (3 SCH math, 1 SCH component area option)
- CHEM 1411 - General Chemistry I* (3 SCH life/physical science, 1 SCH component area option)
- CHEM 1412 - General Chemistry II (3 SCH life/physical science, 1 SCH component area option)
- PHYS 1401 - General Physics I or PHYS 2425 - University Physics I (3 SCH component area option, 1 SCH counts toward the Supporting courses below)

Total: 42 SCH

II. First-year Seminars (when applicable)*

*Full-time first year students are required to take UNIV-1101 and UNIV-1102.

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Total: 2 SCH

III. Supporting Courses
Supporting courses may not be taken on a pass/no pass (P/NP) basis.

- CHEM 1411 - General Chemistry I* 4 sem. hrs.
- CHEM 1412 - General Chemistry II 4 sem. hrs.
- PHYS 1401 - General Physics I 4 sem. hrs.
- PHYS 1402 - General Physics II 4 sem. hrs.
  OR
- PHYS 2425 - University Physics I 4 sem. hrs.
- PHYS 2426 - University Physics II 4 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs. ***

15 credit hours for the MATH 2413, CHEM 1411, CHEM 1412, PHYS 1401 or PHYS 2425 courses are included in the University Core Curriculum above and are not included in the total for this section. Note that PHYS - 2425/2426 are required for some tracks and PHYS 2426 requires MATH 2414 Calculus II as a prerequisite.

Total: 8 SCH

IV. Geology Core

- GEOL 1403 - Physical Geology 4 sem. hrs.
- GEOL 1404 - Historical Geology 4 sem. hrs.
- GEOL 2102 - Undergraduate Seminar in Geology-Careers in the Geosciences 1 sem. hrs.
  OR
- GEOL 2103 - Undergraduate Seminar in Geology-Research in the Geosciences 1 sem. hrs.
- GEOL 3411 - Mineralogy 4 sem. hrs.
- GEOL 3326 - Introduction to Geological Field Methods 3 sem. hrs.
- GEOL 3414 - Igneous and Metamorphic Petrology 4 sem. hrs.
- GEOL 4411 - Sedimentation and Stratigraphy 4 sem. hrs.
- GEOL 4421 - Structural Geology 4 sem. hrs.
- GEOL 4422 - Geophysics 4 sem. hrs.
- GEOL 4650 - Field Geology 6 sem. hrs.
  Choose one:
- GEOL 4444 - Hydrogeology 4 sem. hrs.
  OR
- GEOL 4416 - Introduction to Geochemistry 4 sem. hrs.

Total: 42 SCH

V. Choose one of the following tracks:
1. General Geology

The General Geology track is designed to serve students majoring in geology and environmental science as well as students in other fields who are interested in a broad overview of geologic processes. In addition, there are opportunities to pursue specialized knowledge in selected areas of geoscience in preparation for graduate study and careers in government, industry, or academia.

Designated Electives

Total: 15 SCH

- GEOL 2222 - Karst Geology and Paleoclimatology 2 sem. hrs.
- GEOL 3329 - Geology of National Parks 3 sem. hrs.
- GEOL 3441 - Invertebrate Paleontology 4 sem. hrs.
- GEOL 3442 - Geomorphology 4 sem. hrs.
- GEOL 3443 - Environmental Geology 4 sem. hrs.
- GEOL 4316 - Marine Geoscience 3 sem. hrs.
- GEOL 4321 - Introduction to Soil and Groundwater Restoration 3 sem. hrs.
- GEOL 4326 - Field Seminar in Geology 3 sem. hrs.
- GEOL 4415 - Economic Geology 4 sem. hrs.
- GEOL 4430 - Internship in Geology 1-4 sem. hrs.
- GEOL 4436 - Introduction to Petroleum Geology 4 sem. hrs.
- GEOL 4490 - Selected Topics 1-4 sem. hrs.
- GEOL 4311 - Paleoclimatology 3 sem. hrs.
  GEOL 4444 Hydrogeology if not taken in the Geology core.
  GEOL 4416 Introduction to Geochemistry if not taken in the Geology core.
In choosing electives, students must make sure they meet the University’s 45 upper-division credit hour requirement.

Approved Science Electives

Choose 13 SCH from Environmental Science, Chemistry, Geographic Information Science, Engineering, Physics, Biology, Mathematics or other appropriate area. See also the designated electives listed on the Geochemistry, Environmental Geology and Energy Resources Tracks.
Total: 28 SCH

2. Geochemistry Track

The Geochemistry track focuses on the relationships between aqueous solutions, equilibrium thermodynamics and kinetics, acid-base equilibria, redox reactions, carbon chemistry, organic compounds, biogeochemical cycles, microbial influences and geological processes. These relationships are applied to understand the complex interactions among the atmospheric, continental and marine environments. Must take GEOL 4416 Introduction to Geochemistry in Geology core courses.

Required Courses: 4 SCH
- GEOL 4416 - Introduction to Geochemistry 4 sem. hrs.
- CHEM 3418 - Instrumental Analysis 4 sem. hrs.

*4 credit hours for the GEOL 4416 Introduction to Geochemistry are included in the Geology core and are not included in the total for this selection.

Designated Electives

Total : 24 SCH

- CHEM 3411 - Organic Chemistry I 4 sem. hrs.
- CHEM 4344 - Chemical Oceanography 3 sem. hrs.
- CHEM 4401 - Biochemistry I 4 sem. hrs.
- CHEM 4407 - Advanced Inorganic Chemistry 4 sem. hrs.
- CHEM 4443 - Environmental Chemistry 4 sem. hrs.
- ESCI 3202 - Professional Skills 2 sem. hrs.
- ESCI 3351 - Oceanography 3 sem. hrs.
- GEOL 4444 - Hydrogeology 4 sem. hrs.
- CHEM 3412 - Organic Chemistry II 4 sem. hrs.
- CHEM 3417 - Quantitative Analysis 4 sem. hrs.
- CHEM 4423 - Physical Chemistry I 4 sem. hrs.
- CHEM 4490 - Special Topics 1-4 sem. hrs.
- GEOL 4430 - Internship in Geology 1-4 sem. hrs.
- GEOL 4490 - Selected Topics 1-4 sem. hrs.
- GEOL 4496 - Directed Independent Study 1-4 sem. hrs.

CHEM 4490 includes topics such as Organic Geochemistry, Aquatic Chemistry, Stable Isotope Biogeochemistry.

GEOL 4490 includes Groundwater Geochemistry.

Additional hours not listed may be approved by Faculty Mentor.

In choosing electives, students must make sure they meet the University’s 45 upper-division credit hour requirement.
3. Environmental Geology Track

The Environmental Geology track is designed to provide students with a broad training for careers in different aspects of the environmental geosciences including: water resources, water quality, and the hydrogeochemistry of natural waters. Must take GEOL 4444 Hydrogeology in the Geology core courses. Note that PHYS 2425/2426 University Physics and MATH 2414 are required for some courses part of this track.

Required courses: 4 SCH
- GEOL 3443 - Environmental Geology 4 sem. hrs.
- GEOL 4444 - Hydrogeology 4 sem. hrs.
  4 credit hours for the GEOL 4444 Hydrogeology are included in the Geology core and are not included in the total for this section.

Designated Electives

Total: 24 SCH

- GEOL 2222 - Karst Geology and Paleoclimatology 2 sem. hrs.
- GEOL 4321 - Introduction to Soil and Groundwater Restoration 3 sem. hrs.
- GEOL 4416 - Introduction to Geochemistry 4 sem. hrs.
- GEOL 4430 - Internship in Geology 1-4 sem. hrs.
- GEOL 4490 - Selected Topics 1-4 sem. hrs.
- ATSC 4305 - Remote Sensing 3 sem. hrs.
- ESCI 3351 - Oceanography 3 sem. hrs.
- ESCI 4301 - Environmental Regulations 3 sem. hrs.
- ESCI 4230 - Oil Spill Prevention and Response Theory 2 sem. hrs.
- ESCI 4335 - Climate and Climate Variability 3 sem. hrs.
- ESCI 3202 - Professional Skills 2 sem. hrs.
- GISC 1470 - Geospatial Systems I 4 sem. hrs.
- GISC 2438 - Geospatial Software Systems I 4 sem. hrs.
- GISC 3300 - Geospatial Mathematical Techniques 3 sem. hrs.
- GISC 4431 - Remote Sensing 4 sem. hrs.
  ATSC 4305 Remote Sensing has PHYS 2426 as pre-requisite.
  GISC 2438 Geospatial Software Systems I has GISC 1470 & COSC 1435 as pre-requisites.
  GISC 3300 Geospatial Mathematical Techniques has MATH 2413 and MATH 2414 as pre-requisites.
  GISC 4431 Remote Sensing has GISC 3300 as pre-requisite.
Additional hours not listed may be approved by Faculty mentor.
In choosing electives, students must make sure they meet the University’s 45 upper-division credit hour requirement.

Total: 28 SCH

4. Energy Resources Track

The Energy Resources track offers the engineering and geology background for exploration and production of hydrocarbons, gas hydrates and renewable resources such as geothermal energy. Must take PHYS 2425 University Physics I and PHYS 2426 University Physics II in Supporting courses.

Required Courses: 7-8 SCH
GEOL 4436 Introduction to Petroleum Geology or ESCI 4490 Geochemical Assessment of Subsea Engineering
- PHYS 2425 - University Physics I 4 sem. hrs.
- PHYS 2426 - University Physics II 4 sem. hrs.
- MATH 2414 - Calculus II 4 sem. hrs.

8 credit hours for the PHYS 2425 and PHYS 2426 are included in the Supporting Courses and are not included in the total for this section.

Designated Electives

Total: 20-21 SCH

- ENGR 2325 - Statics 3 sem. hrs.
- ENGR 2326 - Dynamics 3 sem. hrs.
  ENGR 2326 Dynamics has ENGR/ENTC 2325 as pre-requisite.
- ENGR 3316 - Thermodynamics 3 sem. hrs.
- GEOL 4430 - Internship in Geology 1-4 sem. hrs.
- GEOL 4490 - Selected Topics 1-4 sem. hrs.
- GEOL 4496 - Directed Independent Study 1-4 sem. hrs.

Engineering pre-requisite courses and/or additional hours not listed may be approved by Faculty Mentor.
In choosing electives, students must make sure they meet the University’s 45 upper-division credit hour requirement.

Total: 28 SCH

Optional Minor in Another Subject

Geology majors may choose to complete a minor in an approved subject. Course requirements for the minor involve at least 18 semester hours, and the content is specified
by faculty in the minor field. Minors in biology, chemistry, computer science, environmental science, geographic information science, and mathematics are generally appropriate for geology majors. Minors in other disciplines or combination minors may be arranged in consultation with the academic advisor.

Fast Track from Bachelor's to Master's Degree

Geology, BS and Environmental Science, MS

The university allows the opportunity for high-achieving students to count a select number of graduate credits toward their undergraduate degree and thereby obtain a graduate degree at an accelerated pace. Students interested in the Fast Track from Geology to Environmental Science must meet the following application criteria:

- Currently seeking a BS in Geology at A&M-Corpus Christi.
- Minimum of a 3.0 GPA in the last 60 SCH (and a 3.0 GPA in all science and math courses) at the time of Fast Track application.
- Classified as a Senior with successful completion of at least 90 SCH, including CHEM 1411, CHEM 1412, GEOL 1403, GEOL 1404, MATH 2413, PHYS 1401 or PHYS 2425, PHYS 1402 or PHYS 2426, and GEOL 3411.

Students accepted into the Fast Track program will be given permission to enroll in up to six hours of prescribed graduate courses during their last semester of undergraduate studies. The hours for these graduate courses will "double-count" toward both the undergraduate and graduate programs. The BS and MS degrees will be awarded sequentially (i.e., upon completion of each degree) and not simultaneously. Students will be allowed to continue enrollment in the graduate program upon successful completion of the undergraduate degree.

Admissions Requirements

Applicants must provide the following at the time of application:

- A completed application form. Application fees are waived for Fast Track applicants.
- Official transcripts of all college and university coursework.
- An essay of at least 300 words describing their educational and career interests, goals, and challenges.
- Three letters of evaluation from persons knowledgeable about their potential for success in graduate studies.
- Identify a faculty member willing to serve as their graduate advisor. Applicants will not be admitted to the program without a graduate advisor.
- Official GRE scores by the time the student is reclassified to MS.
No criterion is weighted more heavily than any other criterion. Applications received or completed after the deadline for admission during one semester may be considered for admission in the following semester at the applicant's request. Applicants will be notified of the outcome of their application by email.

Academic Preparation

Students accepted to the degree program with insufficient background in science, computer science, mathematics, or communication skills will be required to take undergraduate or graduate prerequisite courses prescribed by their advisory committees. These courses may or may not apply towards the total required for the master's degree.

Fast Track Curriculum in the Senior Year

BS, Geology students accepted in the Fast Track will have up to six hours of undergraduate elective credit replaced with six hours of graduate credit during the final semester of the senior year. A Fast Track student, in consultation with the faculty adviser, will be able to substitute six hours of undergraduate courses from BIOL, CHEM, COSC, ESCI, GEOL, GISC, MATH, PHYS, or other disciplines as approved.

In place of the six hours of undergraduate courses, the student will take two of the following graduate courses instead:

- ESCI 5302 OR ESCI 5360 OR BLAW 5330
- GEOL 5490
- ESCI 5330
- ESCI 5370
- ESCI 5596
- GEOL 5596
- An approved graduate elective.

See the Graduate Catalog for a complete description of the degree requirements for the MS in Environmental Science.

Physics, BS

Introduction

The Joint BS Physics degree is a Bachelor of Science degree with a Physics major, provided through the joint efforts of physics faculty both here at TAMUCC and at other schools in the Texas Physics Consortium (TPC). Interested students are encouraged to visit the TPC website at http://www.tarleton.edu/tpc/. Upper-level physics courses can
originate at any of the TPC schools, and students at any of the other TPC schools can take them via distance education.

Physics courses are also offered in support of other major study areas in the sciences, mathematics, computer science, engineering and technology, and 8-12 level physical science teaching certification.

Student Learning Outcomes

Students obtaining the Joint BS in Physics will:

- possess a broad understanding of physics.
- understand scientific methods and be able use them to develop and conduct studies of physical systems.
- communicate physical information effectively at the undergraduate level, whether the communication is in oral or written form, with or without the use of technology.

General Requirements

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<td>I. First-Year Seminars (where applicable, count as electives)</td>
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<td>II. University Core Curriculum Program</td>
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<td>V. Electives</td>
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</table>

Students must complete 45 semester hours of upper division courses (3000 level or above).

I. First Year Seminars
All full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

II. Core Curriculum Program

Students majoring in physics must take the following courses to fulfill the requirements of the University Core Curriculum. See catalog section on University Core Curriculum Programs.

Note that several required courses are starred (*) below to signify that they count at least partly toward the University Core Curriculum Program. Any other Core Curriculum Program courses taken in those categories will count as electives.

Total: 42

III. Required Non-TPC Courses

These TAMUCC courses are required as part of the Joint BS in Physics degree. They are local courses, not TPC courses. These courses may not be taken on a pass/no pass (P/NP) basis.

- MATH 2413 - Calculus I 4 sem. hrs. *
- MATH 2414 - Calculus II 4 sem. hrs. *
- PHYS 2425 - University Physics I 4 sem. hrs. *
- PHYS 2426 - University Physics II 4 sem. hrs. *
- MATH 2415 - Calculus III 4 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.
- COSC 1435 - Introduction to Problem Solving with Computers I 4 sem. hrs.

* 15 credits hours for these courses are included in the University Core Curriculum tally above, and are not included in the total in this section. They fulfill the 3 hours of mathematics, 6 hours of life and physical sciences, and the 6 hour Component Area Option. One remaining credit does count in this section.

Total: 12

IV. Required TPC Courses

These courses are offered from one of the members of the Texas Physics Consortium (possibly from TAMUCC). Any substitutions for these courses, including transfer
credits, must be approved by the Administrative Council of the Texas Physics Consortium.

- PHYS 3331 - Mechanics I^ 3 sem. hrs.
- PHYS 3334 - Modern Physics I^ 3 sem. hrs.
- PHYS 3332 - Electromagnetism^ 3 sem. hrs.
- PHYS 3333 - Thermodynamics^ 3 sem. hrs.
- PHYS 4330 - Mathematical Methods for Physicists^ 3 sem. hrs.
- PHYS 4335 - Quantum Physics^ 3 sem. hrs.
- PHYS 4337 - Nuclear Physics^ 3 sem. hrs.
- PHYS 4340 - Advanced Physics Lab^ 3 sem. hrs.
- PHYS 4161 - Physics Research Project^ 1 sem. hrs.
- PHYS 4162 - Physics Research Seminar^ 1 sem. hrs.
- PHYS 3490 - Selected Topics^ 1-4 sem. hrs. Repeated to total Credits / Units: 6

The Selected Topics course is used for the TPC Advanced Physics Elective courses, which change from year to year. Any cataloged Advanced Physics courses can also fill this role.

Total: 32

V. Electives

Electives fall into two categories:

- Support Field Electives 18 sem. hrs.
  The Support Field enables students the flexibility to tailor their degree to meet various academic and career goals, including teaching certification and interdisciplinary studies. The courses must be chosen in consultation with their physics faculty advisor. For students transferring into the Physics Major, these courses may be selected from those already taken from the student's former major.

- General Electives 16 sem. hrs.
  The General Electives can include any additional credits not categorized above. (The first-year seminar courses listed above count as general electives.)

Students must choose their electives to make sure that they have 45 sem. hrs. of upper-division courses (3000-level and above), as required by the College of Science & Engineering.

Courses that could be used as Support Field Electives could include (but are not limited to) the following:

- PHYS 3490 - Selected Topics^ 1-4 sem. hrs. †
  † If taken beyond the 6 credit hours listed above.
• MATH 3311 - Linear Algebra 3 sem. hrs.
• COSC 1436 - Introduction to Problem Solving with Computers II 4 sem. hrs.
• ENGR 3315 - Fluid Mechanics 3 sem. hrs.
• ESCI 3351 - Oceanography 3 sem. hrs.
• ESCI 4335 - Climate and Climate Variability 3 sem. hrs.
• ESCI 4360 - Physical Oceanography 3 sem. hrs.
• MEEN 3345 - Heat Transfer 3 sem. hrs.

Total: 34

Minor

Atmospheric Sciences Minor

Students from other discipline who choose the minor in atmospheric sciences must complete 10 semester hours from the following courses:

• ATSC 2403 - Introduction to Meteorology 4 sem. hrs.
• ATSC 3306 - Atmospheric Thermodynamics 3 sem. hrs.
• ATSC 4335 - Climate and Climate Variability 3 sem. hrs.

Ten additional semester hours of courses chosen from the following:

• ATSC 2301 - Weather Observations 3 sem. hrs.
• ATSC 3305 - Physical Meteorology 3 sem. hrs.
• ATSC 3401 - Synoptic Meteorology 4 sem. hrs.
• ATSC 3402 - Mesoscale Meteorology 4 sem. hrs.
• ATSC 4301 - Dynamic Meteorology I 3 sem. hrs.
• ATSC 4302 - Dynamic Meteorology II 3 sem. hrs.
• ATSC 4305 - Remote Sensing 3 sem. hrs.
• ATSC 4590 - Selected Topics 1-5 sem. hrs.
• ESCI 4340 - Severe Weather 3 sem. hrs.

Total: 20 semester hours

Students can choose either ATSC 3402 (with a lab component) or ESCI 4340 (without lab) but can't take both. Pre-approval is required by ATSC faculty for taking ATSC 4590.
Notes:

Students should consult the catalog to determine any additional prerequisites for the courses. Students must earn a 2.50 minimum cumulative grade point average on all courses attempted in the minor discipline. The selection of courses must be made in agreement with the ATSC Advisor for minor programs.

Chemistry Minor

Students majoring in other academic fields who wish to earn a minor in chemistry must complete the following requirements:

- **CHEM 1411** - General Chemistry I* 4 sem. hrs.
- **CHEM 1412** - General Chemistry II 4 sem. hrs.
- **CHEM 3411** - Organic Chemistry I 4 sem. hrs.
- **CHEM 3412** - Organic Chemistry II 4 sem. hrs.

One from the following:

- **CHEM 3417** - Quantitative Analysis 4 sem. hrs.
- **CHEM 3418** - Instrumental Analysis 4 sem. hrs.

Advanced CHEM elective 3

Total: 23

Environmental Science Minor

Students majoring in other academic fields who wish to earn a minor in environmental science must complete the following requirements:

- **ESCI 1401** - Environmental Science I: Intro to Environmental Science 4 sem. hrs.
- **ESCI 3351** - Oceanography 3 sem. hrs.
- **ESCI 3403** - Introduction to Meteorology 4 sem. hrs.
- **ESCI 4301** - Environmental Regulations 3 sem. hrs.

Two from the following:

- **CHEM 4443** - Environmental Chemistry 4 sem. hrs.
- **ESCI 3443** - Environmental Biology 4 sem. hrs.
• ESCI 4365 - Occupational Safety and Accident Prevention 3 sem. hrs.
• ESCI 4230 - Oil Spill Prevention and Response Theory 2 sem. hrs.
• ESCI 4320 - Environmental Health 3 sem. hrs.
• ESCI 4322 - Introduction to Industrial Hygiene 3 sem. hrs.
• GEOL 3443 - Environmental Geology 4 sem. hrs.

Total: 20

Note:

Students wishing to minor in environmental science should consult the appropriate section of the catalog to determine any additional prerequisites needed before they may take these courses.

Geology Minor

Students majoring in other academic fields who wish to earn a minor in geology must complete the following requirements:

• GEOL 1403 - Physical Geology 4 sem. hrs.
• GEOL 1404 - Historical Geology 4 sem. hrs.
• GEOL 3411 - Mineralogy 4 sem. hrs.
• GEOL 3443 - Environmental Geology 4 sem. hrs.
• GEOL 4421 - Structural Geology 4 sem. hrs.

Total: 20

Physics Minor

Introduction

A minor in physics is offered for students who are interested in a broad foundation in classical and modern physics. For students majoring in physical sciences, geographic information science, engineering and technology, the physics minor offers a solid foundational base in the application of fundamental physical laws in their disciplines. It provides training in computation and applied mathematics for computer science and mathematics students.
Substitutions

Students majoring in technical areas may ask the Physics faculty to support a Degree Plan Exceptions Form to list Course Substitutions in their pursuit of a physics minor. Possibilities include:

- EEEN 3310 - Electromagnetic Theory for PHYS 3332 - Electromagnetism^.
- ENGR 3316 - Thermodynamics for PHYS 3333 - Thermodynamics^.
- MATH 4315 - Partial Differential Equations for PHYS 4330 - Mathematical Methods for Physicists^.

Minor in Physics

The following courses are required for a minor in physics:

- PHYS 2425 - University Physics I 4 sem. hrs.
- PHYS 2426 - University Physics II 4 sem. hrs.

12 hours of courses selected from the following:

The upper-level physics courses are offered from one of the members of the Texas Physics Consortium (possibly from TAMUCC) via live two-way video conference.

- PHYS 3334 - Modern Physics I^ 3 sem. hrs.
- PHYS 3331 - Mechanics I^ 3 sem. hrs.
- PHYS 3332 - Electromagnetism^ 3 sem. hrs.
- PHYS 3333 - Thermodynamics^ 3 sem. hrs.
- PHYS 4330 - Mathematical Methods for Physicists^ 3 sem. hrs.
- PHYS 4335 - Quantum Physics^ 3 sem. hrs.
- PHYS 4337 - Nuclear Physics^ 3 sem. hrs.
- PHYS 4340 - Advanced Physics Lab^ 3 sem. hrs.
- PHYS 3490 - Selected Topics^ 1-4 sem. hrs.

Prerequisites

Students pursuing a minor in physics may need to take one or more of the following prerequisite courses:

- MATH 2413 - Calculus I 4 sem. hrs.
- MATH 2414 - Calculus II 4 sem. hrs.
- MATH 2415 - Calculus III 4 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.
Fast Track from Bachelor's to Master's Degree

Fast Track Environmental Science, BS and Environmental Science, MS

The university allows the opportunity for high-achieving students to count a select number of graduate credits toward their undergraduate degree and thereby obtain a graduate degree at an accelerated pace. Students interested in the Fast Track in Environmental Science must meet the following application criteria:

- Currently seeking a BS in Environmental Science at A&M-Corpus Christi.
- Minimum of a 3.0 GPA in the last 60 SCH (and a 3.0 GPA in all science and math courses) at the time of Fast Track application.
- Classified as a Senior with successful completion of at least 90 SCH, including BIOL 1406, CHEM 1411, CHEM 1412, ESCI 1401, ESCI 3202, GEOL 1403, MATH 1442 or MATH 2413, and PHYS 1401 or PHYS 2425.

Students accepted into the Fast Track program will be given permission to enroll in up to six hours of prescribed graduate courses during their last semester of undergraduate studies. The hours for these graduate courses will "double-count" toward both the undergraduate and graduate programs. The BS and MS degrees will be awarded sequentially (i.e., upon completion of each degree) and not simultaneously. Students will be allowed to continue enrollment in the graduate program upon successful completion of the undergraduate degree.

Admissions Requirements

Applicants must provide the following at the time of application:

- A completed application form. Application fees are waived for Fast Track applicants.
- Official transcripts of all college and university coursework.
- An essay of at least 300 words describing their educational and career interests, goals, and challenges.
- Three letters of evaluation from persons knowledgeable about their potential for success in graduate studies.
• Identify a faculty member willing to serve as their graduate advisor. Applicants will not be admitted to the program without a graduate advisor.
• Official GRE scores by the time the student is reclassified to MS.

No criterion is weighted more heavily than any other criterion. Applications received or completed after the deadline for admission during one semester may be considered for admission in the following semester at the applicant's request. Applicants will be notified of the outcome of their application by email.

Academic Preparation

Students accepted to the degree program with insufficient background in science, computer science, mathematics, or communication skills will be required to take undergraduate or graduate prerequisite courses prescribed by their advisory committees. These courses may or may not apply towards the total required for the master's degree.

Fast Track Curriculum in the Senior Year

BS, Environmental Science students accepted in the Fast Track will have up to six hours of undergraduate elective credit replaced with six hours of graduate credit during the final semester of the senior year. A Fast Track student, in consultation with the faculty adviser, will be able to substitute six hours of undergraduate courses from BIOL, CHEM, COSC, ESCI GEOL, GISC, MATH, PHYS, or other disciplines as approved.

In place of the six hours of undergraduate courses, the student will take the following graduate courses instead:

• ESCI 5302 OR ESCI 5360 OR BLAW 5330
  AND

• An approved graduate elective.

See the Graduate Catalog for a complete description of the degree requirements for the MS in Environmental Science.

Fast Track Geology, BS and Environmental Science, MS

Geology, BS and Environmental Science, MS

The university allows the opportunity for high-achieving students to count a select number of graduate credits toward their undergraduate degree and thereby obtain a graduate degree at an accelerated pace. Students interested in the Fast Track from Geology to Environmental Science must meet the following application criteria:
Currently seeking a BS in Geology at A&M-Corpus Christi.

Minimum of a 3.0 GPA in the last 60 SCH (and a 3.0 GPA in all science and math courses) at the time of Fast Track application.

Classified as a Senior with successful completion of at least 90 SCH, including CHEM 1411, CHEM 1412, GEOL 1403, GEOL 1404, MATH 2413, PHYS 1401 or PHYS 2425, PHYS 1402 or PHYS 2426, and GEOL 3411.

Students accepted into the Fast Track program will be given permission to enroll in up to six hours of prescribed graduate courses during their last semester of undergraduate studies. The hours for these graduate courses will "double-count" toward both the undergraduate and graduate programs. The BS and MS degrees will be awarded sequentially (i.e., upon completion of each degree) and not simultaneously. Students will be allowed to continue enrollment in the graduate program upon successful completion of the undergraduate degree.

Admissions Requirements

Applicants must provide the following at the time of application:

- A completed application form. Application fees are waived for Fast Track applicants.
- Official transcripts of all college and university coursework.
- An essay of at least 300 words describing their educational and career interests, goals, and challenges.
- Three letters of evaluation from persons knowledgeable about their potential for success in graduate studies.
- Identify a faculty member willing to serve as their graduate advisor. Applicants will not be admitted to the program without a graduate advisor.
- Official GRE scores by the time the student is reclassified to MS.

No criterion is weighted more heavily than any other criterion. Applications received or completed after the deadline for admission during one semester may be considered for admission in the following semester at the applicant's request. Applicants will be notified of the outcome of their application by email.

Academic Preparation

Students accepted to the degree program with insufficient background in science, computer science, mathematics, or communication skills will be required to take undergraduate or graduate prerequisite courses prescribed by their advisory committees. These courses may or may not apply towards the total required for the master's degree.

Fast Track Curriculum in the Senior Year
BS, Geology students accepted in the Fast Track will have up to six hours of undergraduate elective credit replaced with six hours of graduate credit during the final semester of the senior year. A Fast Track student, in consultation with the faculty adviser, will be able to substitute six hours of undergraduate courses from BIOL, CHEM, COSC, ESCI, GEOL, GISC, MATH, PHYS, or other disciplines as approved.

In place of the six hours of undergraduate courses, the student will take two of the following graduate courses instead:

- ESCI 5302 OR ESCI 5360 OR BLAW 5330
- GEOL 5490
- ESCI 5330
- ESCI 5370
- ESCI 5596
- GEOL 5596
- An approved graduate elective.

See the Graduate Catalog for a complete description of the degree requirements for the MS in Environmental Science.

Interdisciplinary Program: General Science

Interdisciplinary Program: Geography

Interdisciplinary Program: Science, Mathematics and Technology Education

Bachelor of Science

Biology, BS — Grades 7-12 Life Science Education Concentration

I. Introduction

The College of Science and Engineering is committed to the support of students seeking to become science, mathematics and technology educators at all levels. The Science, Mathematics and Technology Education (SMTE) program offers content courses for students seeking K-12 science, mathematics and technology education. SMTE classes are also an integral part of the course work for degrees preparing students for Teacher Certifications. The SMTE program does not offer a degree; rather, degrees leading to Teacher Certification are offered by other Science and Engineering programs and by the
College of Education and Human Development. Students seeking to teach in the elementary and secondary schools of Texas must meet degree requirements as well as certification requirements. The requirements and procedure to become a science, mathematics or technology teacher in Texas are outlined below. Undergraduate students who are graduating from the College of Science & Engineering or the College of Liberal Arts who are seeking initial teacher certification at the 4-8, 7-12 and EC-12 levels prior to graduation, automatically qualify for the Minor in Education.

II. How to Become a Science, Mathematics or Technology Teacher in Texas

In order to be recommended for teacher certification at this university, a candidate must fulfill three basic requirements: (1) have a bachelor's degree from an accredited college or university that includes an academic major and teacher training courses, (2) complete teacher training through an approved program, and (3) successfully complete the appropriate teacher certification tests for the subject and grade level that the candidate wishes to teach. Additional information on the requirements to become a teacher in Texas can be obtained at the State Board of Educator Certification (SBEC) website: http://www.sbec.state.tx.us/SBECOnline/certinfo/becometeacher.asp. This website also provides information on the resources available to help students pay for a teacher training program.

SBEC has approved three levels of teacher certification for regular educators: (1) Early childhood to grade 6 which includes foundation subjects and enrichment areas such as art, PE, and music, (2) Grade 4-8 which includes the foundation areas only, and (3) Grade 7-12 certification. Students can find information on the different certifications at the official Texas Examinations of Educator Standards (TExES) Web site: http://www.texas.ets.org. Texas A&M University-Corpus Christi offers several degrees leading to a number of these teacher certifications. The College of Education and Human Development offers several degrees leading to teacher certification. The College of Science and Engineering offers bachelor's degrees leading to teacher certification in the sciences, mathematics and technology at the 4-8 and the 7-12 levels:

- Biology, BS — Grades 7-12 Life Science Education Concentration (120-122 sem. hrs.) Details immediately follow below.
- Chemistry, BS — Grades 7-12 Physical Science Education Concentration (126-128 sem. hrs.)
- Environmental Science, BS — Grades 4-8 Science Education Concentration (125-130 sem. hrs.)
- Elementary Education, BS — Grades 4-8 with Mathematics Certification (College of Education and Human Development)
- Mathematics, BS — Grades 7-12 Mathematics Education Concentration (120 sem. hrs.)

Mathematics 7-12 teacher certification is also possible with an undergraduate major other than mathematics. Details can be found in the Mathematics, Grades 7-12 Teacher Certification Without a Mathematics Major section.

The individual programs, Biology, Chemistry, Environmental Science, and Mathematics offer these degrees and courses.

Students seeking Teacher Certification are also strongly urged to contact the Certification Officer in the College of Education and Human Development about current requirements and procedures that must be met to obtain the certificate. In particular, students following a degree plan leading to teacher certification must be admitted to the Teacher Education Program at Texas A&M University-Corpus Christi PRIOR to enrolling in any 4000 level EDCI or EDUC courses. Application forms for admission to the teacher education program may be obtained from the Undergraduate or Certification Office, room FC 201. The students are referred to the College of Education and Human Development section of this catalog for more information on the Teacher Education Program.

III. Grade Point Average for Admission to Teacher Education

A minimum grade point average of 2.75 (4.0 = A) in all work attempted, a minimum grade point average of 2.75 in all science, math, or specialization areas, and no grade below "C" in any science or mathematics course on a student's degree plan and/or education courses within the professional block of courses are required. (See College of Education and Human Development, "Admission to Teacher Education" and "Admission to Clinical Teaching" for other requirements.)

IV. Alteration of a Certification Plan

Any amendment to a degree plan originally filed must be approved by the student's academic advisor, the Department Chair, the Dean of the College of Science and Engineering, and the Certification Officer of the College of Education and Human Development for the degree to be granted.

Degree Requirements
The Life Science Education plan is designed for those students who desire a Bachelor of Science Degree in Biology and a secondary teaching certificate in life science. The requirements for a Bachelor of Science in Biology degree with grades 7-12 Life Science Education Concentration are a minimum of 120* semester hours. Forty-two are designated University core curriculum courses; 39 are biology teaching core courses, and 27 are professional development courses. Other requirements include a psychology course and upper division elective courses.

*Students may have to take additional hours to meet university requirements such as First-Year Seminar courses or major requirements that include 4 hour math and science courses.

Additional Educational Requirements for Certification:
Students seeking teaching certification are required to complete 9 credits of English coursework and 3 credits of Public Speaking coursework. ENGL 1302 and a literature course (ENGL 2316, 2332, or 2333) from the core curriculum will satisfy 6 of the 9 required credits. Either COMM 1311 or COMM 1315 will satisfy the public speaking course requirement.

General Requirements

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<thead>
<tr>
<th></th>
<th>Sem. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. First-Year Seminars</td>
<td>2*</td>
</tr>
<tr>
<td>B. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>C. Support Areas</td>
<td>12</td>
</tr>
<tr>
<td>D. Biology Teaching Core</td>
<td>41</td>
</tr>
<tr>
<td>E. Professional Development/Reading Sequence</td>
<td>27</td>
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<tr>
<td>Total</td>
<td>121 (123)</td>
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Details of each of these areas are described below.

A. First-Year Seminars (2 Sem. Hrs.)

Full-time, first-year students are required to take the following First-Year Seminar courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
• UNIV 1102 - First-Year Seminar II* 1 sem. hrs.
  Students entering with some college credit may not be required to take one or both of the First-Year Seminar courses (see the "First-Year Seminar" section of the Core Curriculum Program for rules and exceptions concerning these courses).

Total: 2*

*The hours associated with the First-Year Seminars do not count toward the total number of semester credit hours needed to graduate.

B. University Core Curriculum Program (42 Sem. Hrs.)

All students must take 42 sem. hrs. of coursework in the University Core Curriculum Program. Core requirements and courses are described in detail in the Core Curriculum Program section of the catalog. Life Science Education students MUST take specific courses in the University Core Curriculum to ensure that they have the proper prerequisites for more advanced coursework. These specific requirements are:

Communication (6 sem. hrs)

• COMM 1311 - Foundation of Communication* 3 sem. hrs.
• ENGL 1302 - Writing and Rhetoric* 3 sem. hrs.
  COMM 1311 Foundation of Communication meets the public speaking requirement for teacher certification; ENGL 1301 Composition I can be used to fulfill the public speaking requirement, but may not be used to fulfill other requirements in English.

Mathematics (3 sem. hrs.)

• MATH 2413 - Calculus I 4 sem. hrs.
  Students who are not eligible to enroll in MATH 2413 Calculus I will need to take additional prerequisite courses (3-9 sem. hrs.) depending on their math placement level (i.e., MATH 0300 Developmental Math, MATH 1314 College Algebra and MATH 1316 Trigonometry, or MATH 2312 Precalculus).

Life and Physical Sciences (6 sem. hrs.)

• BIOL 1406 - Biology I 4 sem. hrs.
• BIOL 1407 - Biology II 4 sem. hrs.

Language, Philosophy, and Culture (3 sem. hrs.)

Students MUST choose one literature course:

• ENGL 2316 - Literature and Culture* 3 sem. hrs.
• ENGL 2332 - Literature of the Western World: From the Classics to the Renaissance* 3 sem. hrs.
• ENGL 2333 - Literature of the Western World: From the Enlightenment to the Present* 3 sem. hrs.
Component Area Option (6 sem. hrs.)
Lab Hours (total 3 sem. hrs.) from BIOL 1406 Biology I, BIOL 1407 Biology II, and MATH 2413 Calculus

- CHEM 1411 - General Chemistry I* 4 sem. hrs.
  The 1 sem. hr. associated with the CHEM 1411 lab will be counted toward the requirements in Support Area coursework.

Total: 42

C. Support Areas (12 Sem. Hrs.)

- CHEM 1412 - General Chemistry II 4 sem. hrs.
- CHEM 3411 - Organic Chemistry I 4 sem. hrs.
- ENGL 3301 - Technical and Professional Writing 3 sem. hrs.
  CHEM 1411 - 1 sem. hr. lab
To become certified to teach, a total of 9 sem. hrs. of English are required. Six of these credit hours are taken in the University Core Curriculum Program: ENGL 1302 Writing and Rhetoric (3 sem. hrs.) and the required 3 sem. hr. literature course (ENGL 2316 Literature and Culture OR ENGL 2332 Literature of the Western World: From the Classics to the Renaissance OR ENGL 2333 Literature of the Western World: From the Enlightenment to the Present). One additional 3 sem. hr. English course (2000-level or higher) is required to meet certification requirements and this degree requires that students take ENGL 3301 Technical and Professional Writing to fulfill that requirement.

Total: 12

D. Biology Teaching Core (41 Sem. Hrs.)

- BIOL 1406 - Biology I 4 sem. hrs. (hours included in University Core)
- BIOL 1407 - Biology II 4 sem. hrs. (hours included in University Core)
- BIOL 2371 - Principles of Evolution 3 sem. hrs.
- BIOL 2401 - Anatomy and Physiology I 4 sem. hrs.
- BIOL 2416 - Genetics 4 sem. hrs.
- BIOL 2421 - Microbiology 4 sem. hrs.
- BIOL 3428 - Principles of Ecology 4 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs. (hours included in University Core)
- SMTE 4270 - Science Education Topics I^ 2 sem. hrs.
- SMTE 4217 - Secondary Approaches to the Life Sciences 2 sem. hrs.
- SMTE 4320 - Secondary Science Laboratory Techniques 3 sem. hrs.

For the Chemistry of Life/Cell Biology Requirement
Choose one of the following courses:

- BIOL 3403 - Molecular Biology 4 sem. hrs.
- BIOL 3410 - Cell Biology 4 sem. hrs.

For the Organismal (Animal) Requirement

Choose one of the following courses:

- BIOL 3413 - Invertebrate Zoology 4 sem. hrs.
- BIOL 3414 - Vertebrate Zoology 4 sem. hrs.

For the Organismal (Plant) Requirement

Choose one of the following courses:

- BIOL 2472 - Principles of Botany 4 sem. hrs.
- BIOL 4422 - Plant Taxonomy 4 sem. hrs.

Upper Division Biology Elective Requirement

Choose one of the following electives:

- BIOL 3325 - Biostatistics 3 sem. hrs.
- BIOL 4301 - Embryology 3 sem. hrs.
- BIOL 4302 - Coral Reef Conservation 3 sem. hrs.
- BIOL 4308 - Biogeography 3 sem. hrs.
- BIOL 4319 - Marine Mammals 3 sem. hrs.
- BIOL 4323 - Global Change Ecology 3 sem. hrs.
- BIOL 4328 - Fisheries 3 sem. hrs.
- BIOL 4335 - Conservation Biology 3 sem. hrs.
- BIOL 4343 - Oceans and Human Health 3 sem. hrs.
- BIOL 4370 - Mariculture 3 sem. hrs.
- BIOL 4371 - Population Genetics 3 sem. hrs.
- BIOL 4304 - Biology of Viruses 3 sem. hrs.

Other upper division Biology courses may be taken as electives with approval.

Total: 41

E. Professional Development and Reading Sequence (27 Sem. Hrs.)
Students who seek a 7-12 level Life Science teaching certificate should contact a Certification Officer in the College of Education and Human Development about requirements and procedures that must be met to obtain the certificate. The professional development sequence must be taken in a specific order and it is recommended that students contact the College of Education and Human Development early in their academic careers for specific details on these courses.

Preliminary Courses

- READ 3353 - Content Area Reading for Secondary Students\(^3\) sem. hrs.
- EDUC 3311 - School and Society\(^3\) sem. hrs.

Field-Based Semester

- EDUC 4606 - Planning, Teaching, Assessment and Technology for Grades 7-12 Teachers 6 sem. hrs.
- EDUC 4322 - Instructional Design for Special Populations: Grades 7-12\(^*\)\(^3\) sem. hrs.

Student Teaching Semester

- EDUC 4312 - Classroom Management: Grades 7-12 3 sem. hrs.
- EDUC 4993 - Student Teaching: Grades 7-12 9 sem. hrs.

Total: 27

Chemistry, BS — Grades 7-12 Physical Science Education Concentration

I. Introduction

The College of Science and Engineering is committed to the support of students seeking to become science, mathematics and technology educators at all levels. The Science, Mathematics and Technology Education (SMTE) program offers content courses for students seeking K-12 science, mathematics and technology education. SMTE classes are also an integral part of the course work for degrees preparing students for Teacher Certifications. The SMTE program does not offer a degree; rather, degrees leading to Teacher Certification are offered by other Science and Engineering programs and by the College of Education and Human Development. Students seeking to teach in the elementary and secondary schools of Texas must meet degree requirements as well as
II. How to Become a Science, Mathematics or Technology Teacher in Texas

In order to be recommended for teacher certification at this university, a candidate must fulfill three basic requirements: (1) have a bachelor's degree from an accredited college or university that includes an academic major and teacher training courses, (2) complete teacher training through an approved program, and (3) successfully complete the appropriate teacher certification tests for the subject and grade level that the candidate wishes to teach. Additional information on the requirements to become a teacher in Texas can be obtained at the State Board of Educator Certification (SBEC) website: http://www.sbec.state.tx.us/SBECOnline/certinfo/becometeacher.asp. This website also provides information on the resources available to help students pay for a teacher training program.

SBEC has approved three levels of teacher certification for regular educators: (1) Early childhood to grade 6 which includes foundation subjects and enrichment areas such as art, PE, and music, (2) Grade 4-8 which includes the foundation areas only, and (3) Grade 7-12 certification. Students can find information on the different certifications at the official Texas Examinations of Educator Standards (TExES) Web site: http://www.texas.ets.org. Texas A&M University-Corpus Christi offers several degrees leading to a number of these teacher certifications. The College of Education and Human Development offers several degrees leading to teacher certification. The College of Science and Engineering offers bachelor's degrees leading to teacher certification in the sciences, mathematics and technology at the 4-8 and the 7-12 levels:

- Biology, BS — Grades 7-12 Life Science Education Concentration (121-123 sem. hrs.)
- Chemistry, BS — Grades 7-12 Physical Science Education Concentration (126-128 sem. hrs.) Details immediately follow below.
- Environmental Science, BS — Grades 4-8 Science Education Concentration (125-130 sem. hrs.)
- Elementary Education, BS — Grades 4-8 with Mathematics Certification (College of Education)
Mathematics, BS — Grades 7-12 Mathematics Education Concentration (120 sem. hrs.)

Mathematics 7-12 teacher certification is also possible with an undergraduate major other than mathematics. Details can be found in the Mathematics, Grades 7-12 Teacher Certification Without a Mathematics Major section.

The individual programs, Biology, Chemistry, Computer Science, Environmental Science, and Mathematics offer these degrees and courses.

Students seeking Teacher Certification are also strongly urged to contact the Certification Officer in the College of Education and Human Development about current requirements and procedures that must be met to obtain the certificate. In particular, students following a degree plan leading to teacher certification must be admitted to the Teacher Education Program at Texas A&M University-Corpus Christi PRIOR to enrolling in any 4000 level EDCI or EDUC courses. Application forms for admission to the teacher education program may be obtained from the Undergraduate or Certification Office, room FC 201. The students are referred to the College of Education and Human Development section of this catalog for more information on the Teacher Education Program.

III. Grade Point Average for Admission to Teacher Education

A minimum grade point average of 2.75 (4.0 = A) in all work attempted, a minimum grade point average of 2.75 in all science, math, or specialization areas, and no grade below "C" in any science or mathematics course on a student's degree plan and/or education courses within the professional block of courses are required. (See College of Education and Human Development, "Admission to Teacher Education" and "Admission to Student Teaching" for other requirements.)

IV. Alteration of a Certification Plan

Any amendment to a degree plan originally filed must be approved by the student's academic advisor, the Department Chair, the Dean of the College of Science and Engineering, and the Certification Officer of the College of Education and Human Development for the degree to be granted.

Degree Requirements
The Bachelor of Science degree in Chemistry with a Physical Science Education concentration is designed for those planning to teach chemistry or physics at the 7-12 level, or who need chemical knowledge and skills relevant to future studies in the sciences. The BS in Chemistry requires at least 120 semester hours with a university required 45 upper-division hours. Students may have to take additional hours to meet university general education requirements such as First-Year Seminar courses. The degree requirements for the physical science education concentration are as follows:

General Requirements

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<thead>
<tr>
<th>Sem. Hrs.</th>
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<tbody>
<tr>
<td>(2)</td>
</tr>
<tr>
<td>1. First-Year Seminars (when applicable)*</td>
</tr>
<tr>
<td>2. Core Curriculum Program</td>
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<tr>
<td>3. Special Foundation Courses</td>
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<tr>
<td>4. Chemistry Major</td>
</tr>
<tr>
<td>5. Electives</td>
</tr>
<tr>
<td>6. Professional Development and Reading Sequence</td>
</tr>
</tbody>
</table>

A: *First-Year Seminars or Electives

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Students entering with some college credit may not be required to take one or both of the First-Year Seminar courses (see the "First-Year Seminar" section of the University Core Curriculum Programs for rules and exceptions regarding these courses).

Total: 2

B: University Core
Core Curriculum 42 Sem Hrs. See catalog section on University Core. Students choosing a physical science education concentration must take MATH 2413 - Calculus I, MATH 2414 - Calculus II, PHYS 2425 - University Physics I, PHYS 2426 - University Physics II, and PSYC 2301 - General Psychology* as part of their core curriculum requirements.

Total: 42 (44)

C: Special Foundations for Physical Science Education Concentration

- PHYS 2425 - University Physics I 4 sem. hrs. (3) 1**
- PHYS 2426 - University Physics II 4 sem. hrs. (3) 1**
- MATH 2413 - Calculus I 4 sem. hrs. (3) 1**
- MATH 2414 - Calculus II 4 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.

Total: 4**

Note:

**Fifteen of these hours are used to fulfill the University Core Curriculum science and mathematics requirements. The total shown does not included the 15 hours applied to the core.

D: Chemistry Major for Physical Science Education Concentration

- CHEM 1411 - General Chemistry I* 4 sem. hrs.
- CHEM 1412 - General Chemistry II 4 sem. hrs.
- CHEM 3411 - Organic Chemistry I 4 sem. hrs.
- CHEM 3412 - Organic Chemistry II 4 sem. hrs.
- CHEM 3417 - Quantitative Analysis 4 sem. hrs.
- CHEM 3418 - Instrumental Analysis 4 sem. hrs.
- CHEM 4401 - Biochemistry I 4 sem. hrs.
- CHEM 4443 - Environmental Chemistry 4 sem. hrs.
- CHEM 4423 - Physical Chemistry I 4 sem. hrs.
- PHYS 3334 - Modern Physics I^ 3 sem. hrs.
- SMTE 4217 - Secondary Approaches to the Life Sciences 2 sem. hrs.
- SMTE 4270 - Science Education Topics I^ 2 sem. hrs.
- SMTE 4320 - Secondary Science Laboratory Techniques 3 sem. hrs.

Total: 46
E: Electives

- BIOL 1406 - Biology I 4 sem. hrs.
- BIOL 1407 - Biology II 4 sem. hrs.

To become certified to teach, a total of 9 sem. hrs. of English are required. Six of these hours are taken in the University Core Curriculum Program: ENGL 1302 Writing and Rhetoric (3 sem. hrs.) and the required 3 sem. hr. literature course (ENGL 2316, ENGL 2332, or ENGL 2333 - see above). The Texas Education Agency also requires one additional 3 semester credit hour English course (2000-level or higher) to meet certification requirements.

Total: 11

F: Professional Development Sequence

Students who seek an 7-12 level Physical Science teaching certificate should contact a Certification Officer in the College of Education and Human Development about requirements and procedures that must be met to obtain the certificate. The professional development sequence must be taken in a specific order and it is recommended that students contact the College of Education and Human Development early in their academic careers for specific details on these courses.

Preliminary Courses

- READ 3353 - Content Area Reading for Secondary Students^ 3 sem. hrs.
- EDUC 3311 - School and Society^ 3 sem. hrs.

Field-Based Semester

- EDUC 4606 - Planning, Teaching, Assessment and Technology for Grades 7-12 Teachers 6 sem. hrs.
- EDUC 4322 - Instructional Design for Special Populations: Grades 7-12*^ 3 sem. hrs.

Student Teaching Semester

- EDUC 4312 - Classroom Management: Grades 7-12 3 sem. hrs.
- EDUC 4993 - Student Teaching: Grades 7-12 9 sem. hrs.

Total: 27

Elementary Education, BS — Grades 4-8 with Mathematics Certification
I. Introduction

The College of Science and Engineering is committed to the support of students seeking to become science, mathematics and technology educators at all levels. The Science, Mathematics and Technology Education (SMTE) program offers content courses for students seeking K-12 science, mathematics and technology education. SMTE classes are also an integral part of the course work for degrees preparing students for Teacher Certifications. The SMTE program does not offer a degree; rather, degrees leading to Teacher Certification are offered by other Science and Engineering programs and by the College of Education and Human Development. Students seeking to teach in the elementary and secondary schools of Texas must meet degree requirements as well as certification requirements. The requirements and procedure to become a science, mathematics or technology teacher in Texas are outlined below. Undergraduate students who are graduating from the College of Science & Engineering or the College of Liberal Arts who are seeking initial teacher certification at the 4-8, 7-12 and EC-12 levels prior to graduation, automatically qualify for the Minor in Education.

II. How to Become a Science, Mathematics or Technology Teacher in Texas

In order to be recommended for teacher certification at this university, a candidate must fulfill three basic requirements: (1) have a bachelor's degree from an accredited college or university that includes an academic major and teacher training courses, (2) complete teacher training through an approved program, and (3) successfully complete the appropriate teacher certification tests for the subject and grade level that the candidate wishes to teach. Additional information on the requirements to become a teacher in Texas can be obtained at the State Board of Educator Certification (SBEC) website: http://www.sbec.state.tx.us/SBECOnline/certinfo/becometeacher.asp. This website also provides information on the resources available to help students pay for a teacher training program.

SBEC has approved three levels of teacher certification for regular educators: (1) Early childhood to grade 6 which includes foundation subjects and enrichment areas such as art, PE, and music, (2) Grade 4-8 which includes the foundation areas only, and (3) Grade 7-12 certification. Students can find information on the different certifications at the official Texas Examinations of Educator Standards (TExES) Web site: http://www.texas.ets.org. Texas A&M University-Corpus Christi offers several degrees leading to a number of these teacher certifications. The College of Education and Human Development offers several degrees leading to teacher certification. The College of
Science and Engineering offers bachelor's degrees leading to teacher certification in the sciences, mathematics and technology at the 4-8 and the 7-12 levels:

- Biology, BS — Grades 7-12 Life Science Education Concentration (121-123 sem. hrs.)
- Chemistry, BS — Grades 7-12 Physical Science Education Concentration (126-8 sem. hrs.)
- Environmental Science, BS — Grades 4-8 Science Education Concentration (125-130 sem. hrs.)
- Elementary Education, BS — Grades 4-8 with Mathematics Certification (College of Education and Human Development) Details immediately follow below.
- Mathematics, BS — Grades 7-12 Mathematics Education Concentration (120 sem. hrs.)

Mathematics 7-12 teacher certification is also possible with an undergraduate major other than mathematics. Details can be found in the Mathematics, Grades 7-12 Teacher Certification Without a Mathematics Major section.

The individual programs, Biology, Chemistry, Environmental Science, and Mathematics offer these degrees and courses.

Students seeking Teacher Certification are also strongly urged to contact the Certification Officer in the College of Education and Human Development about current requirements and procedures that must be met to obtain the certificate. In particular, students following a degree plan leading to teacher certification must be admitted to the Teacher Education Program at Texas A&M University-Corpus Christi PRIOR to enrolling in any 4000 level EDCI or EDUC courses. Application forms for admission to the teacher education program may be obtained from the Undergraduate or Certification Office, room FC 201. The students are referred to the College of Education and Human Development section of this catalog for more information on the Teacher Education Program.

III. Grade Point Average for Admission to Teacher Education

A minimum grade point average of 2.75 (4.0 = A) in all work attempted, a minimum grade point average of 2.75 in all science, math, or specialization areas, and no grade below "C" in any science or mathematics course on a student's degree plan and/or education courses within the professional block of courses are required. (See College of Education and Human Development, "Admission to Teacher Education" and "Admission to Student Teaching" for other requirements.)
IV. Alteration of a Certification Plan

Any amendment to a degree plan originally filed must be approved by the student's academic advisor, the Department Chair, the Dean of the College of Science and Engineering, and the Certification Officer of the College of Education and Human Development for the degree to be granted.

Degree Requirements

Grades 4-8 certification in mathematics is completed with an Interdisciplinary Studies major in the College of Education and Human Development. See the College of Education and Human Development section of the catalog for more details.

Environmental Science, BS — Grades 4-8 Science Education Concentration

I. Introduction

The College of Science and Engineering is committed to the support of students seeking to become science, mathematics and technology educators at all levels. The Science, Mathematics and Technology Education (SMTE) program offers content courses for students seeking K-12 science, mathematics and technology education. SMTE classes are also an integral part of the course work for degrees preparing students for Teacher Certifications. The SMTE program does not offer a degree; rather, degrees leading to Teacher Certification are offered by other Science and Technology programs and by the College of Education and Human Development. Students seeking to teach in the elementary and secondary schools of Texas must meet degree requirements as well as certification requirements. The requirements and procedure to become a science, mathematics or technology teacher in Texas are outlined below. Undergraduate students who are graduating from the College of Science & Engineering or the College of Liberal Arts who are seeking initial teacher certification at the 4-8, 7-12 and EC-12 levels prior to graduation, automatically qualify for the Minor in Education.

II. How to Become a Science, Mathematics or Technology Teacher in Texas
In order to be recommended for teacher certification at this university, a candidate must fulfill three basic requirements: (1) have a bachelor's degree from an accredited college or university that includes an academic major and teacher training courses, (2) complete teacher training through an approved program, and (3) successfully complete the appropriate teacher certification tests for the subject and grade level that the candidate wishes to teach. Additional information on the requirements to become a teacher in Texas can be obtained at the State Board of Educator Certification (SBEC) website: http://www.sbec.state.tx.us/SBECOnline/certinfo/becometeacher.asp. This website also provides information on the resources available to help students pay for a teacher training program.

SBEC has approved three levels of teacher certification for regular educators: (1) Early childhood to grade 6 which includes foundation subjects and enrichment areas such as art, PE, and music, (2) Grade 4-8 which includes the foundation areas only, and (3) Grade 7-12 certification. Students can find information on the different certifications at the official Texas Examinations of Educator Standards (TExES) Web site: http://www.texas.ets.org. Texas A&M University-Corpus Christi offers several degrees leading to a number of these teacher certifications. The College of Education and Human Development offers several degrees leading to teacher certification. The College of Science and Engineering offers bachelor's degrees leading to teacher certification in the sciences, mathematics and technology at the 4-8 and the 7-12 levels. These bachelor's degrees are the following:

- Biology, BS — Grades 7-12 Life Science Education Concentration (121-123 sem. hrs.)
- Chemistry, BS — Grades 7-12 Physical Science Education Concentration (126-128 sem. hrs.)
- Environmental Science, BS — Grades 4-8 Science Education Concentration (120 sem. hrs.) Details immediately follow below.
- Elementary Education, BS — Grades 4-8 with Mathematics Certification (College of Education)
- Mathematics, BS — Grades 7-12 Mathematics Education Concentration (120 sem. hrs.)

Mathematics 7-12 teacher certification is also possible with an undergraduate major other than mathematics. Details can be found in the Mathematics, Grades 7-12 Teacher Certification Without a Mathematics Major section.

The individual programs, Biology, Chemistry, Environmental Science, and Mathematics offer these degrees and courses.

Students seeking Teacher Certification are also strongly urged to contact the Certification Officer in the College of Education and Human Development about current requirements.
and procedures that must be met to obtain the certificate. In particular, students following a degree plan leading to teacher certification must be admitted to the Teacher Education Program at Texas A&M University-Corpus Christi PRIOR to enrolling in any 4000 level EDCI or EDUC courses. Application forms for admission to the teacher education program may be obtained from the Undergraduate or Certification Office, room FC 201. The students are referred to the College of Education and Human Development section of this catalog for more information on the Teacher Education Program.

III. Grade Point Average for Admission to Teacher Education

A minimum grade point average of 2.75 (4.0 = A) in all work attempted, a minimum grade point average of 2.75 in all science, math, or specialization areas, and no grade below "C" in any science or mathematics course on a student's degree plan and/or education courses within the professional block of courses are required. (See College of Education and Human Development, "Admission to Teacher Education" and "Admission to Student Teaching" for other requirements.)

IV. Alteration of a Certification Plan

Any amendment to a degree plan originally filed must be approved by the student's academic advisor, the Department Chair, the Dean of the College of Science and Engineering, and the Certification Officer of the College of Education and Human Development for the degree to be granted.

Degree Requirements

The minimum requirement for a Bachelor of Science Degree in Environmental Science with a science education concentration is a total of 120 hours. The concentration is designed for those students who plan on obtaining a 4-8 Science certificate. The degree requirements are divided among the following areas:

General Requirements

Sem. Hrs.

1. Core Curriculum Program
2. First Year Seminar (when applicable)
3. Science Content Courses 42
   (2)
4. Mathematics Courses 38 (11)
5. Professional Development and Reading Sequence 3
   3
6. Electives as Required 7
   Total 120

Details of each of these areas are described below.

A. Core Curriculum Program 42 Sem. Hrs.

University Core and First-Year Seminars

See catalog section on University Core. Students choosing a science education concentration must take Statistics for Life (MATH 1442), Biology I (BIOL 1406), General Chemistry I with lab (CHEM 1411), Environmental Science I: Intro to Environmental Science (ESCI 1401) and General Psychology (PSYC 2301). Some of these courses are included in the Foundations requirements; in such cases the semester hours are indicated in parenthesis for the course.

B. First-Year Seminars (when applicable)

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

C. Science Content Courses

- PHYS 1304 - Introduction to Astronomy: Solar System 3 sem. hrs.
- BIOL 1406 - Biology I 4 sem. hrs. *
- BIOL 1407 - Biology II 4 sem. hrs.
- CHEM 1411 - General Chemistry I* 4 sem. hrs. *
- ESCI 1401 - Environmental Science I: Intro to Environmental Science 4 sem. hrs. *
- ESCI 4202 - Issues in Environmental Science 2 sem. hrs.
- GEOL 1403 - Physical Geology 4 sem. hrs.
- GEOL 1404 - Historical Geology 4 sem. hrs.
- PHYS 1401 - General Physics I 4 sem. hrs.
• SMTE 4217 - Secondary Approaches to the Life Sciences 2 sem. hrs.
• SMTE 4270 - Science Education Topics I^ 2 sem. hrs.
• SMTE 4320 - Secondary Science Laboratory Techniques 3 sem. hrs.
• Either  ESCI 3351 - Oceanography 3 sem. hrs.
• Or  ESCI 3403 - Introduction to Meteorology 4 sem. hrs.

Choose one of the following:

• SMTE 3315 - Foundational Approaches to the Physical Sciences 3 sem. hrs.
• PHYS 1402 - General Physics II 4 sem. hrs.

Choose one of the following:

• ESCI 3443 - Environmental Biology 4 sem. hrs.
• CHEM 4443 - Environmental Chemistry 4 sem. hrs.
• ESCI 3351 - Oceanography 3 sem. hrs.
• ESCI 3403 - Introduction to Meteorology 4 sem. hrs.
• ESCI 4230 - Oil Spill Prevention and Response Theory 2 sem. hrs.
• ESCI 4335 - Climate and Climate Variability 3 sem. hrs.
• ESCI 4360 - Physical Oceanography 3 sem. hrs.
• GEOL 3443 - Environmental Geology 4 sem. hrs.

Total: 38 (11 hours counting in University Core)

Note:

*Only BIOL 1406 (4 hours), CHEM 1411 (4 hours) and ESCI 1401 (3 hours) are counted in the University Core. The 1-hour laboratory component of ESCI 1401 will be counted in the major requirements rather than the University Core.

D. Mathematics Courses

• MATH 1442 - Statistics for Life*^ 4 sem. hrs. *

Choose one of the following:

• MATH 1316 - Trigonometry 3 sem. hrs.
• MATH 2312 - Precalculus 3 sem. hrs.
• MATH 2413 - Calculus I 4 sem. hrs.

Total: 3
E. Professional Development Sequence

Students who seek a 4-8 level Science teaching certificate should contact a Certification Officer in the College of Education and Human Development about requirements and procedures that must be met to obtain the certificate. The professional development sequence must be taken in a specific order and it is recommended that students contact the College of Education and Human Development early in their academic careers for specific details on these courses.

Preliminary Courses

- EDUC 3311 - School and Society^ 3 sem. hrs.
- READ 3320 - Principles and Practices of Reading Instruction 3 sem. hrs.
- READ 3351 - Diagnosis and Correction of Reading Problems 3 sem. hrs.

Field-Based Semester

- EDUC 4607 - Planning, Teaching, Assessment and Technology for Grades 4-8 Teachers 6 sem. hrs.
- EDUC 4323 - Instructional Design for Special Populations: Grades 4-8^ 3 sem. hrs.

Student Teaching Semester

- EDUC 4992 - Student Teaching: Grades 4-8 9 sem. hrs.
- EDUC 4313 - Classroom Management: Grades 4-8 3 sem. hrs.

Total: 30

F. Electives as Required

Electives as needed to fulfill university graduation requirements.

Total: 7

Mathematics, BS — Grades 7-12 Mathematics Education Concentration
I. Introduction

The College of Science and Engineering is committed to the support of students seeking to become science, mathematics and technology educators at all levels. The Science, Mathematics and Technology Education (SMTE) program offers content courses for students seeking K-12 science, mathematics and technology education. SMTE classes are also an integral part of the course work for degrees preparing students for Teacher Certifications. The SMTE program does not offer a degree; rather, degrees leading to Teacher Certification are offered by other Science and Technology programs and by the College of Education and Human Development. Students seeking to teach in the elementary and secondary schools of Texas must meet degree requirements as well as certification requirements. The requirements and procedure to become a science, mathematics or technology teacher in Texas are outlined below. Undergraduate students who are graduating from the College of Science & Engineering or the College of Liberal Arts who are seeking initial teacher certification at the 4-8, 7-12 and EC-12 levels prior to graduation, automatically qualify for the Minor in Education.

II. How to Become a Science, Mathematics or Technology Teacher in Texas

In order to be recommended for teacher certification at this university, a candidate must fulfill three basic requirements: (1) have a bachelor's degree from an accredited college or university that includes an academic major and teacher training courses, (2) complete teacher training through an approved program, and (3) successfully complete the appropriate teacher certification tests for the subject and grade level that the candidate wishes to teach. Additional information on the requirements to become a teacher in Texas can be obtained at the State Board of Educator Certification (SBEC) website: http://www.sbec.state.tx.us/SBECOnline/certinfo/becometeacher.asp. This website also provides information on the resources available to help students pay for a teacher training program.

SBEC has approved three levels of teacher certification for regular educators: (1) Early childhood to grade 6 which includes foundation subjects and enrichment areas such as art, PE, and music, (2) Grade 4-8 which includes the foundation areas only, and (3) Grade 8-12 certification. Students can find information on the different certifications at the official Texas Examinations of Educator Standards (TExES) Web site: http://www.texas.ets.org. Texas A&M University-Corpus Christi offers several degrees leading to a number of these teacher certifications. The College of Education and Human Development offers several degrees leading to teacher certification. The College of
Science and Engineering offers bachelor's degrees leading to teacher certification in the sciences, mathematics and technology at the 4-8 and the 8-12 levels:

- Biology, BS — Grades 7-12 Life Science Education Concentration (121-123 sem. hrs.)
- Chemistry, BS — Grades 7-12 Physical Science Education Concentration (126-8 sem. hrs.)
- Environmental Science, BS — Grades 4-8 Science Education Concentration (125-130 sem. hrs.)
- Elementary Education, BS — Grades 4-8 with Mathematics Certification (College of Education and Human Development)
- Mathematics, BS — Grades 7-12 Mathematics Education Concentration (120 sem. hrs.) Details immediately follow below.

Mathematics 7-12 teacher certification is also possible with an undergraduate major other than mathematics. Details can be found in the Mathematics, Grades 7-12 Teacher Certification Without a Mathematics Major section.

The individual programs, Biology, Chemistry, Environmental Science, and Mathematics offer these degrees and courses.

Students seeking Teacher Certification are also strongly urged to contact the Certification Officer in the College of Education and Human Development about current requirements and procedures that must be met to obtain the certificate. In particular, students following a degree plan leading to teacher certification must be admitted to the Teacher Education Program at Texas A&M University-Corpus Christi PRIOR to enrolling in any 4000 level EDCI or EDUC courses. Application forms for admission to the teacher education program may be obtained from the Undergraduate or Certification Office, room FC 201. The students are referred to the College of Education and Human Development section of this catalog for more information on the Teacher Education Program.

III. Grade Point Average for Admission to Teacher Education

A minimum grade point average of 2.75 (4.0 = A) in all work attempted, a minimum grade point average of 2.75 in all science, math, or specialization areas, and no grade below "C" in any science or mathematics course on a student's degree plan and/or education courses within the professional block of courses are required. (See College of Education and Human Development, "Admission to Teacher Education" and "Admission to Student Teaching" for other requirements.)
IV. Alteration of a Certification Plan

Any amendment to a degree plan originally filed must be approved by the student's academic advisor, the Department Chair, the Dean of the College of Science and Engineering, and the Certification Officer of the College of Education and Human Development for the degree to be granted.

Degree Requirements

This plan is designed for those students who desire a Bachelor of Science Degree in Mathematics and a secondary teaching certificate in mathematics. The requirements for a Bachelor of Science in Mathematics degree are a minimum of 120 semester hours. Forty-two are designated University core curriculum courses; 38 are mathematics courses. All students must take the Major Field Test in Mathematics their senior year, prior to graduation.

General Requirements

<table>
<thead>
<tr>
<th>Component</th>
<th>Sem. Hrs.</th>
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<tbody>
<tr>
<td>1. Core Curriculum Program</td>
<td>42</td>
</tr>
<tr>
<td>First-Year Seminars (when applicable)*</td>
<td></td>
</tr>
<tr>
<td>2. Mathematics Core</td>
<td>(2)</td>
</tr>
<tr>
<td>3. Mathematics Electives</td>
<td>33</td>
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<tr>
<td>4. Supporting Courses</td>
<td>6</td>
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<tr>
<td>5. Psychology Course (hours counted in Core Curriculum Program)</td>
<td>10 (3)</td>
</tr>
<tr>
<td>6. Professional Development and Reading Sequence</td>
<td>27</td>
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<tr>
<td>7. Electives (as needed to fulfill University graduation requirements)</td>
<td>0-2</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
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</tbody>
</table>

The following describes each of the components of the mathematics major in more detail.

A. University Core Curriculum and First-Year Seminars.

University Core Curriculum Programs
As part of the core curriculum requirements students must take:

MATH 2413 - Calculus I

PHYS 2426 - University Physics II
PHYS 2425 - University Physics I

Only 3 hours of these courses will apply to the University Core Curriculum. The three 1 hour laboratory components apply to the Mathematics Core or Supporting Courses requirement.

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Total: 42 (44)

B. Mathematics Core

The following courses are required of all mathematics majors.

- MATH 2305 - Discrete Mathematics I 3 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs. *
- MATH 2414 - Calculus II 4 sem. hrs. *
- MATH 3311 - Linear Algebra 3 sem. hrs.
- MATH 3313 - Foundations of Number Theory 3 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.
- MATH 2415 - Calculus III 4 sem. hrs.
- MATH 4301 - Introduction to Analysis 3 sem. hrs.
- MATH 4306 - Modern Algebra 3 sem. hrs.
- MATH 4385 - Applied Modeling 3 sem. hrs.

Total: 33 (3 hours count in the Core Curriculum Program)

Note:

*May be waived with suitable placement; see placement section below for more details.
Upper-division classes may be required to increase total hours to the university minimum. See the degree requirements section of the catalog for details.

†3 hours of MATH 2413 apply to the University Core Curriculum. The 1 hour laboratory component applies to the Mathematics major requirement.
C. Mathematics Electives

- MATH 3312 - College Geometry 3 sem. hrs.

One of the following

- MATH 4315 - Partial Differential Equations 3 sem. hrs.
- MATH 4328 - Discrete Mathematics II 3 sem. hrs.
- MATH 4342 - Introduction to Mathematical Statistics 3 sem. hrs.
- SMTE 4370 - Mathematics Education Topics I 3 sem. hrs.

Total: 6

D. Supporting Courses

Supporting courses are chosen to provide a context in which to apply mathematics, to provide important career skills for the mathematician, and to motivate many of the important problems studied in mathematics.

- COSC 1435 - Introduction to Problem Solving with Computers I 4 sem. hrs.
- COSC 1436 - Introduction to Problem Solving with Computers II 4 sem. hrs.

Total: 10

E. Psychology

- PSYC 2301 - General Psychology* 3 sem. hrs.

Total: (3; hours are counted in the Core Curriculum Program)

F. Professional Development and Reading Sequence

Students who seek a 7-12 level Mathematics teaching certificate should contact a Certification Officer in the College of Education and Human Development about requirements and procedures that must be met to obtain the certificate. The professional development sequence must be taken in a specific order and it is recommended that students contact the College of Education and Human Development early in their academic careers for specific details on these courses.

Preliminary Courses

- READ 3353 - Content Area Reading for Secondary Students^ 3 sem. hrs.
- EDUC 3311 - School and Society^ 3 sem. hrs.

Field-Based Semester

- EDUC 4606 - Planning, Teaching, Assessment and Technology for Grades 7-12 Teachers 6 sem. hrs.
- EDUC 4322 - Instructional Design for Special Populations: Grades 7-12*^ 3 sem. hrs.

Student Teaching Semester

- EDUC 4312 - Classroom Management: Grades 7-12 3 sem. hrs.
- EDUC 4993 - Student Teaching: Grades 7-12 9 sem. hrs.

Total: 27

Teacher Certificate

Mathematics, Grades 7-12 Teacher Certification Without a Mathematics Major

I. Introduction

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- Biology, BS — Grades 7-12 Life Science Education Concentration (121-123 sem. hrs.)
- Chemistry, BS — Grades 7-12 Physical Science Education Concentration (126-128 sem. hrs.)
- Environmental Science, BS — Grades 4-8 Science Education Concentration (125-130 sem. hrs.)
- Elementary Education, BS — Grades 4-8 with Mathematics Certification (College of Education)
- Mathematics, BS -- Grades 7-12 Mathematics Education Concentration (120 sem. hrs.)

Mathematics 7-12 teacher certification is also possible with an undergraduate major other than mathematics. Details immediately follow below.
The individual programs, Biology, Chemistry, Environmental Science, and Mathematics offer these degrees and courses.

Students seeking Teacher Certification are also strongly urged to contact the Certification Officer in the College of Education and Human Development about current requirements and procedures that must be met to obtain the certificate. In particular, students following a degree plan leading to teacher certification must be admitted to the Teacher Education Program at Texas A&M University-Corpus Christi PRIOR to enrolling in any 4000 level EDCI or EDUC courses. Application forms for admission to the teacher education program may be obtained from the Undergraduate or Certification Office, room FC 201. The students are referred to the College of Education and Human Development section of this catalog for more information on the Teacher Education Program.

III. Grade Point Average for Admission to Teacher Education

A minimum grade point average of 2.75 (4.0 = A) in all work attempted, a minimum grade point average of 2.75 in all science, math, or specialization areas, and no grade below "C" in any science or mathematics course on a student's degree plan and/or education courses within the professional block of courses are required. (See College of Education and Human Development, "Admission to Teacher Education" and "Admission to Student Teaching" for other requirements.)

IV. Alteration of a Certification Plan

Any amendment to a degree plan originally filed must be approved by the student's academic advisor, the Department Chair, the Dean of the College of Science and Engineering, and the Certification Officer of the College of Education and Human Development for the degree to be granted.

Requirements

Mathematics 7-12 teacher certification without a mathematics major requires at least 26 hours of mathematics and 27 hours of professional development and reading courses. The required mathematics courses are listed in the Mathematics, BS — Grades 7-12 Mathematics Education Concentration. Students seeking certification through this route should contact a Certification Officer in the College of Education and Human Development. The mathematics major as described includes all required courses.
Courses

- MATH 2305 - Discrete Mathematics I 3 sem. hrs.
- MATH 2413 - Calculus I 4 sem. hrs.
- MATH 2414 - Calculus II 4 sem. hrs.
- MATH 3311 - Linear Algebra 3 sem. hrs.
- MATH 3313 - Foundations of Number Theory 3 sem. hrs.
- MATH 3315 - Differential Equations 3 sem. hrs.
- MATH 2415 - Calculus III 4 sem. hrs.
- MATH 4301 - Introduction to Analysis 3 sem. hrs.
- MATH 4306 - Modern Algebra 3 sem. hrs.
- MATH 4385 - Applied Modeling 3 sem. hrs.

Total: 33 hrs.

Science, Mathematics and Technology Education

I. Introduction

The College of Science and Engineering is committed to the support of students seeking to become science, mathematics and technology educators at all levels. The Science, Mathematics and Technology Education (SMTE) program offers content courses for students seeking K-12 science, mathematics and technology education. SMTE classes are also an integral part of the course work for degrees preparing students for Teacher Certifications. The SMTE program does not offer a degree; rather, degrees leading to Teacher Certification are offered by other Science and Technology programs and by the College of Education and Human Development. Students seeking to teach in the elementary and secondary schools of Texas must meet degree requirements as well as certification requirements. The requirements and procedure to become a science, mathematics or technology teacher in Texas are outlined below; presentation of such details about multiple programs in a single catalog section is intended for clarity and ease of readers in locating information.

II. How to Become a Science, Mathematics or Technology Teacher in Texas

In order to be recommended for teacher certification at this university, a candidate must fulfill three basic requirements: (1) have a bachelor's degree from an accredited college or university that includes an academic major and teacher training courses, (2) complete teacher training through an approved program, and (3) successfully complete the appropriate teacher certification tests for the subject and grade level that the candidate
wishes to teach. Additional information on the requirements to become a teacher in Texas can be obtained at the State Board of Educator Certification (SBEC) website: http://www.sbec.state.tx.us/SBECOnline/certinfo/becometeacher.asp. This website also provides information on the resources available to help students pay for a teacher training program.

SBEC has approved three levels of teacher certification for regular educators: (1) Early childhood to grade 6 which includes foundation subjects and enrichment areas such as art, PE, and music, (2) Grade 4-8 which includes the foundation areas only, and (3) Grade 7-12 certification. Students can find information on the different certifications at the official Texas Examinations of Educator Standards (TExES) Web site: http://www.texes.ets.org. Texas A&M University-Corpus Christi offers several degrees leading to a number of these teacher certifications. The College of Education and Human Development offers several degrees leading to teacher certification. The College of Science and Engineering offers bachelor's degrees leading to teacher certification in the sciences, mathematics and technology at the 4-8 and the 7-12 levels. These bachelor's degrees are the following; they are described in Section V below, in the order listed:

• Biology, BS — Grades 7-12 Life Science Education Concentration (121-123 sem. hrs.)
• Chemistry, BS — Grades 7-12 Physical Science Education Concentration (126-128 sem. hrs.)
• Environmental Science, BS — Grades 4-8 Science Education Concentration (125-130 sem. hrs.)
• Elementary Education, BS — Grades 4-8 with Mathematics Certification (College of Education and Human Development)
• Mathematics, BS — Grades 7-12 Mathematics Education Concentration (120 sem.hrs.)

Mathematics 7-12 teacher certification is also possible with an undergraduate major other than mathematics. Details immediately follow the BS in Mathematics listing.

The individual programs, Biology, Chemistry, Environmental Science, and Mathematics offer these degrees and courses.

Students seeking Teacher Certification are also strongly urged to contact the Certification Officer in the College of Education and Human Development about current requirements and procedures that must be met to obtain the certificate. In particular, students following a degree plan leading to teacher certification must be admitted to the Teacher Education Program at Texas A&M University-Corpus Christi PRIOR to enrolling in any 4000 level
EDCI or EDUC courses. Application forms for admission to the teacher education program may be obtained from the Undergraduate or Certification Office, room FC 201. The students are referred to the College of Education and Human Development section of this catalog for more information on the Teacher Education Program.

III. Grade Point Average for Admission to Teacher Education

A minimum grade point average of 2.75 (4.0 = A) in all work attempted, a minimum grade point average of 2.75 in all science, math, or specialization areas, and no grade below "C" in any science or mathematics course on a student's degree plan and/or education courses within the professional block of courses are required. (See College of Education and Human Development, "Admission to Teacher Education" and "Admission to Student Teaching" for other requirements.)

IV. Alteration of a Certification Plan

Any amendment to a degree plan originally filed must be approved by the student's academic advisor, the Department Chair, the Dean of the College of Science and Engineering, and the Certification Officer of the College of Education and Human Development for the degree to be granted.

Secondary/EC-12 Teacher Certification

Students seeking certification to teach in the secondary schools of Texas, or at all levels in the fields of art, music, physical education, Spanish, and theatre must: (a) major in an approved teaching field and complete all major study and related requirements for a baccalaureate degree in that field, and (b) comply with teacher certification requirements. Requirements to establish a major field of study are located within the individual college sections of the catalog.

In addition to these requirements, students seeking a certificate to teach in the secondary schools of Texas must complete:

1. The baccalaureate degree with an academic major.
2. The University's General Education requirements, including the Core Curriculum Program. (See "General Education Requirements" in the "Undergraduate Programs" section of this catalog; see also "Core Curriculum Program.""
3. Three semester hours of reading; READ 3353 - Content Area Reading for Secondary Students^.
4. Either secondary or EC-12 course work (see below)
5. A passing score on the appropriate TExES tests
Either secondary or EC-12 course work as listed below:

A. Secondary

Twelve semester hours of professional education:

- EDUC 3311 - School and Society^ 3 sem. hrs.
- EDUC 4605 - Planning, Teaching, Assessment and Technology 6 sem. hrs.
- EDUC 4311 - Classroom Management 3 sem. hrs.

Twelve semester hours of student teaching:

- EDUC 4321 - Instructional Design for Special Populations 3 sem. hrs.
- EDUC 4995 - Clinical Teaching 9 sem. hrs.

B. EC-12

Twelve semester hours of professional education:

- EDUC 3311 - School and Society^ 3 sem. hrs.
- EDUC 4605 - Planning, Teaching, Assessment and Technology 6 sem. hrs.
- EDUC 4311 - Classroom Management 3 sem. hrs.

Twelve semester hours of student teaching:

- EDUC 4995 - Clinical Teaching 9 sem. hrs.
- EDUC 4321 - Instructional Design for Special Populations 3 sem. hrs.

University College

University College

Degree Programs

- Applied Arts and Sciences, BAS
- University Studies, BA, BS

Programs

- Core Curriculum Program
- First-Year Learning Communities Program
- Honors Program

Department of Undergraduate Studies
Requirements

Core Curriculum Program

- Core Curriculum Program Overview
- Core Curriculum Program Courses
- Transfer Students and the Core Curriculum Program

Core Curriculum Program Overview

The Core Curriculum Program (the Core) is a 42-semester-hour program of study that is required of undergraduates to ensure that students will develop the essential knowledge and skills they need to be successful in college, in a career, in their communities, and in life.

Each course in the Core has been reviewed and approved on the basis of its potential to contribute to the achievement of the following six core objectives.

- Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- Communication Skills - to include effective development, interpretation and expression of ideas through written, oral and visual communication
- Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
- Teamwork - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
- Personal Responsibility - to include the ability to connect choices, actions and consequences to ethical decision-making
- Social Responsibility: to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

Core Curriculum Program Courses

Students are encouraged to consult their degree plans for specific Core course requirements for their majors. Core curriculum courses are organized according to the Foundational Component Areas are listed below.

Communication (6 semester hours)¹

COMM 1311 - Foundation of Communication*~
ENGL 1301 - Composition I~
ENGL 1302 - Writing and Rhetoric*

Mathematics (3 semester hours) - Select one from:

MATH 1314 - College Algebra
MATH 1324 - Mathematics for Business and Social Sciences
MATH 1325 - Calculus for Business & Social Sciences
MATH 1332 - Contemporary Mathematics
MATH 1442 - Statistics for Life**
MATH 2413 - Calculus I
PHIL 2303 - Introduction to Logic and Critical Thinking

Life and Physical Sciences (6 semester hours) - Select two courses from:

BIOL 1308 - Science for Life I (Non-Majors Biology)
BIOL 1406 - Biology I
BIOL 1407 - Biology II
BIOL 2401 - Anatomy and Physiology I
BIOL 2402 - Anatomy and Physiology II
BIOL 2420 - Principles of Microbiology
CHEM 1305 - Introductory Chemistry*
CHEM 1411 - General Chemistry I*
CHEM 1412 - General Chemistry II
ESCI 1401 - Environmental Science I: Intro to Environmental Science
GEOL 1303 - Essentials of Geology*
GEOL 1403 - Physical Geology
GEOL 1404 - Historical Geology
GISC 1301 - Physical Geography
PHYS 1303 - Introduction to Astronomy: Stars and Galaxies
PHYS 1304 - Introduction to Astronomy: Solar System
PHYS 1401 - General Physics I
PHYS 1402 - General Physics II
PHYS 2425 - University Physics I
PHYS 2426 - University Physics II

Language, Philosophy and Culture (3 semester hours) - Select one from:
ENGL 2316 - Literature and Culture*
ENGL 2332 - Literature of the Western World: From the Classics to the Renaissance*
ENGL 2333 - Literature of the Western World: From the Enlightenment to the Present*
PHIL 1301 - Introduction to Philosophy
PHIL 2306 - Introduction to Ethics
SPAN 2315 - Language and Culture for Heritage Learners
SPAN 3304 - Spanish Civilization
SPAN 3305 - Latin American Civilization
SPAN 3320 - Introduction to Spanish Literature
SPAN 3325 - Introduction to Latin American Literature

Creative Arts (3 semester hours) - Select one from:
ARTS 1301 - Art and Society
ARTS 1303 - Art History Survey I
MEDA 1305 - Film and Culture*^ 
MUSI 1306 - Understanding and Enjoying Music*
MUSI 1307 - Elements of Musical Style
THEA 1310 - The Art of the Theatre*

American History (6 semester hours)
HIST 1301 - U.S. History to 1865*
HIST 1302 - U.S. History Since 1865*

HIST 2301 - Texas History

Government/Political Science (6 semester hours)

POLS 2305 - U.S. Government and Politics*^  
POLS 2306 - State and Local Government*^  

Social and Behavioral Sciences (3 semester hours) Select one from:

ECON 1301 - Introduction to Economics*  
ECON 2301 - Macroeconomics Principles*  
ECON 2302 - Microeconomics Principles*  
PSYC 2301 - General Psychology*  
SOCI 1301 - Introduction to Sociology*  

Component Area Option (6 semester hours)²

Any Foundation Component Area Course (not counted in a Foundational Area)³

And/or COMM 1315 - Public Speaking

1. Students who have taken COMM 1315 previously at TAMUCC or another institution can count these courses toward completion of the Communication Foundational Component Area.

2. For 4-SCH courses that are taken as a Foundational Component Area requirement, students may count the extra 1 SCH of each course as part of the Component Area Option (to a maximum of 3 SCH).

3. Students who have passed MATH 2413 may take MATH 2414 to satisfy up to 4 hours of the Component Area Option.

*Students should complete the Communication Component Area by the end of the sophomore year. Students who transfer into the University without equivalent credit should complete these courses as soon as possible.

*Courses with an * indicate online offerings.

^Courses with an ^ indicate blended offerings.
Transfer Students and the Core Curriculum Program

Transfer students will be advised through their college's academic advising center.

For a list of transfer courses that will fulfill specific Core requirements, please see the appendix entitled "Lower-Division Transfer Courses: Common Courses."

Students transferring credit hours to Texas A&M-Corpus Christi from other institutions may have various means of fulfilling the Core requirement.

First-Year Learning Communities Program

- First-Year Learning Communities Program Overview
- First-Year Seminar
- First-Year Seminar Course Descriptions

First-Year Learning Communities Program Overview

As part of the First-Year Learning Communities Program, all full-time Texas A&M-Corpus Christi students are expected to enroll, in each of their first two semesters, in specially selected groups of two to four classes known as Dyad, Triads, and Tetrads, with the goal of helping students make meaningful connections with faculty, staff, and students at the University.

The students and teachers within each Dyad, Triad, or Tetrad form a learning community. The same group of students takes all of the classes within a given Dyad, Triad, or Tetrad together, which gives them many opportunities to work together, get to know each other, and learn together. The teachers in each learning community also work with each other to develop connections among the classes.

All of the learning communities include a First-Year Seminar (UNIV 1101 or UNIV 1102) and many are linked to a Communication class (COMM 1311, ENGL 1301, or ENGL 1302). These are small classes of 25 students or fewer. In addition, Dyads and Triads include a lecture class (such as History or Sociology), and Tetrads include two lecture classes. The classes within each learning community are "linked," in the sense that students enroll in all classes at once.
An example of a Dyad for students could include:

- First-Year Seminar (UNIV 1101 or UNIV 1102)
- Introduction to Philosophy (PHIL 1301)

Students who need credit for COMM 1311, ENGL 1301, or ENGL 1302 might enroll in a Triad that includes:

- First-Year Seminar (UNIV 1101 or UNIV 1102)
- Communication (COMM 1311, ENGL 1301, or ENGL 1302)
- Human Societies (SOCI 1301)

A Tetrads that the University frequently offers consists of the following courses:

- First-Year Seminar (UNIV 1101 or UNIV 1102)
- Communication (COMM 1311, ENGL 1301, or ENGL 1302)
- Biology I (BIOL 1406)
- General Chemistry I (CHEM 1411)

First-Year Seminar

Learn what it means to be a student and member of the Texas A&M University - Corpus Christi community in the two-semester sequence of First-Year Seminar (FYS). FYS explores different facets of college knowledge for academic and social success. As the integrative engine of a learning community, FYS engages students in a collaborative learning experience. By attending learning community courses with students, FYS faculty facilitate meaningful connections between linked courses. FYS students gain confidence in their individual skills and develop abilities for use in the academic community and beyond. UNIV 1101 familiarizes students with university-level expectations. Whereas, UNIV 1102 emphasizes student success after the first-year.

Both UNIV 1101 and UNIV 1102 are degree plan requirements for all students who graduate from Texas A&M-Corpus Christi.

Full-time first-year students. First-year students are those who have never attended any college after graduating from high school. This includes students enrolled in the fall term who attended college for the first time in the prior summer term. It also includes students
who entered with advanced standing (college credits earned before graduation from high school). Full-time first-year students are required to enroll in a First-Year Seminar during each of their first two semesters.

Transfer students. Transfer students are those who have attended another college after graduating from high school. Transfer students who become full-time Texas A&M-Corpus Christi students after having completed less than 12 semester hours are required to take both UNIV 1101 and UNIV 1102. Students who become full-time Texas A&M-Corpus Christi students after having completed 12-23 semester hours are required to take only one First-Year Seminar. They may take either UNIV 1101 or UNIV 1102. Students who become full-time Texas A&M-Corpus Christi students after having completed 24 or more semester hours are exempt from the First-Year Seminar requirement.

Course Goals and Objectives

- Integrative Learning
- Learning to Learn
- Academic Development
- Higher Education Navigation

Student Learning Outcomes*

- Synthesize connections between learning community courses by engaging in integrative experiences and assignments.
- Evaluate learning processes in learning community courses through self-reflection.
- Demonstrate academic development from learning community participation by completing integrative assignments and presenting in a public forum.
- Locate and utilize campus resources connected to learning community courses and university life.

First-Year Seminar Course Descriptions

UNIV 1101 - First-Year Seminar I.

UNIV 1102 - First-Year Seminar II.

Bachelor of Applied Science

Applied Arts and Sciences, BAS
The Bachelor of Applied Science (BAS) program at Texas A&M University-Corpus Christi is designed to build on the knowledge and skills that students have gained through vocational and/or technical studies at an accredited institution. The program consists of three component areas: first, the transfer of vocational/technical credit hours (from 3-42 hours); second, the completion of the Core Curriculum Program (42 hours) or the core of another accredited institution; and third, the completion of a professional track curriculum that provides both academic and professional depth to individuals who possess recognized competence in a vocational or technical field (24-27 hours).

Students are required to earn a minimum of 120 hours for the Bachelor of Applied Science degree. Students can select one of eight tracks in the BAS program: Applied Leadership, Childhood Development/Early Childhood Education, Community and Mental Health, Criminal Justice, Environmental and Occupational Safety/Emergency Response, Information Technology, Legal Studies, or Technical Communication.

**Student Learning Outcomes**

Students will:

- understand concepts and practices within community-accepted standards relevant to each track;
- apply teamwork and communication skills to develop successful careers in their fields;
- apply professional and ethical awareness in the practices of their fields.

**Degree Requirements (All Tracks)**

Full-time, first-year students are required to take the following courses:

- UNIV 1101 - First-Year Seminar I* 1 sem. hrs.
- UNIV 1102 - First-Year Seminar II* 1 sem. hrs.

Vocational/Technical Credit (3-42 hours)

Core Curriculum Program (42 hours)
Professional Track Curriculum (24-27 hours)

University Electives

Students must consult with the BAS Advisor to select appropriate electives to meet graduation requirements. All BAS students must earn a minimum of 120 semester credit hours, 36 of which are upper-division courses taken at Texas A&M University-Corpus Christi.

Applied Leadership

This track is designed for students in any field who seek to advance their careers by taking on supervisory positions.

Required Courses (18 semester hours):
- COMM 1321 - Business and Professional Communication 3 sem. hrs.
- OR
- COMM 3350 - Leadership 3 sem. hrs.
- COMM 3330 - Persuasion 3 sem. hrs.
- COMM 4345 - Intercultural Communication 3 sem. hrs.
- COMM 4350 - Organizational Communication 3 sem. hrs.
- ENGL 3301 - Technical and Professional Writing 3 sem. hrs.
- POLS 3341 - Introduction to Public Administration 3 sem. hrs.

Designated Electives (9 semester hours):
- COMM 3311 - Nonverbal Communication 3 sem. hrs.
- COMM 4360 - International Leadership 3 sem. hrs.
- ENGL 3379 - Writing for the Web 3 sem. hrs.
- ENGL 3380 - Visual Rhetoric 3 sem. hrs.
- MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
- MGMT 4320 - Leadership and Managerial Effectiveness* 3 sem. hrs.
- SOCI 4315 - Complex Organizations 3 sem. hrs.

Childhood Development/Early Childhood Education

This track is designed for graduates of Applied Arts and Science programs in Child Development, as well as child care providers who seek additional qualifications.

Students who do not have vocational/technical hours may apply to complete the Bachelor of Applied Science (B.A.S.) degree with an Early Childhood track. The application will be approved if the student is able to demonstrate that his/her career goals are closely matched to a B.A.S. track and that he/she is unable to receive the necessary training from
another degree offered by the university. Students must be in good academic standing to transfer to the B.A.S. Program.

Required Courses (18 semester hours):
- ECED 3324 - Child Development 3 sem. hrs.
- ECED 3380 - Developmentally Appropriate Practice in Early Childhood Education 3 sem. hrs.
- EDUC 3311 - School and Society^ 3 sem. hrs.
- READ 3310 - Principles and Practices of Early Reading Instruction 3 sem. hrs.
- READ 3320 - Principles and Practices of Reading Instruction 3 sem. hrs.
- SPED 4310 - Students with Exceptionalities* 3 sem. hrs.

Designated Electives (9 semester hours):
- BIEM 4345 - Language Acquisition and Development 3 sem. hrs.
- BIEM 4357 - Methods of Teaching English as a Second Language 3 sem. hrs.
- ECED 4350 - EC-6 Social Studies Curriculum 3 sem. hrs.
- ENGL 3301 - Technical and Professional Writing 3 sem. hrs.
- READ 3352 - Content Area Reading for Elementary Students 3 sem. hrs.
- READ 3380 - Children's and Adolescents' Literature 3 sem. hrs.

Community and Mental Health

The Community and Mental Health track is designed for those students who wish to seek entry level positions in social service agencies such as Child Protective Services or in child or elderly care facilities. It is also designed for those hoping to further their education in graduate school, as students wishing to provide mental health counseling in the state of Texas must be licensed. Graduate schools will provide the coursework, internship, and practicum opportunities necessary for licensure.

Required Courses (18 semester hours):
- ENGL 3301 - Technical and Professional Writing 3 sem. hrs.
- PSYC 3361 - Psychology of Personality* 3 sem. hrs.
- PSYC 3363 - Abnormal Psychology* 3 sem. hrs.
- SOCI 2319 - Social Psychology 3 sem. hrs.
- SOCW 3301 - Introduction to Social Work 3 sem. hrs.
- SOCW 3310 - Approaches to Social Welfare 3 sem. hrs.

Designated Electives (6 semester hours):
- CRIJ 3325 - Community-Based Corrections 3 sem. hrs.
- SOCI 3312 - Racial and Ethnic Relations 3 sem. hrs.
- SOCI 3340 - Sociology of the Family 3 sem. hrs.
OR
• PSYC 2314 - Lifespan Developmental Psychology* 3 sem. hrs.
• SOCW 3320 - Social Services in the Community 3 sem. hrs.

Criminal Justice

This track is designed for graduates of associate’s programs in law enforcement or corrections.

• CRIJ 3302 - Police and Society 3 sem. hrs.
  OR
• CRIJ 4351 - Police Supervision and Management 3 sem. hrs.
• CRIJ 3325 - Community-Based Corrections 3 sem. hrs.
• CRIJ 4312 - Law and Evidence 3 sem. hrs.
  OR
• CRIJ 4313 - Criminal Procedure 3 sem. hrs.
• CRIJ 4320 - Offender Rehabilitation 3 sem. hrs.
  OR
• CRIJ 4321 - American Prisons and Prisoners 3 sem. hrs.
• CRIJ 4331 - Juvenile Delinquency 3 sem. hrs.
  OR
• CRIJ 4335 - Criminology 3 sem. hrs.
• CRIJ 4345 - Research Methods in Criminal Justice 3 sem. hrs.
• ENGL 3301 - Technical and Professional Writing 3 sem. hrs.

Environmental & Occupational Safety/Emergency Response

This track prepares students planning a variety of careers in professions in the management of workplace and environmental safety issues, as well as the management of emergency situations such as natural disasters or major industrial incidents.

  Required Courses (18 semester hours):
  • CHEM 4490 - Special Topics 1-4 sem. hrs.
    OR
  • ESCI 4490 - Selected Topics 1-4 sem. hrs.
  • COMM 4335 - Crisis Communication 3 sem. hrs.
  • ESCI 3202 - Professional Skills 2 sem. hrs.
  • ESCI 4301 - Environmental Regulations 3 sem. hrs.
  • POLS 3341 - Introduction to Public Administration 3 sem. hrs.

  Designated Electives (6-8 semester hours):
• BIOL 2421 - Microbiology 4 sem. hrs.
• CHEM 4443 - Environmental Chemistry 4 sem. hrs.
• ESCI 3443 - Environmental Biology 4 sem. hrs.
• ESCI 4320 - Environmental Health 3 sem. hrs.
• ESCI 4498 - Internship in Environmental Science 2 sem. hrs.
• GEOL 3443 - Environmental Geology 4 sem. hrs.
• GISC 1470 - Geospatial Systems I 4 sem. hrs.

Information Technology

This track prepares students for a variety of careers such as personal computer technician, network administrator, database manager, information security technician, and computer technology manager within commercial, industrial, educational and government organizations.

• COSC 1435 - Introduction to Problem Solving with Computers I 4 sem. hrs.
• ENGL 3301 - Technical and Professional Writing 3 sem. hrs.
• COSC 4690 - Contracted Field Experience in Computer Science 1-6 sem. hrs.

Choose two courses from the following:
• COSC 1436 - Introduction to Problem Solving with Computers II 4 sem. hrs.
• COSC 2465 - Linux Systems 4 sem. hrs.
• COSC 2466 - Network Systems 4 sem. hrs.
• COSC 2437 - Data Structures 4 sem. hrs.
• COSC 2470 - COBOL Programming 4 sem. hrs.
• COSC 3342 - Network Design and Management 3 sem. hrs.
• MISY 2305 - Computer Applications in Business* 3 sem. hrs.

Choose two courses from the following:
• COSC 3336 - Introduction to Database Systems 3 sem. hrs.
• COSC 3351 - Internet Programming 3 sem. hrs.
• COSC 3360 - Human-computer Interaction 3 sem. hrs.
• COSC 4365 - Windows Security 3 sem. hrs.
• MGMT 3312 - Behavior in Organizations* 3 sem. hrs.
• MISY 3310 - Management Information Systems Concepts^* 3 sem. hrs.
• MISY 4330 - Website Development for Business 3 sem. hrs.
• MISY 4375 - IT Project Management 3 sem. hrs.
• COSC 3474 - Cyber Defense I 4 sem. hrs.

Legal Studies
This track is designed for graduates of Court Reporting, Legal Secretarial and Paralegal specialties who seek advancement in private law firms, federal or state governmental agencies, legal departments of corporations, banks, insurance companies, mortgage companies, law libraries, legal services/legal aid offices, and law departments of special interest groups or associations.

Required Courses (18 semester hours):
- COMM 3330 - Persuasion 3 sem. hrs.
- CRIJ 4310 - Constitutional Law 3 sem. hrs.
- CRIJ 4312 - Law and Evidence 3 sem. hrs.
- CRIJ 4313 - Criminal Procedure 3 sem. hrs.
- ENGL 3301 - Technical and Professional Writing 3 sem. hrs.
- POLS 3313 - The Legislative Process 3 sem. hrs.

Designated Electives (9 semester hours):
- BLAW 3310 - Legal Environment of Business* 3 sem. hrs.
- COMM 3311 - Nonverbal Communication 3 sem. hrs.
- ENGL 3378 - Document Design and Publishing 3 sem. hrs.
- POLS 3317 - Judicial Politics 3 sem. hrs.
- POLS 3351 - U.S. Constitution and Federalism 3 sem. hrs.

Technical Communication

This track is designed for graduates from a variety of Applied Arts and Sciences programs who seek preparation for career tracks that demand good written communication skills. It provides entry into a fast growing, in-demand field.

Required Courses (18 semester hours):
- COMM 4350 - Organizational Communication 3 sem. hrs.
- ENGL 3301 - Technical and Professional Writing 3 sem. hrs.
- ENGL 3378 - Document Design and Publishing 3 sem. hrs.
- ENGL 3379 - Writing for the Web 3 sem. hrs.
- ENGL 4320 - Professional Writing Workshop 3 sem. hrs.
- ENGL 4321 - Grants and Proposals 3 sem. hrs.

Designated Electives (6 semester hours):
- COMM 1321 - Business and Professional Communication 3 sem. hrs.
- COMM 4345 - Intercultural Communication 3 sem. hrs.
- ENGL 3380 - Visual Rhetoric 3 sem. hrs.

Bachelor of Arts or Science
The University Studies degree at Texas A&M University-Corpus Christi (TAMU-CC) is a flexible undergraduate program which allows students to design a course of study that best fits their educational and career goals rather than follow a specific track of coursework prescribed by a major degree. The University Studies degree can be completed as a Bachelor of Arts (BA) or a Bachelor of Science (BS). With a University Studies degree, students will graduate with a breadth of knowledge in a range of academic disciplines, preparing them for the workforce, graduate school, or fulfilling their dreams of obtaining a degree.

In today’s marketplace, employers are looking for people who demonstrate leadership skills, who can plan and organize, set priorities and who are result oriented. The University Studies degree at TAMU-CC highlights these skills. Students work closely with an academic advisor to develop their educational path, based on their career goals, and select coursework that will best suit their individual needs.

Who should consider a University Studies degree?

- Current TAMU-CC students with over 60 hours and who are unsure about what major to pursue or whose career goals do not align with an established TAMU-CC major.
- Current TAMU-CC students with over 60 hours who need to accelerate their graduation date and are unable to do so in their stated major due to major specific requirements, course sequencing and/or gpa requirements.
- Former Islanders who would like to return to TAMU-CC to complete their degree.

Students must meet the minimum requirements to obtain a University Studies degree; they are as follows:

1. Completion of the Texas core curriculum
2. At least 24 hours in a primary concentration area; at least 18 of the hours must be upper division hours (3000 and 4000) and 6 may be lower division hours (1000 and 2000). Hours earned before changing majors can be used to satisfy degree requirements. Courses completed as part of the core curriculum may not be used to satisfy the concentration area requirements
3. 21 hours in a secondary concentration area (or 21 additional hours in the primary concentration area); hours in the secondary concentration area may be lower or upper division hours. Hours earned before changing majors can be used to satisfy degree requirements. Courses completed as part of the core curriculum may not be used to satisfy the concentration area requirements.
4. UNIV 4350 (Capstone)
5. 45 total upper-division hours; 30 upper-division hours must be taken at TAMU-CC (Students who wish to graduate with honors must have completed at least 45 undergraduate semester hours at Texas A&M University-Corpus Christi.)
6. 120 total hours.
7. Electives – upper and lower division electives to ensure that the student completes 45 total upper division hours and 120 hours overall for the degree requirements.
8. UNIV 1101 & 1102 (Students with more than 24 hours of transfer work are exempt from this requirement.)
9. Foreign Language (either 2 years in high school or 2 semesters in college)
10. Overall and TAMU-CC GPA of at least 2.0

You may choose your primary and/or secondary concentration areas from the following: Business, Education/Human Development, Liberal Arts, Nursing/Health Sciences, and Science/Engineering.

Please note that some departments have class, major or pre-requisite restrictions on some of the classes that may be taken. When choosing your concentration areas and coursework, it is important to keep this in mind.

All students must complete the UNIV 4350 course, which is the capstone course for the University Studies degree. In this course, students will demonstrate, via class projects and assignments, their ability to identify skills which can be used in community settings to assist in problem solving, customer service and the workforce.

Students will begin with an in-depth look at the five main components of solving a problem and practice the skills through a series of a structured exercises. During this process, students will discuss research, assessment of data, brainstorming and creative thinking, planning, time management, leadership and collaboration, effective communication, and evaluating results. Students will then apply the skills learned to their area of interest in a final project.

### Degree Requirements

<table>
<thead>
<tr>
<th>Component</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Core Curriculum Program</td>
<td>42</td>
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<tr>
<td>First-Year Seminars (when applicable)</td>
<td>2 hours</td>
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<tr>
<td>Student-Designed Concentration</td>
<td>24</td>
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<tr>
<td>Supporting Coursework</td>
<td>33</td>
</tr>
<tr>
<td>Electives</td>
<td>18</td>
</tr>
<tr>
<td>UNIV 4350</td>
<td>3</td>
</tr>
</tbody>
</table>
Total 120 hours (122)

* Full-time, first-year students are required to take the following courses: UNIV 1101 and UNIV 1102.

Residence Requirement

Students must take a minimum of 30 semester hours of upper-division course work from this university to complete a University Studies degree.

Advising and Degree Plans

As soon as students declare their intent to pursue a University Studies degree, they must meet with their academic advisor to discuss their concentration and possible career path.

Honors

Requirements

Honors Program

The Honors Program at Texas A&M University-Corpus Christi offers an enriched plan of study to highly motivated students who have the capacity to excel academically and a strong and abiding determination to reach their greatest intellectual potential. We pride ourselves on being an experience-based program that helps students develop the skills necessary to succeed in the workforce or graduate education, by focusing on three key areas of personal development: undergraduate research, study away, and volunteerism. Students admitted to our selective community of scholars will receive the following direct benefits:

Undergraduate Research/Creative Experience

* Study with outstanding faculty
* Work on original research
* Honors research fellowships
Study Away Experience

* Travel away
* Attend conferences
* Travel to professional events

Service Learning Experience

* Community outreach
* Skills-relevant curriculum
* Course credit for internships

STUDENT LEARNING OUTCOMES

Upon completion of the Honors Program, students will be able to:

1. Demonstrate critical thinking and analytical skills, to include: creative thinking, innovation, inquiry and analysis, evaluation, and synthesis of information.

2. Demonstrate communication skills, to include: the effective development and interpretation and expression of ideas through written, oral, and visual communication.

ADMISSION

Students can apply for admission to the Honors Program by completing the general application for admission to the university (ApplyTexas) and choose if they want to apply to the program. If they select "yes" they will be taken to a secondary application for the Program that can be submitted automatically with their general application. Students will be admitted on a rolling basis to the program as space allows for those meeting the requirements outlined on the Honors Program website (honors.tamucc.edu). The Director and Program Coordinator will review the application as part of the admissions process prior to making invitations to join the Program. The Program will host open houses for prospective students.

CURRICULUM AND REQUIREMENTS

In order to graduate from the Honors Program at TAMU-CC and receive an Honors designation on the diploma, students have broad discretion over the kinds of curricular,
research, and service learning experiences they can explore in order to meet our program requirements.

The minimum requirements to remain in good standing and complete the Honors Program are as follows:

Required courses (6 student credit hours)

- HONR 1101 - Honors Campus Leadership Seminar 1 sem. hrs.
- HONR 1102 - Honors Community Leadership Seminar 1 sem. hrs.
- HONR 2101 - Honors Experience Seminar 1 sem. hrs.
- HONR 3101 - Project of Excellence Seminar I 1 sem. hrs.
- HONR 4101 - Project of Excellence Seminar II 1 sem. hrs.
- HONR 4102 - Project of Excellence Seminar III 1 sem. hrs.

Elective Honors Courses (12 student credit hours)

Students are encouraged to take elective Honors courses that relate to their field(s) of study. Any course offered at TAMU-CC has the potential to be an elective Honors course option. A range of elective Honors courses will be offered each semester from across the Colleges; some of these courses may be stacked courses in that they may require the Honors student to complete additional readings, assignments, etc. Elective Honors courses will be listed under Honors in SAIL and also denoted as Honors courses by the "H" code assigned to the course section. Standalone Honors courses across the Colleges may also be offered. This requirement can be met at the upper-division level or through experiential courses, such as HONR 4396 Honors Directed Independent Study, HONR 4397 Honors Internship, or HONR 4398 Honors Applied Experience, meaning students are often able to meet curricular requirements without adding twelve hours to their degree plan. Students are expected to take the Honors Seminar courses in sequence as they progress through their academic studies. The Director and Program Coordinator will have discretion over whether transfer courses or other substitutions can meet these requirements.

Further Program Requirements

- Successfully complete and publicly defend an original research project: the Project of Excellence (POE)
- Attend at least one professional conference or participate in a study away activity
- Engage in sufficient service activities as determined by the Director and Program Coordinator, in consultation with the Honors Student Association.

- Maintain a cumulative GPA of 3.5 or higher in all coursework and 3.0 in all Honors courses

- Meet with the Honors Program Coordinator each semester for advising

- Maintain enrollment and active participation in the Program for at least four continuous long semesters

- Students not remaining in good standing over two continuous semesters either through grades, enrollment, or participation can be asked to leave the Program at the discretion of the Director and Program Coordinator.

CONTACT

For further information contact the Honors Program.

Web site: http://honors.tamucc.edu

Campus address: CCH 262; phone: (361) 825-3926

Mailing address: Honors Program
Texas A&M University-Corpus Christi
6300 Ocean Drive, Corpus Christi, TX 78412-5751

E-Mail: honors@tamucc.edu

Course Description Information

Course Abbreviations or Prefixes

The University offers undergraduate courses in a variety of subjects. The following table lists (1) the undergraduate subjects offered, (2) their abbreviations or course prefixes, (3) the colleges or units in which they are taught, and (4) the page numbers. The prefixes are used in course listings in this catalog and the semester class schedule.

SubjectPrefixCollege or Unit
<table>
<thead>
<tr>
<th>Program</th>
<th>Code</th>
<th>Major</th>
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<tbody>
<tr>
<td>Accounting</td>
<td>ACCT</td>
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</tr>
<tr>
<td>Anthropology</td>
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<td>Liberal Arts</td>
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<tr>
<td>Art</td>
<td>ARTS</td>
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<td>Astronomy</td>
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<tr>
<td>Women and Gender Studies</td>
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</table>
Course Numbers

Each course number includes a four-character prefix (identifying the discipline or subject) and a four-digit number. The first digit indicates the level of the course. The second digit usually indicates the credit hour value of the course. The third and fourth digits differentiate the courses in a particular discipline.

Courses numbered in the 1000 and 2000 series are lower-division (freshman or sophomore) courses. The University uses the Texas Common Course Numbering System as the basis for numbering most lower-division courses.

Courses numbered in the 3000 and 4000 series are upper-division (junior or senior) courses.

Courses numbered 5000 or higher are graduate courses. Courses at the 5000 level are open only to students with graduate status and senior undergraduates who meet specific criteria. (See “Graduate Study by Undergraduates” in the "Undergraduate Programs" section of this catalog.) Graduate courses are listed in the Graduate Catalog.

Courses at the 6000 level are open only to students admitted to a doctoral program, or with permission from the program coordinator.

Courses numbered in the 0000 series, such as 0399, are remedial or developmental courses that do not count toward graduation.

Prerequisite/Corequisite

A prerequisite is a requirement that must be completed before a course may be attempted. A corequisite is a requirement that must be completed at the same time a course is attempted.

List of Undergraduate Courses

Undergraduate courses are listed here. Course descriptions may include projected scheduling information. Individual courses, however, are subject to change or withdrawal at any time and may not be offered every semester or every year. When registering for courses, please consult the semester class schedule, a separate publication that provides specific course offering information for a particular semester or session.

Common Courses Designated in Course Descriptions
Freshman and sophomore-level courses that are considered equivalent to courses in the Texas Common Course Numbering System (TCCNS) are identified at the beginning of their course descriptions. The TCCNS prefix and number may be found immediately after the A&M-Corpus Christi prefix and number. Examples follow:

ACCT 2301 (ACCT 2301)
COMM 1315 (SPCH 1315)

For a list of all common courses taught at A&M-Corpus Christi, see the appendix titled "Lower-Division Transfer Courses: Common Courses."

Online and Blended Courses

Courses that are offered online or blended will have an * or ^ after the title.

* - indicate online offerings
^ - indicate blended offerings

For example: CRIJ 4365 - White Collar Crime^ or BUSI 3315 - Entrepreneurship, Creativity, & Innovation* or MATH 1442 - Statistics for Life*^.

Course Descriptions

Accounting

ACCT 2301 - Financial Accounting
3 sem. hrs. Financial accounting concepts and their application in the accounting process for business organizations including financial statement preparation, analysis and communication of financial information. TCCNS Equivalent: ACCT 2301

ACCT 2302 - Managerial Accounting
3 sem. hrs. The use of accounting information as an aid to management decision making, including performance measurement and budgets. Prerequisite: ACCT 2301. TCCNS Equivalent: ACCT 2302

ACCT 3311 - Intermediate Accounting I*
3 sem. hrs. An intensive study of the balance sheet accounts and the related income statement accounts. It exposes the student to the various Accounting Principles Board opinions and Financial Accounting Standards Board statements, and International Financial Reporting standards, as these publications affect the various accounts and transactions. It covers the various working capital accounts and operational assets. Prerequisites: ACCT 2301, ACCT 2302, and Junior standing or above.

ACCT 3312 - Intermediate Accounting II*

3 sem. hrs. A continuation of Intermediate Accounting I involving current and non-current liabilities and owner equity accounts, the Statement of Cash Flows, deferred income tax, financial statement analysis and several special problem areas. Prerequisites: ACCT 3311 and Junior standing or above.

ACCT 3314 - Cost Accounting*

3 sem. hrs. A study of procedures and concepts in allocating the costs of firm inputs to outputs, determination and use of standard costs in the control function, profit planning and control techniques used in management decision-making. Prerequisites: ACCT 2301, ACCT 2302, and Junior standing or above. (MISY 2305 recommended.)

ACCT 3315 - Multinational Entities: Accounting and Consolidations*

3 sem. hrs. A study of the similarities and differences between U.S. and other countries' accounting and reporting procedures. Basic consolidation of international segments will be covered. Use of spreadsheets and web technology required. Prerequisites: ACCT 2302 and Junior standing or above.

ACCT 3316 - Governmental and Not-for-Profit Accounting

3 sem. hrs. A study of fund accounting used in governmental entities and non-profit organizations. Emphasis on budgetary and fund accounts. Prerequisites: ACCT 2301, ACCT 2302, and Junior standing or above.

ACCT 3317 - Oil, Gas, & Energy Accounting*

3 sem. hrs. This course covers the basic principles of oil and gas accounting. Course topics include upstream oil and gas operations, successful efforts accounting, full cost pool accounting, accounting for production, exploration and construction, joint interest accounting, international operations, oil and taxation and analysis of oil and gas financial statements. Prerequisites: ACCT 3311 or equivalent and Junior standing or above.
ACCT 3321 - Federal Income Tax I*

3 sem. hrs. Emphasizes the role of taxation in the business decision-making process. The course introduces the tools to conduct basic tax research and planning. Prerequisites: ACCT 2301, ACCT 2302, and Junior standing or above.

ACCT 3322 - Federal Income Tax II*

3 sem. hrs. Examines additional, more complex topics in business decision-making, tax research, and tax planning. Prerequisites: ACCT 3321 and Junior standing or above.

ACCT 3340 - Fraud Examination*

3 sem. hrs. This course covers the basic principles of fraud examination. Course topics include the behavioral aspects of fraud and common fraud schemes including skimming, larceny, check tampering, register disbursement schemes, billing schemes, payroll and expense reimbursement, non-cash misappropriations, corruption and bribery, and fraudulent financial statements. Prerequisites: ACCT 2301, ACCT 2302 or equivalent and Junior standing or above.

ACCT 4311 - Auditing Principles and Procedures*

3 sem. hrs. Auditing principles and techniques underlying the audit process; procedures used in conducting external audits, reviews and compilations. Prerequisites: ACCT 3312, and Junior standing or above.

ACCT 4314 - Advanced Accounting Problems*

3 sem. hrs. A study of advanced accounting topics, including leases, pensions, consolidations, asset retirement obligations, accounting for not-for-profit organizations and government entities and other special problem areas. Prerequisites: ACCT 3312 and Junior standing or above.

ACCT 4345 - Ethics for Texas CPA Candidates and Business Executives

3 sem. hrs. This course will cover ethical theory, ethical reasoning, integrity, objectivity, independence and other core values and regulatory requirements associated with the practice of professional accounting and decision making of other executives, with an emphasis on corporate governance in the post-Sarbanes-Oxley regulatory environment. This course satisfies the ethics requirement of the Texas State Board of Public Accountancy (TSBPA); however, it does not count for advanced accounting hours.
required to sit for the CPA exam. Students who receive credit for ACCT 4345 cannot also receive credit for ACCT 5345. Prerequisite: Junior Standing or above.

ACCT 4355 - Accounting Information Systems*

3 sem. hrs. A study of the role of accounting information systems and related subsystems in both for profit and not-for-profit entities. The relationship of accounting information systems to other systems, including management information systems, is addressed. Concepts are reinforced by the completion of computer-based projects. Prerequisites: ACCT 2301, ACCT 2302, Misy 2305, and Senior standing (no Juniors).

ACCT 4390 - Current Topics in Accounting*

3 sem. hrs. Selected topics for special study related to accounting functions, processes or issues. May be repeated for credit when topics vary. Prerequisites: Junior standing or above, and others depending on topic. Contact the Dean's office for information.

ACCT 4396 - Directed Individual Study

1-3 sem. hrs. Individual supervised study and completion of a final report. Prerequisites: permission of instructor, Junior standing or above, and others depending on selected topic. Inquire at the Dean's office for information.

ACCT 4398 - Accounting Internship

3 sem. hrs. Supervised full-time or part-time, off-campus training in public accounting, industry, or government. Oral and written reports required. Prerequisites: accounting major, and Junior standing or above with a minimum 3.00 accumulated GPA in upper division accounting courses. Student must apply to program and be accepted prior to registration. May not be repeated for credit. May not count as accounting requirement for CPA. State Board of Accountancy may not approve course as an accounting equivalent for CPA.

Anthropology

ANTH 3301 - Cultural Anthropology

3 sem. hrs. Study of the social life of human groups from their earliest appearance to the present. Analyses of cultures include language, kinship, art, religion, economics, and political behavior. Cross-cultural comparisons allow development of generalizations
about social patterns, social structure, and cultural practices found in human societies. (Credit may not be given for both this course and SOCI 3301.)

ANTH 3370 - Native Americans in North America

3 sem. hrs. An ethnographic and historical analysis of Native American cultures in what is now called North America from prehistoric times to the present. (Credit may not be given for both this course and SOCI 3370.)

ANTH 3390 - Special Topics in Anthropology

3 sem. hrs. Study of different topics in anthropology including biological, archaeological, cultural, or linguistic subjects. May be repeated when topics vary.

Arabic

ARAB 1311 - Arabic I

3 sem. hrs. This course introduces students to listening, speaking, reading, and writing skills in an Arabic cultural framework. It is designed for students with no previous knowledge of Arabic. The main objective is to communicate in Arabic for understanding. This will be accomplished by learning Modern Standard Arabic as a beginner and by gaining exposure to the instructor's dialect form of Arabic.

ARAB 1312 - Arabic II

3 sem. hrs. This course will continue to reflect the emphasis of Arabic 1311 on Modern Standard Arabic (MSA) and the spoken dialect of the instructor. Students will continue to build on the skills and strategies acquired in Arabic 1311 for all listening, reading, speaking, writing and culture modalities. In addition to increased vocabulary repertoire, a greater emphasis will be placed on basic grammatical understanding, to deal with more complex sentence structure, and larger spoken and written exercises.

Art

ARTS 1301 - Art and Society

3 sem. hrs. Designated for non-art majors. Establishes a working vocabulary for evaluating works of art in various media. Objects are interpreted in terms of their specific historical contexts and the changing relationships between art and society. This course does not fulfill the art history requirement for art majors. TCCNS Equivalent: ARTS 1301 This course satisfies the university core curriculum requirement in fine arts.
ARTS 1303 - Art History Survey I

3 sem. hrs. An examination of painting, sculpture, architecture, and other arts from the ancient through medieval periods. TCCNS Equivalent: ARTS 1303 This course satisfies the university core curriculum requirement in fine arts.

ARTS 1304 - Art History Survey II

3 sem. hrs. A further examination of painting, sculpture, architecture, and other arts from the Renaissance through Modern periods. Prerequisite for art majors only: ARTS 1303. TCCNS Equivalent: ARTS 1304

ARTS 1311 - Design I

3 sem. hrs. A studio course concerning the fundamentals of art with emphasis on two-dimensional concepts. Co-requisite: SMTE 0097 Art Student Safety Seminar. TCCNS Equivalent: ARTS 1311

ARTS 1312 - Design II

3 sem. hrs. A studio course concerning the fundamentals of art with emphasis on three-dimensional concepts. Co-requisite: SMTE 0097 Art Student Safety Seminar. TCCNS Equivalent: ARTS 1312

ARTS 1316 - Drawing I

3 sem. hrs. A studio course investigating a variety of media techniques, including their descriptive and expressive possibilities. Co-requisite: SMTE 0097 Art Student Safety Seminar. TCCNS Equivalent: ARTS 1316

ARTS 1317 - Drawing II

3 sem. hrs. A further investigation of media techniques explored in Drawing I, including their descriptive and expressive possibilities. Prerequisite: ARTS 1316 Drawing I. Co-requisite: SMTE 0097 Art Student Safety Seminar. TCCNS Equivalent: ARTS 1317

ARTS 2311 - Design III: Color

3 sem. hrs. Investigation of the properties of color. Color is studied and applied to studio-oriented design assignments. Co-requisite: SMTE 0097 Art Student Safety Seminar.

ARTS 2316 - Painting I
3 sem. hrs. A studio course exploring the potentials of painting media. Prerequisite: ARTS 1316 Drawing I. Co-requisite: SMTE 0097 Art Student Safety Seminar. TCCNS Equivalent: ARTS 2316

ARTS 2323 - Drawing III

3 sem. hrs. A studio course continuing the investigation of media and techniques explored in Drawing I and Drawing II. Students investigate how formal aspects and selected media along with conceptual choices create specific visual ideas. Prerequisites: ARTS 1317. Co-requisite: SMTE 0097 Art Student Safety Seminar. TCCNS Equivalent: ARTS 2323

ARTS 2326 - Sculpture I

3 sem. hrs. A studio course exploring sculptural approaches in a variety of media. Co-requisite: SMTE 0097 Art Student Safety Seminar. TCCNS Equivalent: ARTS 2326

ARTS 2333 - Printmaking I

3 sem. hrs. An introductory studio course in basic printmaking processes and techniques. Prerequisite: ARTS 1316 Drawing I. Co-requisite: SMTE 0097 Art Student Safety Seminar. TCCNS Equivalent: ARTS 2333

ARTS 2336 - Ceramics I

3 sem. hrs. An introductory studio course in basic ceramic processes. Co-requisite: SMTE 0097 Art Student Safety Seminar. TCCNS Equivalent: ARTS 2346

ARTS 2356 - Photography I

3 sem. hrs. This course is an introduction to digital photography capture, processing, and basic editing software. While focusing on the fundamentals of digital photography and printing techniques, it will introduce students to the theory and practice of photography and assist them in producing a conceptually devised and technically consistent portfolio. TCCNS Equivalent: ARTS 2356

ARTS 2367 - Watercolor


ARTS 3301 - Life Drawing
3 sem. hrs. Drawing from the model using a variety of techniques and media. Prerequisite: ARTS 1317. Co-requisite: SMTE 0097 Art Student Safety Seminar.

ARTS 3302 - Intermediate Printmaking

3 sem. hrs. Opportunity to work with relief, intaglio, lithographic, or screen printing processes to provide limited edition prints. Prerequisite: ARTS 2333 Printmaking I. Co-requisite: SMTE 0097 Art Student Safety Seminar.

ARTS 3303 - Intermediate Painting

3 sem. hrs. Explores the issues of content, imagery, application, and influences of master artists. Prerequisite: ARTS 2316 Painting I. Co-requisite: SMTE 0097 Art Student Safety Seminar.

ARTS 3304 - Intermediate Sculpture

3 sem. hrs. A study in sculptural design and expression. Examines the structural pattern of form through the elements and principles of design. Working with classical and contemporary techniques and materials. Prerequisite: ARTS 2326 Sculpture I. Co-requisite: SMTE 0097 Art Student Safety Seminar.

ARTS 3316 - Art Activities I

3 sem. hrs. Practical experience with basic design, drawing, painting, and sculpture, along with a study of art history and criticism. Includes a consideration of how these experiences relate to art curricula in the elementary school. Prerequisites: Completion of lower-division art course work in design (6 sem. hrs.), drawing (6 sem. hrs.), and art history (6 sem. hrs.).

ARTS 3322 - Art Activities II

3 sem. hrs. Practical experiences with basic design, drawing, painting, printmaking, sculpture, and crafts, along with a study of art history and criticism. Includes a consideration of how these experiences relate to art curricula in the secondary school. Prerequisites: Completion of lower-division art course work in design (6 .), drawing (6 .), and art history (6 .).

ARTS 3324 - Intermediate Ceramics
3 sem. hrs. Covers wheel-thrown ceramics, basic glazemaking, and an introduction to kiln firing and loading. Prerequisite: ARTS 2346 Ceramics I. Co-requisite: SMTE 0097 Art Student Safety Seminar.

ARTS 3350 - Art of the United States

3 sem. hrs. A survey of the major developments in the art of North America from Pre-Columbian times to the modern era

ARTS 3352 - Modern Art

3 sem. hrs. A survey of the major movements of 20th century art and aesthetics, which developed primarily in Europe. Includes a review of late 19th century modernist antecedents with emphasis placed on the principal movements of the early 20th century: Fauvism, German Expressionism, Cubism, Futurism, Abstract Art, Dada, and Surrealism.

ARTS 3353 - Contemporary Art, 1945 to the Present

3 sem. hrs. An examination of the dispersal of European artists and Modernism, primarily to America, as a result of World War II. Examines the development of Abstract Expressionism in New York in the 1940s and 50s, followed by a survey of recent trends in contemporary art to the present day.

ARTS 3365 - Photography II

3 sem. hrs. An intermediate studio course using digital cameras and image manipulation software. Prior completion of ARTS 2356 is required.

This course will enhance and expand skills developed in Photography I. It is geared toward informing students in the many ways we can make photographs; by seeking them out, framing them, forming them, extracting them, building them, and finally sequencing and presenting them. Students will engage in the theory and practice of photography, refine their photographic technique, and create a conceptually devised and technically consistent portfolio. Emphasis is placed on the development of a strong conceptual foundation from which to approach the making and understanding of photography as an art form. This knowledge will be achieved through photographic assignments, slide lectures of relevant works, and in-class critiques. It can be repeated twice for credit. Prerequisite: ARTS 2356. Co-requisite: SMTE 0097 Art Student Safety Seminar.

ARTS 3366 - Analogue Photography
3 sem. hrs. An introductory studio course in analogue photography using film cameras and the silver gelatin darkroom process. While focusing on the fundamentals of black and white, analogue photography and printing techniques this course will assist students in producing a conceptually devised and technically consistent portfolio. Prior completion of ARTS 2356 is required. Co-req: SMTE 0097.

ARTS 4301 - Advanced Drawing

3 sem. hrs. Emphasis on the development of content through drawing. Research on contemporary trends and process investigation will aid students in the development of visual ideas and lead to a cohesive body or work. Prerequisite: ARTS 2323. Co-requisite: SMTE 0097 Art Student Safety Seminar. May be taken three times for credit.

ARTS 4302 - Advanced Printmaking

3 sem. hrs. Assumes competencies attained in ARTS 3302. Co-requisite: SMTE 0097 Art Student Safety Seminar. May be taken three times for credit.

ARTS 4303 - Advanced Painting

3 sem. hrs. Assumes competencies attained in ARTS 3303. Co-requisite: SMTE 0097 Art Student Safety Seminar. May be taken three times for credit.

ARTS 4304 - Advanced Sculpture


ARTS 4324 - Advanced Ceramics

3 sem. hrs. Assumes competencies attained in ARTS 3324. Co-requisite: SMTE 0097 Art Student Safety Seminar. May be taken three times for credit.

ARTS 4350 - Pre-Columbian Art of Mesoamerica

3 sem. hrs. Explores the history of Pre-Columbian art from Mexico and Central America, from the Olmec through the Aztec cultures. May be taken three times for credit.

ARTS 4352 - Modern Art of Mexico

3 sem. hrs. Explores the history of art during the nineteenth and twentieth centuries in Mexico. May be taken three times for credit.
ARTS 4354 - Global Currents in Contemporary Art

3 sem. hrs. The course will cover key developments in contemporary art from the post-World War II era in the Western context to global currents in the present international arena. From a socio-political perspective, artistic tendencies will be considered as part of a trajectory that saw the center of the art world shift from being Euro- and Anglo-centric in the mid-twentieth century, to one without a discernible center in the early twenty-first century. Analysis of artworks from this decentralized cultural climate will focus on the evolution of conceptualism, the persistence of traditional modes of aesthetic practice, the role of the art market, and notions of environmentalism and sustainability as related to these "transnational transition." The course will consider works from Eastern Europe, South and Central America, the Caribbean, East/West/South/Southeast Asia, Oceania, and Africa.

ARTS 4356 - Contemporary Art Since 1980

3 sem. hrs. The course will examine the evolution of architecture, sculpture, painting, digital media, installation, and interdisciplinary arts in the global context from 1980 to the present, in light of the historical and intellectual background of the period. Topics covered will include the transition from postmodernism to contemporaneity, considering notions of appropriation, commodification, consumerism, memory, history, and globalization. Lectures will be constructed upon thematic analysis of contemporary, primary sources coupled with secondary source material, and complemented by presentation opportunities and class discussion.

ARTS 4365 - Advanced Photography

3 sem. hrs. Assumes competencies attained in ARTS 3365. Covers content as creative expression in addition to basic photographic skills. Co-requisite: SMTE 0097 Art Student Safety Seminar. May be taken three times for credit.

ARTS 4390 - Topics in Art History

3 sem. hrs. May be repeated when topics vary.

ARTS 4391 - Topics in Studio Art

3 sem. hrs. May be repeated when topics vary. Co-requisite: SMTE 0097 Art Student Safety Seminar.

ARTS 4396 - Directed Individual Study
1-3 sem. hrs. See College description. Offered on application Co-requisite: SMTE 0097 Art Student Safety Seminar.

ARTS 4398 - Applied Experience


Astronomy

PHYS 1303 - Introduction to Astronomy: Stars and Galaxies

3 sem. hrs. (2:2) This is one of two courses in the introduction to astronomy sequence which emphasizes the nature of astronomical phenomena over the mathematical analysis of them. This course will focus mostly on the nature of light, the nature and evolution of stars, the material between the stars, the Milky Way Galaxy, external galaxies, and the structure and evolution of the universe as a whole. Corequisite: SMTE 0095 - Physics Laboratory Safety Seminar - Required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. TCCNS Equivalent: PHYS 1303 This course counts toward the natural science component of University Core Curriculum.Offered every Fall.

PHYS 1304 - Introduction to Astronomy: Solar System

3 sem. hrs. (2:2) This is one of two courses in the introduction to astronomy sequence which emphasizes the nature of astronomical phenomena over the mathematical analysis of them. This course introduces astronomical phenomena related to the Solar System such as apparent motion of the Sun, phases of the Moon and apparent and true motion of the planets. Main focus will be on the objects comprising the Solar System: planets, their moons, asteroids, comets and trans-Neptunian bodies. A portion of the course will be dedicated to the formation and development of the Solar System and other, extrasolar planetary systems. The course also will touch the aspects of human exploration of the Solar System and the role of technology in our learning and understanding of the Solar System. This includes the history and the basics of robotic and manned spaceflights. Corequisite: SMTE 0095 - Physics Laboratory Safety Seminar - Required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. TCCNS Equivalent: PHYS 1304 This course counts toward the natural science component of University Core Curriculum.Offered every Spring and Summer.
Atmospheric Science

ATSC 2101 - Weathercasting

1 sem. hrs. (1:0) This course is to practice in preparing and presenting weathercasts for radio and television. The instructors of this course will provide the students with: (1) information in the form of lectures and supplemental readings; (2) opportunities to practice weathercasting on video, and (3) advice, supervision, and guidance. In lecture, students will spend most of the course learning about geography and weathercasting rules. A large portion of the course is to practice the weathercasting and report. Prerequisite ATSC 2403. Offered on sufficient demand.

ATSC 2301 - Weather Observations

3 sem. hrs. (3:0) This course is an introduction of the basic concept of meteorology. The focus is on the measurements of the atmosphere and weather related phenomenon. The principle of the instruments used to measure temperature, pressure, moisture, radiation, precipitation and other weather related properties of the atmosphere will be introduced. The differences among the observations from in-situ, balloon borne, airborne, and satellite borne instruments will be examined and discussed. Prerequisite: ATSC 2403. Offered on sufficient demand.

ATSC 2403 - Introduction to Meteorology

4 sem. hrs. (3:2) This course is an introduction to meteorology and the dynamics of planetary atmospheres. Emphasis on atmospheric accretion, composition, evolution, structure, and dynamics. Lab exercises cover basic measurement techniques, weather maps, and forecasting. A student cannot receive credit for both this course and ESCI 3403 - Introduction to Meteorology. Corequisite: SMTE 0096 Environmental Science Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Spring (on sufficient demand), Fall.

ATSC 3305 - Physical Meteorology

3 sem. hrs. (3:0) This course will cover the fundamentals of atmospheric physics including the atmospheric composition, kinetic theory of gases, moist processes, aerosol, solar and terrestrial radiation, scattering of electromagnetic radiation and radiative transfer. Prerequisites: ATSC 2403 and PHYS 2426. Offered on sufficient demand.
ATSC 3306 - Atmospheric Thermodynamics

3 sem. hrs. (3:0) This course introduces a foundation in the thermodynamics of the atmosphere. After a brief review of general thermodynamics, the emphasis is given to the basic principles that are useful for the application to atmospheric problems. The course covers a number of atmospheric processes that are basically thermodynamic in nature. The specific topics include aerological diagrams, atmospheric statics, and vertical stability. Prerequisite: ATSC 2403 and PHYS 2425. Offered on sufficient demand.

ATSC 3401 - Synoptic Meteorology

4 sem. hrs. (3:2) This course focuses on introducing middle-latitude synoptic weather phenomenon, including planet waves, frontal systems etc. We will apply principles of Dynamic Meteorology in regards to processes in the atmosphere, weather elements and forecasting. We will examine the structure and dynamics of these systems by integrating weather observations with the current state of dynamic theory, numerical weather prediction models, and the physical principles of atmospheric thermodynamics and cloud and precipitation physics. Prerequisite: ATSC 3306 - Atmospheric Thermodynamics. Corequisite: SMTE 0096 Environmental Science Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Offered on sufficient demand.

ATSC 3402 - Mesoscale Meteorology

4 sem. hrs. (3:2) This course focuses on introducing mesoscale weather systems including thunderstorms, squall lines and hurricanes, as well as the mechanisms of tornado and lighting. The methods of observing, analyzing, and predicting these severe weather systems with the interpretation of satellite and radar images will also be introduced in this class. Prerequisite: ATSC 3306 - Atmospheric Thermodynamics. Corequisite: SMTE 0096 Environmental Science Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Offered on sufficient demand.

ATSC 4301 - Dynamic Meteorology I

3 sem. hrs. (3:0) This course focuses on introductory-level atmospheric dynamics. Basic concepts of geophysical fluid dynamics and its application to a variety of atmospheric phenomena are introduced. Specific topics include the equations of motion on rotating earth, vorticity, potential vorticity, divergence, circulation theorem, and planetary wave. Prerequisites: ATSC 3306 and MATH 2414. Offered on sufficient demand.
ATSC 4302 - Dynamic Meteorology II

3 sem. hrs. (3:0) This course is a continuation of ATSC 4301 (Dynamic Meteorology I), which covers the introductory-level atmospheric dynamics. The course introduces more advanced materials including equatorial waves, baroclinic and barotropic instability, two-dimensional turbulence, atmospheric teleconnection, El Nino/Southern Oscillation, Madden-Julian Oscillation, global warming, and numerical modeling of atmospheric circulations. Prerequisite: ATSC 4301. Offered on sufficient demand.

ATSC 4305 - Remote Sensing

3 sem. hrs. (3:0) This course aims to introduce the fundamentals of satellite/airborne remote sensing techniques and demonstrates its application to various aspects of Earth Sciences. Topics include physical principles of remote sensing from ultraviolet to the microwave, radiometry, sensors and sensor technology, calibration, and environmental applications for land, ocean and atmosphere research. Prerequisite: PHYS 2426. Offered on sufficient demand.

ATSC 4335 - Climate and Climate Variability

3 sem. hrs. 3:0 This course intended to guide environmental science undergraduate students in developing a conceptual understanding of Earth's global climate and its variability. Review past climates, present mean state of the climate system, climate variability from seasonal to multi-decadal time scales, and climate change. Special attention will be given to climates of the Gulf of Mexico, Caribbean Sea and surrounding land regions. Plausible climate-change scenarios, as well as mitigation and adaptation strategies will also be discussed. Cross listed with ESCI 4335. Prerequisite: ATSC 2403 or ESCI 3351. Spring.

ATSC 4496 - Directed Independent Study

1-4 sem. hrs. (1-4:0-4) Requires a formal proposal of study to be completed in advance of registration and to be approved by the supervising faculty, the Chairperson, and the Dean of the College. Spring, Summer, Fall.

ATSC 4498 - Internship in Atmospheric Science

ATSC 4498 (Internship in Atmospheric Science) gives ATSC undergraduates an opportunity to obtain valuable paid or unpaid work experience related to atmospheric science, to better position them for employment after graduation. Students contract to work a specified number of hours weekly over a full semester with a state or federal agency or private industry related to atmospheric science, in return for college credit as
follows: 3-6 hrs./week = 1 sem. hr., 6-9 hrs./week = 2 sem. hrs., 9-12 hrs./week = 3 sem. hrs., 12-15 hrs./week = 4 sem. hrs. Students may contract for 1-2 sem. hrs. in a single summer session (5.5 weeks) but may contract for up to 4 sem. hrs. if carrying out internship over a regular long semester or two summer sessions (11 weeks). If interning for the summer, students should increase the number of hours interned weekly to account for the shortened period worked, so total hours interned will be equivalent to those in a regular long semester. A student may intern only twice with a single office or agency. The internships will not apply towards graduate credit. N/A

ATSC 4590 - Selected Topics

1-5 sem. hrs. (1-5:0-4) This course includes special topics with variable content. May be repeated for credit. Offered on sufficient demand. Prerequisite: Consent of the instructor. Offered on sufficient demand.

Bilingual/ESL/Multicultural

BIEM 4344 - The Bilingual Child, Culture, & the Social Studies Curriculum

3 sem. hrs. Studies of the bilingual children, the effect of culture on psychological development, and the challenges of the social studies curriculum.

BIEM 4345 - Language Acquisition and Development

3 sem. hrs. A study of language acquisition and development with special reference to implications for monolingual and bilingual learners.

BIEM 4349 - Linguistics for Bilingual Teachers

3 sem. hrs. A study of the phonological, morphological, syntactical, lexical, and semantic characteristics of contemporary Spanish and English. The course focuses on Spanish-English bilingualism.

BIEM 4351 - The Minority Child

3 sem. hrs. Introduces students to themes and issues associated with the education of the minority child; modes of learning in various curriculum subjects; relation of materials and methods to affective and cognitive aspects of learning; information concerning the learning strengths and needs of children from various minority groups. (May be used to satisfy COE multicultural requirement.)
BIEM 4355 - Language Arts Studies in the Bilingual Curriculum

3 sem. hrs. Basic methodological strategies and assessment skills required to teach language arts in the elementary bilingual classroom are provided. Emphasis is on teaching in Spanish.

BIEM 4356 - Content Area Studies in the Bilingual Curriculum

3 sem. hrs. The concepts and skills required to teach mathematics and science in the elementary bilingual classroom are provided.

BIEM 4357 - Methods of Teaching English as a Second Language

3 sem. hrs. Studies in methodology and techniques available for teaching those whose native language is not English. Testing and assessment of English language learners will be integrated into the course.

BIEM 4360 - Foundations in Bilingualism

3 sem. hrs. The philosophical and legal foundations of bilingual schooling in the United States through a sociohistorical approach. The rationale for bilingual education is examined, as are the basic program models. An overview of bilingual education in Texas is also provided.

BIEM 4393 - Field Studies in Family Literacy

3 sem. hrs. Field experiences designed to develop skills regarding the orientation of the adult population to bilingual/ESL purposes and philosophy, improving parental involvement, and English literacy skills.

BIEM 4696 - Directed Individual Study

3 sem. hrs. Programs will be designed for individual cases through special permission of the Department Chair and Dean. May be repeated for credit when the topic varies.

Biomedical Science

BIMS 2171 - Medical Terminology
1 sem. hrs. (1:0) This course stresses familiarity with and facility in scientific terminology. Areas of focus include: an introduction to scientific terminology, word analysis, etymologies, spelling and pronunciation. Prerequisites: BIOL 1406 - Biology I and BIOL 1407 - Biology II or BIOL 2401 and BIOL 2402. Offered fall and spring semesters every year.

BIMS 2200 - Professional Skills

2 sem. hrs. (2:0) Presentation and discussion of selected topics relating to the professional skills of practicing scientists including literature searches, reviews, paper presentation, professional opportunities and job requirements. Biomedical Sciences and Biology majors only. Offered fall, spring and summer semesters every year.

BIMS 3100 - Essentials for Applied Forensics Laboratory Sciences

1 sem. hrs. Introduction to general laboratory procedures related to the criminal investigation system and regulations (especially related to Texas), lab safety, quality assurance and quality control, professional ethics, specimen acquisition and maintenance and chain of custody. Prerequisites: BIOL 1407 - Biology II and CHEM 1412 - General Chemistry II.

Corequisites: BIMS 3103 (Essentials Laboratory for Forensic Science); SMTE 0092 (Biomedical Lab Safety Seminar) is required for continued participation in this course.

Cannot be taken for credit by Clinical Laboratory Science students.

BIMS 3103 - Essentials Laboratory for Forensic Science

1 sem. hrs. (0:3) Application of essential practices for forensic science. Prerequisite or Co-requisite: CLSC 3200 - Essentials for Applied Laboratory Sciences. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

BIMS 3300 - Animal Nutrition

3 sem. hrs. (3:0) Examines the dietary requirements of both companion animals and livestock. Includes the anatomy, physiology and biochemistry of the gastrointestinal system, nutrient procurement and use, feed additives, growth stimulants, metabolic diseases, and diet therapy. Cross listed with BIOL 3300. Prerequisites: BIOL 1407 - Biology II and CHEM 3411 - Organic Chemistry I. Prerequisite or Corequisite CHEM 3412 - Organic Chemistry II. Offered spring semester every year.
BIMS 3301 - Introduction to Animal Science

3 sem. hrs. (3:0) This course is an orientation into animal science as it relates to agriculture and veterinary medicine. Students will also be guided on issues to ensure successful veterinary school matriculation. Offered fall semester every year.

BIMS 3320 - Survey of Forensic Science

3 sem. hrs. (2:2) A survey of the methods and materials used to gather and process evidence at potential crime scenes. Students are introduced to the legal rules of evidence and their practical ramifications during scientific criminal investigations. In laboratory, students use commonly available processing items and tools to investigate a simulated crime scene. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

BIMS 3325 - Professional Practice in Forensic Science

3 sem. hrs. (3:0) An introduction to industry standards and ethics for professional forensic scientists. This course analyzes cognitive processes, scientific methods and quality control/quality assurance issues in forensic investigations. It also stresses maintaining credibility in an adversarial legal system through the development of technical/scientific speaking and writing skills. Prerequisite: BIMS 3320 - Survey of Forensic Science. Offered spring semester every year.

BIMS 3401 - Pathophysiology

4 sem. hrs. (4:0) This course is a study of the biological basis of human disease. It includes an investigation of inflammation, immunity, and neoplasia, as well as the more common presenting dysfunctions of body systems. Offered every fall. Offered fall semester every year. Prerequisites: CHEM 1411 - General Chemistry I* and either BIOL 1407 - Biology II or BIOL 2401 - Anatomy and Physiology I. Offered fall semester every year.

BIMS 3403 - Molecular Biology

4 sem. hrs. (3:3) Principles of molecular biology including advanced concepts of gene structure, expression and regulation, chromatin structure, recombination, and current molecular biology techniques. Laboratory emphasis is on basic skills for nucleic acid analyses, including extraction, PCR amplification, quantification, restriction, and electrophoresis. DNA sequencing-based approaches are covered including bioinformatics for sequence comparisons, polymorphisms, and molecular identification. Cross listed
with BIOL 3403. Prerequisites: BIOL 2416 - Genetics and BIOL 2421 - Microbiology. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester every year.

BIMS 4111 - Contemporary Scientific Readings

1 sem. hrs. (1:0) Students read one non-fiction book per month addressing some aspect of medicine, science or history (four books per semester), then meet once per month to discuss, analyze and defend their perceptions about the book. Only open to students accepted into the Partnership for Primary Care and the Joint Admissions Medical Program (JAMP), those who are seeking admission into JAMP by participating in the pre-JAMP and students in other sponsored programs. This course may be repeated once for full credit in subsequent semesters. Offered on sufficient demand.

BIMS 4128 - Medicolegal Death Investigations Practicum

1 sem. hrs. This practicum course is designed to provide laboratory and practical experience for the investigation of deaths under the jurisdiction of Texas medical Examiners. This course may involve visits to the office of medical examiners and actual sites of deaths. Corequisites: BIMS 4328 - Medicolegal Death Investigations Lecture and SMTE 0092 - Biomedical Laboratory Safety Seminar.

BIMS 4170 - Biomedical Seminar

1 sem. hrs. (1:0) A series of seminars on current topics of biomedical research. This course may be repeated once for full credit in subsequent semesters. Prerequisite: BIOL 1407 - Biology II. Offered on sufficient demand.

BIMS 4295 - Biomedical Practicum

2 sem. hrs. Supervised learning experience with a community professional in health care (e.g., physician, dentist, veterinarian, chiropractor, pharmacist, physician assistant or physical therapist). On-campus meetings, oral and written reports are required. (Cannot be taken by Clinical Laboratory Science students in lieu of CLSC 4297 - Professional Practicum I.) Prerequisite: BIOL 1407 - Biology II. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. This course may be repeated once for full credit in subsequent semesters. Requires permission of instructor. Offered fall and spring semesters every year.

BIMS 4296 - Clinical Research
2 sem. hrs. Students will actively perform clinical research and learn from and interact with health care professionals such as physicians, nurses, physical therapists, pharmacists, etc. The student will be a functioning member of a research team with specific, measurable responsibilities in clinical studies. Prerequisite: BIOL 1407 - Biology II. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. This course may be repeated once for full credit in subsequent semesters. Requires permission of instructor. Offered spring semester every year.

BIMS 4299 - Directed Independent Research

1-2 sem. hrs. (0:1-2) Independent laboratory- or field-based research project on topic of current interest. Project developed and funded in conjunction with a faculty advisor. Written report required. Prerequisites: Junior class standing, BIOL 1407 - Biology II and CHEM 1412 - General Chemistry II, and consent of instructor. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. May be repeated for a maximum of 4 semester credit hours. Offered any semester upon request by a student and consent of the instructor.

BIMS 4311 - Biology of Cancer

3 sem. hrs. This course is a study of the profile of a cancer cell, and the various causes of human cancer. Contribution of heredity, environmental factors, and infectious agents to oncogenesis will be studied. Cancer screening, diagnosis, and treatment will be discussed. Various types of cancer will be presented. Prerequisite: BIOL 2416 - Genetics. (BIOL 3410 - Cell Biology is strongly recommended.) Offered fall semester of even-numbered years.

BIMS 4323 - Neurobiology

3 sem. hrs. (3:0) Studies the anatomy and physiology of the nervous system. Includes an examination of evolutionary trends in nervous system development, neural function, nerve impulse transmission, sensory and motor systems, behavior, emotional states, learning and memory. Particular emphasis is placed on human functioning. Prerequisite: BIOL 2416 - Genetics. Offered spring semester every year.

BIMS 4327 - Introduction to Toxicology

3 sem. hrs. (3:0) Principles of toxicology including absorption and excretion, biotransformation, chemical carcinogenesis, developmental toxicology and toxic agents.
Prerequisites: BIOL 1407 - Biology II and CHEM 1412 - General Chemistry II. Offered summer semester every year.

BIMS 4328 - Medicolegal Death Investigations Lecture

3 sem. hrs. This course is designed to provide an introduction to the essential procedures of forensic death investigation. Students are instructed in the process of investigating all aspects of a death case falling under the jurisdiction of medical examiners in Texas. The importance of scene management and documentation, case file management, review of physical and psychological evidence, autopsy procedures, and consultation with other forensic science experts leading to the correct classification of cause and manner of death are emphasized. Corequisites: BIMS 4128 - Medicolegal Death Investigations Practicum and SMTE 0092 - Biomedical Laboratory Safety Seminar. Offered spring semester every year.

BIMS 4330 - Biological Basis of Aging

3 sem. hrs. (3:0) Molecular aspects of aging and disease, including biological mechanisms and theories involving cells, tissues, and organ systems. Prerequisites: BIOL 1407 - Biology II and CHEM 3411 - Organic Chemistry I. Offered on sufficient demand.

BIMS 4331 - Health Disparities

3 sem. hrs. (3:0) This course will examine the social/societal, physical/environmental, biological, and genetic/epigenetic factors that are fundamental in creating disparities in health in America. This course will also focus on the formulation and implementation of public policy objectives to reduce and ultimately eliminate health disparities. Prerequisite: BIOL 1407 - Biology II. Offered fall and spring semesters every year.

BIMS 4333 - Medical Entomology

3 sem. hrs. (3:0) An introduction to arthropods of medical and veterinary importance with particular emphasis on the critical roles that they play in their host group's health and well-being. Prerequisite: BIOL 1407 - Biology II. Offered on sufficient demand.

BIMS 4334 - Human Genetics

3 sem. hrs. (3:0) Introduction to the genetic aspects of health and disease. Classic Mendelian and chromosomal disorders are examined as well as the relationship of genetic predisposition to the healthy state and to diseases/conditions. Prerequisites: BIOL 2416 - Genetics and CHEM 3412 - Organic Chemistry II. Offered on sufficient demand.
BIMS 4335 - Endocrinology^

3 sem. hrs. (3:0) Basic biochemical and molecular aspects of hormone physiology, basic endocrine function and hormone action, immune-endocrine interactions, and clinical examples of the outcomes of abnormal function in human disease. Prerequisites: UNIV 1101 First-Year Seminar I* & UNIV 1102 First-Year Seminar II* or BIMS 2200 - Professional Skills or BIOL 2416 - Genetics, and CHEM 3412 - Organic Chemistry II. Offered fall semester of odd-numbered years.

BIMS 4340 - Forensic Science in Criminal Law

3 sem. hrs. (3:0) Students will learn legal procedures, rules of evidence, and applications of forensic science in the area of criminal law. Students will also develop skills in report writing and testifying in court. Prerequisite: BIMS 3320 - Survey of Forensic Science. Offered spring semester every year.

BIMS 4374 - Medical Microbiology

3 sem. hrs. (3:0) Study of common human pathogenic organisms. Includes bacterial, parasitic, viral and fungal infections with emphasis on pathogenesis and treatment. Prerequisite: BIOL 2421 - Microbiology. Offered fall semester every year.

BIMS 4375 - Mechanisms of Microbial Pathogenesis^

3 sem. hrs. (3:0) Studies of how microorganisms invade the host and produce pathological symptoms associated with diseases. Emphasis is on the interaction between various host cells and pathogens, especially molecular mechanisms of pathogenesis and host immune responses. Prerequisite: BIOL 2421 - Microbiology. Offered summer semester of even-numbered years.

BIMS 4395 - Forensic Science Internship

3 sem. hrs. This course is designed to bridge the gap between academic instructions and the forensic science industry by providing real world experience in forensic investigations. Students attend lectures on campus, plus spend five hours/week at a crime laboratory. Students will accompany crime scene investigators to actual crime scenes and participate in several hands on forensic exercises involving mock as well as real investigations. Some activities may result in students spending more that five hours of laboratory or practicum time. Prerequisite or Corequisite: BIMS 3320 - Survey of Forensic Science. Corequisite: SMTE 0092 (Biomedical Safety Seminar); successful completion is required for continued participation in the course. Offered fall semester every year.
BIMS 4396 - Directed Independent Study

1-3 sem. hrs. (1-3:0) Research in areas of current interest. Written report required. Prerequisites: BIOL 1407 - Biology II, CHEM 1412 - General Chemistry II, and consent of instructor. May be repeated for a maximum of 6 semester hours credit. Offered any semester upon request by a student and consent of the instructor.

BIMS 4406 - Immunology

4 sem. hrs. (3:3) An overview of immunology with emphasis on current knowledge of the immune system. Detailed examination of the specific cells, cytokines, antibodies, and molecules that comprise the immune system. Laboratory exercises demonstrate the basic principles and techniques used in immunologic studies. Cross listed with BIOL 4406. Prerequisite: BIOL 2421 - Microbiology (BIOL 3345 - Cell Physiology or BIOL 3410 - Cell Biology is recommended). Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester every year.

BIMS 4410 - Histology

4 sem. hrs. (3:3) The study of cells and tissues, especially the manner in which they are organized to form organs and systems. Laboratories involve intensive use of the microscope to identify cells, tissues and organs. Prerequisite: BIOL 2402 - Anatomy and Physiology II or BIOL 3425 - Functional Anatomy. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester of even-numbered years.

BIMS 4590 - Selected Topics^

1-5 sem. hrs. (1:0-3:4) Variable content. May be repeated for credit. Prerequisite: Consent of the instructor. Corequisite: When laboratory hours are included, safety training given in SMTE 0091 - Biological Laboratory Safety Seminar, SMTE 0092 - Biomedical Laboratory Safety Seminar, or SMTE 0093 - Chemistry Laboratory Safety Seminar is required for continued participation in this course. May be offered any semester: students should consult the online course schedule.

Biology

BIMS 4085 - Major Field Test in Biology
The Major Field Test (MFT) in Biology is a national examination given in the Fall and Spring semesters only. It is a graduation requirement for all Biology and some Biomedical Sciences students. Students enroll in this course during the semester that they plan to take the MFT. There is no cost to the student for either this course or for the MFT. Admission is limited to students who have completed 90 or more semester credit hours. Offered fall and spring semesters every year.

BIOL 1308 - Science for Life I (Non-Majors Biology)

3 sem. hrs. (2:2) A non-majors science course in which students will learn basic biological principles, identify the relevance of science in everyday life, and will understand the scientific method. Hands-on lab activities will reinforce course concepts. This course does not substitute for BIOL 1406 - Biology I or BIOL 1407 - Biology II for science majors. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. TCCNS Equivalent: BIOL 1308 Semester Credit Hours (SCH) from this course may count toward the 6 SCH in the Life and Physical Sciences Foundational Component Area and/or the 6 SCH in the Component Area Option of the University Core Curriculum.Offered fall, spring and summer semesters every year.

BIOL 1406 - Biology I

4 sem. hrs. (3:2) Presentation of basic biological concepts including scientific method, cytology, energetics, nucleic acids and genetics. This course is suitable for all majors.

Placement: Students may place into BIOL 1406 in any one of the following ways: (i) completion of a precalculus or calculus course in high school; or (ii) completion of any of the following courses: MATH 1314, MATH 1316, MATH 2305 or MATH 2413; or (iii) test scores sufficient to be placed into a Level IV or higher course by the Math Department, see http://sci.tamucc.edu/departments/math-and-statistics/placement.html for details.

Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. TCCNS Equivalent: BIOL 1406.

Semester Credit Hours (SCH) from this course may count toward the 6 SCH in the Life and Physical Sciences Foundational Component Area and/or the 6 SCH in the Component Area Option of the University Core Curriculum.Offered fall, spring and summer semesters every year.

BIOL 1407 - Biology II
4 sem. hrs. (3:2) This course is an overview of the major concepts in biological diversity and plant and animal biology. Laboratory work will include individual/team activities as well as technology-related assignments. Prerequisite: BIOL 1406 - Biology I. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. TCCNS Equivalent: BIOL 1407 Semester Credit Hours (SCH) from this course may count toward the 6 SCH in the Life and Physical Sciences Foundational Component Area and/or the 6 SCH in the Component Area Option of the University Core Curriculum. Offered fall, spring and summer semesters every year.

BIOL 2300 - Science Communication

3 sem. hrs. This course involves presentation and discussion of selected topics relating to the professional skills of practicing biological scientists, including basic software instruction, a review of library services pertinent to science, the application of scientific literature research skills, hypothesis generation and statistical tests, critical reviews of scientific articles, and an introduction to ethical issues in science. Offered Fall and Spring.

BIOL 2371 - Principles of Evolution

3 sem. hrs. (3:0) An overview of the mechanisms by which heritable information changes, adaptations develop, and species diversify. Provides a foundation for molecular, cellular, and organismal studies in the biological sciences. Prerequisite: BIOL 1407 - Biology II. Corequisite: SMTE 0091 - Biological Laboratory Safety Seminar Offered fall, spring and summer semesters every year.

BIOL 2401 - Anatomy and Physiology I

4 sem. hrs. (3:2) Structure and function of the human body emphasizing biological chemistry, cell biology, tissues, and the integumentary, skeletal, muscular, and nervous systems. Not recommended for majors in the College of Science and Engineering. To count this course toward a major in the Department of Life Sciences, a student must demonstrate that it is required by professional schools in his or her career track and obtain approval for a substitution from his or her faculty mentor. Students may not receive credit for both this course and either BIOL 3425 - Functional Anatomy or BIOL 3430 - Physiology. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. TCCNS Equivalent: BIOL 2401 Semester Credit Hours (SCH) from this course may count toward the 6 SCH in the Life and Physical Sciences Foundational Component Area and/or the 6 SCH in the Component Area Option of the University Core Curriculum. Not
BIOL 2402 - Anatomy and Physiology II

4 sem. hrs. (3:2) Structure and function of the human body emphasizing blood, growth, development, genetics, and the endocrine, digestive, respiratory, cardiovascular, lymphatic, immune and urogenital systems. Not recommended for majors in the College of Science and Engineering. To count this course toward a major in the Department of Life Sciences, a student must demonstrate that it is required by professional schools in his or her career track and obtain approval for a substitution from his or her faculty mentor. Students may not receive credit for both this course and either BIOL 3425 - Functional Anatomy or BIOL 3430 - Physiology. Prerequisite: BIOL 2401 - Anatomy and Physiology I. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. TCCNS Equivalent: BIOL 2402 Semester Credit Hours (SCH) from this course may count toward the 6 SCH in the Life and Physical Sciences Foundational Component Area and/or the 6 SCH in the Component Area Option of the University Core Curriculum. Not recommended for Biology or Biomedical Sciences majors. Offered fall, spring and summer semesters every year.

BIOL 2416 - Genetics

4 sem. hrs. (3:0:3) Principles of genetic transmissions and molecular basis of heredity and variation. Weekly recitation periods will involve team assignments, problem solving activities, and seminars. Prerequisites: BIOL 1406 - Biology I with a grade of "C" or above and BIOL 1407 - Biology II. TCCNS Equivalent: BIOL 2416. Offered fall, spring and summer semesters every year.

BIOL 2420 - Principles of Microbiology

4 sem. hrs. (3:2) Introduction to microorganisms with emphasis on those of importance in patient care. Principles of disinfection, sterilization, immunity. This class is intended for nursing majors; it cannot substitute for BIOL 2421 - Microbiology. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. TCCNS Equivalent: BIOL 2420 Semester Credit Hours (SCH) from this course may count toward the 6 SCH in the Life and Physical Sciences Foundational Component Area and/or the 6 SCH in the Component Area Option of the University Core Curriculum. Offered fall and spring semesters every year.

BIOL 2421 - Microbiology
4 sem. hrs. (3:3) An introduction to microorganisms including the bacteria, fungi, and viruses. Laboratory involves microbiological techniques and development of basic laboratory skills. Prerequisites: BIOL 1406 - Biology I with a grade of "C" or above, BIOL 1407 - Biology II, CHEM 1411 - General Chemistry I*, CHEM 1412 - General Chemistry II, or permission of instructor. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. TCCNS Equivalent: BIOL 2421 Offered fall and spring semesters every year.

BIOL 2472 - Principles of Botany^  

4 sem. hrs. (3:3) Introduction to the structure, function, diversity and application of plants. Laboratory focus on anatomical features, physiological adaptations, classification, and life cycles. Prerequisites: BIOL 1407 - Biology II and CHEM 1411 - General Chemistry I*, or consent of instructor. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester of odd-numbered years.

BIOL 3300 - Animal Nutrition  

3 sem. hrs. (3:0) Examines the dietary requirements of both companion animals and livestock. Includes the anatomy, physiology and biochemistry of the gastrointestinal system, nutrient procurement and use, feed additives, growth stimulants, metabolic diseases, and diet therapy. Cross listed with BIMS 3300. Prerequisites: BIOL 1407 - Biology II and CHEM 3411 - Organic Chemistry I. Prerequisite or corequisite: CHEM 3412 - Organic Chemistry II. Offered spring semester every year.

BIOL 3325 - Biostatistics  

3 sem. hrs. The application of statistical analyses to biological data. Students will gain an understanding of how to apply statistical analyses to biological data through study of the principles of experimental design including how to frame informative research questions. At a fundamental level, these concepts are linked to the philosophy of science and our understanding of the way the world works. Offered during the spring semester.

BIOL 3345 - Cell Physiology  

3 sem. hrs. (3:0) Emphasis on cellular functions that underlie physiological processes, transport across membranes, membrane potential and excitability, the cell nucleus, and organelles and their relationship to energy, metabolism, and transport mechanisms within the cell. Prerequisites: BIOL 2200 - Professional Skills or BIMS 2200 - Professional Skills, and BIOL 3410 - Cell Biology. Offered on sufficient demand.
BIOL 3403 - Molecular Biology

4 sem. hrs. (3:3) Principles of molecular biology including advanced concepts of gene structure, expression and regulation, chromatin structure, recombination, and current molecular biology techniques. Laboratory emphasis is on basic skills for nucleic acid analyses, including extraction, PCR amplification, quantification, restriction, and electrophoresis. DNA sequencing-based approaches are covered including bioinformatics for sequence comparisons, polymorphisms, and molecular identification. Cross listed with BIMS 3403. Prerequisites: BIOL 2416 - Genetics and BIOL 2421 - Microbiology. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester every year.

BIOL 3410 - Cell Biology

4 sem. hrs. (3:3) Study of cellular architecture and function. Topics include membranes, transport, organelles, cytoskeleton, and signaling mechanisms. Interrelationships of structure, function, energy and metabolism are explored. Laboratory will emphasize basic techniques of cell biology. Prerequisites: BIOL 2416 - Genetics and CHEM 3411 - Organic Chemistry I. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

BIOL 3413 - Invertebrate Zoology

4 sem. hrs. (3:3) Structure, life history, and evolution of the invertebrates with special emphasis on the phylogeny and ecological relationships of the major phyla. Laboratory will involve field trips and survey collections. Prerequisite: BIOL 1407 - Biology II. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

BIOL 3414 - Vertebrate Zoology

4 sem. hrs. (3:3) Structure, life history, and evolution of the vertebrates with special emphasis on the phylogeny and ecological relationships of the classes. Laboratory will involve field trips and survey collections. Prerequisite: BIOL 1407 - Biology II. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester every year.
BIOL 3425 - Functional Anatomy

4 sem. hrs. (3:3) General trends in morphological development and adaptation as demonstrated by the anatomy and embryology of living and extinct chordates. Students may not receive credit for both this course and either BIOL 2401 - Anatomy and Physiology I or BIOL 2402 - Anatomy and Physiology II. Prerequisite: BIOL 1407 - Biology II. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester every year.

BIOL 3428 - Principles of Ecology

4 sem. hrs. (3:3) Introduction to the interrelationships of organisms and their environment. Population structure, community classification and regulation, and energy flow in ecosystems will also be covered. Laboratory sections will focus on experimental design and field techniques in ecology. Prerequisites: BIOL 1407 - Biology II; and BIOL 2200 - Professional Skills or BIMS 2200 - Professional Skills, or UNIV 1101 - First-Year Seminar I* and UNIV 1102 - First-Year Seminar II*; and CHEM 1411 - General Chemistry I*. Prerequisite or Corequisite: MATH 2413 - Calculus I. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered fall and spring semesters every year.

BIOL 3430 - Physiology

4 sem. hrs. (3:3) The study of physiological processes that are the product of complex interactions between tissues, organs and organ systems, with emphasis on the circulatory, respiratory, endocrine, muscular, digestive, and urogenital systems. Particular focus on homeostasis, and the role of the environment and evolution on organ systems. Students may not receive credit for both this course and either BIOL 2401 - Anatomy and Physiology I, or BIOL 2402 - Anatomy and Physiology II. Prerequisite: BIOL 1407 - Biology II. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

BIOL 3455 - Plant form and Function

4 sem. hrs. (3:2) Anatomy of vegetative and reproductive organs of plants, unique cellular features, development and differentiation of cell and tissue types. Emphasis on physiological mechanisms of response and adaptation to the environment. Prerequisite: BIOL 1407 - Biology II, or consent of instructor. Corequisite: Safety training given in
SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester of even-numbered years.

BIOL 3479 - Plant Ecology

4 sem. hrs. (3:3) Structure, physiology, life cycles, and economic impact of plants. Factors influencing diversity, succession and ecological distribution of plants.
Prerequisite: BIOL 1407 - Biology II. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester of odd-numbered years.

BIOL 4100 - Research Ethics and Professionalism

1 sem. hrs. (1:0) A course designed to enhance the professionalism of undergraduate researchers. This course discusses the codified aspects of research ethics, including fabrication, falsification and plagiarism of data; assigning authorship, submitting manuscripts to more than one journal and management of lab teams. It also addresses careers in science, resume writing, producing the successful application and interviewing skills. Permission of instructor required. Offered on sufficient demand.

BIOL 4299 - Directed Independent Research

1-2 sem. hrs. (0:1-2) Independent laboratory- or field-based research project on topic of current interest. Project developed and funded in conjunction with a faculty advisor. Written report required. May be repeated for a maximum of 4 semester hours.
Prerequisites: Junior class standing, BIOL 1407 - Biology II, and CHEM 1412 - General Chemistry II, and consent of instructor. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered any semester upon request by a student and consent of the instructor.

BIOL 4301 - Embryology

3 sem. hrs. (3:0) Studies the events that occur just prior to and during gestation. Includes gametogenesis, chromosomal and single gene aberrations, teratology, and the development of the body systems. Prerequisite: BIOL 2416 - Genetics. Offered fall semester every year.

BIOL 4302 - Coral Reef Conservation

3 sem. hrs. 3:0 Survey of challenges and threats facing coral reef ecosystems in the 21st century and discussion of conservation and management strategies. Topics include biology and ecology of reef ecosystems, climate change impacts, coral bleaching, over-
fishing and the effectiveness and design of marine protected areas. Prerequisite: BIOL 3428 - Principles of Ecology. Offered spring semester every year.

BIOL 4304 - Biology of Viruses

3 sem. hrs. (3:0) Introduction to the study of viruses, including viral life cycles, replication schemes and Baltimore classification of representative bacteriophages, plant and animal viruses. Emphasis on analysis and review of primary literature on viruses. Prerequisites: BIOL 2416 - Genetics, BIOL 2421 - Microbiology and CHEM 1411 - General Chemistry I*. Offered spring semester of odd-numbered years.

BIOL 4308 - Biogeography

3 sem. hrs. This course offers an overview of the theories, methods, and current directions in modern biogeography, emphasizing marine and terrestrial plant and animal species and communities. Juniors or Seniors only, or consent of instructor. Offered spring semester of odd-numbered years.

BIOL 4311 - Biological Bases of Behavior

3 sem. hrs. (3:0) This lecture-based course examines the processes by which neuronal circuits generate behaviors and the mechanisms by which experience modulates the activity of these circuits. Prerequisite: BIMS 4323 - Neurobiology, or permission of the instructor. Offered fall semester every year.

BIOL 4319 - Marine Mammals

3 sem. hrs. (3:0) A taxonomic overview of the marine mammal group including representative life histories of selected species, their distribution and behavior, and the management/conservation and stranding network efforts. Prerequisite: BIOL 1407 - Biology II, or consent of instructor. Offered fall semester every year.

BIOL 4323 - Global Change Ecology

3 sem. hrs. (3:0) An introduction to the effects of climatic and anthropogenic change on terrestrial and aquatic structure and function. Includes readings from the current literature and discussion of controversial articles. Prerequisite: BIOL 3428 - Principles of Ecology. Offered spring semester every year.

BIOL 4328 - Fisheries
3 sem. hrs. (3:0) A study of theory and techniques in fisheries science, including practical fisheries sampling designs and techniques, behavior of fisheries populations and application to resource management with emphasis in tide-influenced waters. Includes readings in the current literature. Prerequisite: BIOL 1407 - Biology II. Offered spring semester every year.

BIOL 4335 - Conservation Biology

3 sem. hrs. Principles and theories relating to the conservation of biological diversity, including patterns and processes creating biological diversity, estimates of extinction rates, consequences of losses of biodiversity and causes of diversity loss. Prerequisite: BIOL 3428 - Principles of Ecology. Offered fall semester every year.

BIOL 4340 - Genomics, Proteomics and Bioinformatics

3 sem. hrs. (3:0) An introduction to integrative biological study using genome-wide approaches and bioinformatics. The "-omics" technologies (Genomics, Proteomics, Metabolomics, etc.) will be surveyed for current and potential contributions to understanding biological function at molecular, cellular, organismal and ecosystem levels. Prerequisites: BIOL 2416 - Genetics and either BIOL 3410 - Cell Biology or CHEM 4401 - Biochemistry I. Offered fall semester every year.

BIOL 4343 - Oceans and Human Health

3 sem. hrs. Healthy oceans are essential to the habitability of our planet – for humans and all other forms of life. Students will explore links between oceans, pollution, human well-being, ecosystem services, resource management, and the science and legislation governing the enforcement of water quality standards. Juniors or Seniors only. Offered in fall of odd-numbered years.

BIOL 4350 - Research and Design

3 sem. hrs. (3:0) Course will include experimental design, literature review of a research topic and laboratory work on the research topic. Prerequisite: Consent of instructor. Offered on sufficient demand.

BIOL 4353 - Down the River: Biology of Gulf Coast Fishes

3 sem. hrs. This course covers aspects of ecology and biogeography of riverine and estuarine fishes while exposing students to field sampling techniques and museum preparation of specimens. This will be a unique opportunity for students to gain an in-depth understanding of the biological complexity of Texas Gulf Coast river systems.
while gaining hands-on experience in field and museum ichthyological techniques that are employed by state, federal and academic researchers alike. Consent of instructor is required to take the course. Students who wish to take the course should have a strong background in zoology. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered during Maymester every year.

BIOL 4355 - Public Aquarium and Animal Care Operations

3 sem. hrs. This course examines the unique requirements needed for public aquariums and zoos to balance animal care and health with public display for general education and conservation research. Juniors or Seniors only or permission of instructor. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course even though no laboratory is scheduled because students will interact with systems containing live animals. Classes will be held at off-campus animal care facilities. Offered during summer every year.

BIOL 4370 - Mariculture

3 sem. hrs. (3:0) Survey of the physiological, behavioral, environmental, and economic parameters governing the culture of selected aquatic species. Included are techniques employed worldwide to produce aquatic products. Prerequisite: BIOL 1407 - Biology II, or consent of instructor. Offered fall semester every year.

BIOL 4371 - Population Genetics

3 sem. hrs. (3:0) An introduction to evolutionary processes and their genetic basis, this course focuses on theoretical and experimental approaches to the study of population genetics, quantitative genetics, evolutionary ecology, and molecular evolution. Prerequisites: BIOL 2416 - Genetics and MATH 2413 - Calculus I, or permission of instructor. Offered fall semester of even-numbered years.

BIOL 4396 - Directed Independent Study

1-3 sem. hrs. (1-3:0) Research in areas of current interest. Written report required. May be repeated for a maximum of 6 semester hours. Prerequisites: BIOL 1407 - Biology II, and CHEM 1412 - General Chemistry II, and consent of instructor. Offered any semester upon request by a student and consent of the instructor.

BIOL 4405 - Limnology
4 sem. hrs. (3:3) The study of the functional relationships and productivity of aquatic communities as they are affected by their physical, chemical, and biotic environment. The influence of man's activities on these systems will be the focus of the course. Prerequisite: BIOL 3428 - Principles of Ecology. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester of odd-numbered years.

BIOL 4406 - Immunology

4 sem. hrs. (3:3) An overview of immunology with emphasis on current knowledge of the immune system. Detailed examination of the specific cells, cytokines, antibodies, and molecules that comprise the immune system. Laboratory exercises demonstrate the basic principles and techniques used in immunologic studies. Cross listed with BIMS 4406. Prerequisite: BIOL 2421 - Microbiology. (BIOL 3410 - Cell Biology or BIOL 3345 - Cell Physiology recommended.) Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester every year.

BIOL 4408 - Microbial Diversity and Ecology

4 sem. hrs. (3:3) Biodiversity and roles of microorganisms in natural environments. Interactions with other micro- and macro-organisms (humans, animals and plants) and with abiotic factors. Unique abilities of microorganisms such as nitrogen fixation and adaptation to extreme environments. Prerequisite: BIOL 2421 - Microbiology. Prerequisite or Corequisite: BIOL 4328 or consent of instructor. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

BIOL 4410 - Mammalogy

4 sem. hrs. (3:3) Systematics and ecology of mammals. Prerequisite: BIOL 1407 - Biology II; (BIOL 3414 - Vertebrate Zoology is also recommended). Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester of even-numbered years.

BIOL 4411 - Animal Behavior

4 sem. hrs. (3:3) An understanding of why animals behave in the manner they do, through examination of both invertebrate and vertebrate species. Prerequisite: BIOL 1407 Biology II, and Junior standing. Corequisite: Safety training given in SMTE 0091
Biological Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

BIOL 4413 - Entomology

4 sem. hrs. (3:3) A broad overview of the natural history, classification, phylogeny, ecology, behavior, development and physiology of insects and their kin. The lab will involve field work, collection and curation. Prerequisite: BIOL 3413 Invertebrate Zoology or consent of instructor. Corequisite: Safety training given in SMTE 0091 Biological Laboratory Safety Seminar is required for continued participation in this course. Offered on sufficient demand.

BIOL 4417 - Field Biology

4 sem. hrs. (1:6) Field Biology is a hands-on course designed to teach students key concepts by immersing them in nature. Topics include adaptations of plants and animals in different habitats, food web interactions, and how biotic and abiotic forces interact to structure natural communities including spatial and temporal variation in communities. Prerequisite: BIOL 3428 - Principles of Ecology. Corequisite: Safety training given in SMTE 0091 Biological Laboratory Safety Seminar is required for continued participation in this course. Offered summer semester (Maymester) every year.

BIOL 4422 - Plant Taxonomy

4 sem. hrs. (3:3) Principles and practice in the classification of flowering plants. Field trips are required. Prerequisite: BIOL 1407 - Biology II. Corequisite: Safety training given in SMTE 0091 Biological Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester every year.

BIOL 4425 - Ornithology

4 sem. hrs. (3:3) Systematics, anatomy, physiology, ecology, behavior, and field identification of birds. Prerequisite: BIOL 1407 - Biology II; (BIOL 3414 - Vertebrate Zoology is also recommended). Corequisite: Safety training given in SMTE 0091 Biological Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester of odd-numbered years.

BIOL 4429 - Marine Botany

4 sem. hrs. (3:3) The ecology of marine plants with emphasis on identification, life histories, and environmental factors of distribution. Prerequisite: BIOL 1407 - Biology II. Corequisite: Safety training given in SMTE 0091 Biological Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester of even-numbered years.
Seminar is required for continued participation in this course. Offered fall semester every year.

BIOL 4432 - Ichthyology

4 sem. hrs. (3:3) Systematics, evolution, biology, and ecology of fishes. Laboratory identification of marine and freshwater fishes collected during field excursions. Prerequisite: BIOL 1407 - Biology II; (BIOL 3414 - Vertebrate Zoology is also recommended). Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

BIOL 4433 - Parasitology

4 sem. hrs. (3:3) An introduction to parasitology with emphasis on internal parasites and appropriate references to human endoparasites and parasites of veterinary importance. Prerequisite: BIOL 2421 - Microbiology, or consent of instructor. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester every year.

BIOL 4435 - Biological Microtechniques

4 sem. hrs. (2:4) Theory and techniques of processing specimens for histochemistry and microscopic examination. Laboratory includes preparation of tissues and small specimens for analysis and display. Prerequisites: BIOL 1407 - Biology II and CHEM 3411 - Organic Chemistry I. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered summer semester of even-numbered years.

BIOL 4436 - Marine Ecology

4 sem. hrs. (3:3) Habitats and community structure in marine environments; biotic and abiotic factors governing the distribution of marine organisms. Prerequisite: BIOL 3428 - Principles of Ecology. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester every year.

BIOL 4442 - Herpetology

4 sem. hrs. (3:3) Systematics, ecology, and behavior of amphibians and reptiles. Prerequisite: BIOL 1407 - Biology II; (BIOL 3414 - Vertebrate Zoology is also
recommended). Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course.

BIOL 4444 - Estuarine Organisms

4 sem. hrs. (3:3) Systematics, distribution, and ecology of estuarine macrofauna and macroflora. Weekend field trips and individual study required. Prerequisite: BIOL 3413 - Invertebrate Zoology. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester every year.

BIOL 4446 - Tropical Ecosystems & Conservation

4 sem. hrs. (3:3) Survey of the ecology and conservation issues of the major ecosystems in the tropics and field techniques used to study tropical forest ecology. Prerequisite: BIOL 3428 - Principles of Ecology or permission of instructor. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester of even-numbered years.

BIOL 4452 - Ecology and Evolution of Fishes

4 sem. hrs. This course covers aspects of fish ecology from individual, population, community, and ecosystem levels. We discuss the role of the environment on fish physiology and behavior, food-web dynamics, community assembly and diversity, ecosystem interactions, and anthropogenic impacts on fishes with a focus on conservation. Prerequisite: BIOL 4432 - Ichthyology or consent of instructor. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Field trips and laboratory studies required. Offered every spring semester.

BIOL 4547 - Marine Science Field Camp

5 sem. hrs. Students learn techniques required to properly conduct marine science field research. Practical, hands-on experience is gained in a variety of topics including biotic and abiotic sample collection and processing, quantitative analysis of field data, evaluation of environmental factors, survival and distribution of living organisms, and the structure of biotic communities. Juniors or seniors only. Consent of the instructor is required to register for the course. Offered during Maymester every year.

BIOL 4590 - Selected Topics^
1-5 sem. hrs. (1:0-3:4) Variable content. May be repeated for credit. Prerequisite: Consent of the instructor. Corequisite: When laboratory hours are included, safety training given in SMTE 0091 - Biological Laboratory Safety Seminar, SMTE 0092 - Biomedical Laboratory Safety Seminar, or SMTE 0093 - Chemistry Laboratory Safety Seminar is required for continued participation in this course. May be offered any semester: students should consult the online course schedule.

BIOL 4598 - Biology Internship

2-6 sem. hrs. Two to six semester credit hours may be earned by working in an internship position in a governmental agency, private industry, or other appropriate venue. Juniors or Seniors only; requires consent of faculty member who will oversee/administer the internship.

BIOL 4609 - Field and Sampling Techniques

6 sem. hrs. (3:9) The study of techniques required for proper field work in the biological sciences. The course includes ecological sampling methods, safety, logistics, equipment operation and maintenance and travel concerns. Prerequisite: consent of instructor. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered summer semester every year.

Business Law

BLAW 3310 - Legal Environment of Business*

3 sem. hrs. An introduction to the legal systems of government, business and society. Includes coverage of ethics, the judicial process, basics of contracts law, constitutional issues, business torts and crimes, creditor/debtor relationships, business organizations, international law, environmental law, and various aspects of regulation of business. Prerequisite: BUSI 0011.

BLAW 3320 - Law for Personal Business

3 sem. hrs. A study of the laws that influence each individual in the conduct of personal life and business affairs. Includes such topics as the court and legal system, family law, torts, property law, insurance, wills and trusts, contracts, and other areas of current interest. Prerequisite: Junior standing or above.
BLAW 4342 - Law for Professional Certification

3 sem. hrs. Designed as a second course in business law for students who desire a more in-depth knowledge. Individuals planning to take professional certification exams that contain a business law component are encouraged to enroll in this course. Prerequisites: BLAW 3310 (or permission of instructor) and Junior standing or above.

BLAW 4350 - Human Resource Law

3 sem. hrs. A study of the laws relating to human resource management in today's business environment. Covers discrimination, labor law, retirement regulations, safety issues and employee/management topics. Emphasis on current issues, cases and legislation. May be used as a management major elective or business elective. Prerequisite: Junior standing or above.

BLAW 4390 - Current Topics in Business Law

1-3 sem. hrs. Selected topics for special study related to laws impacting business, organizations and human resources. May be repeated for credit when topics vary. Prerequisites: Junior standing or above, and others depending on topic. Contact the Dean's office for information.

BLAW 4396 - Directed Individual Study

1-3 sem. hrs. Individual supervised study and a final report. Prerequisites: permission of instructor, Junior standing or above, and others depending on selected topic. Inquire at the Dean's office for information.

Business Administration

BUSI 0011 - Cob Student Code of Ethics and Plagiarism*

0 sem. hrs. The emphasis of this non-credit, web-based course is educational. It covers the provisions in the COB Student Code of Ethics and covers information related to the issue of plagiarism. It prepares business majors to successfully complete an online test to meet a requirement for graduation. Prerequisites: students must have officially declared a major offered by the College of Business. Graded CR/NC.

BUSI 0088 - Graduation Requirements Review
0 sem. hrs. 0 sem. hrs. The purpose of this non-credit, web-based course is educational. This no cost course provides important information to prepare students for a successful progression toward graduation. Co-requisite: MGMT 3312. BUSI 0088 is CR/NC.

**BUSI 1310 - Introduction to the Business Environment**

3 sem. hrs. An overview of the nature of business and its environment. Emphasizes the dynamic role of business in everyday life and its importance to society.

Not open to Juniors or Seniors majoring in business. TCCNS Equivalent: BUSI 1301

**BUSI 3315 - Entrepreneurship, Creativity, & Innovation***

3 sem. hrs. This is an initial course in entrepreneurship. The student will learn the description and analysis of the characteristics that produce creative opportunities and commercially sustainable innovations. This will include learning about the personal and organizational characteristics, business and societal planning tools, and practices of entrepreneurs. Factors inside and outside the entrepreneurial firm that influence creativity and innovation are also considered as they affect successful business decisions.

Prerequisite: Sophomore standing or above

**BUSI 4310 - International Business**

3 sem. hrs. An understanding of international business including its importance in today's world, the evolution of international institutions and the monetary system, the differences and similarities among nations and cultures, and the special characteristics of the business functions in a global setting. Prerequisite: Junior standing or above.

**BUSI 4320 - New Venture Creation**

3 sem. hrs. New venture creation teaches students how to analyze the feasibility of a new product, service or innovation within the entrepreneurial organization. Students learn to develop business plans necessary for the creation of start-up enterprise to include specific business practices, finances, and obligations of the firms created and maintained by entrepreneurs. Factors inside and outside the entrepreneurial enterprise are researched and analyzed as they affect successful new venture business decisions.

Prerequisites: BUSI 3315 or MGMT 3312, Junior standing or above and/or permission of the instructor for non-business majors.

**BUSI 4390 - Current Topics in Entrepreneurship**
1-3 sem. hrs. Selected topics for special study related to entrepreneurship. May be repeated for credit when topics vary. Junior standing or above, and others depending on topic. Contact the Dean's office for information.

BUSI 4396 - Directed Individual Study

1-3 sem. hrs. Individual supervised study and a final report. Prerequisites: permission of instructor, Junior standing or above, and others depending on selected topic. Inquire at the Dean's office for information.

Chemistry

CHEM 1305 - Introductory Chemistry*

3 sem. hrs. (3:0) A one-semester principles course for students in non-science related majors covering the major concepts of chemistry (atomic structure, bonding, stoichiometry, elementary thermodynamics) and the role of chemistry in contemporary society (polymers, energy, pollution, etc.). Will not substitute for CHEM 1411. TCCNS Equivalent: CHEM 1305 This course counts toward the natural science component of the University Core Curriculum. Either CHEM 1305 or CHEM 1411, but not both, may be applied towards the core requirement. This course is offered in Fall, Spring and both Summer sessions. In addition, it is offered as a regular in-person course and an online course.

CHEM 1411 - General Chemistry I*

4 sem. hrs. (3:3) The foundation course in chemistry. Stoichiometry, chemical equilibria, atomic structure, chemical bonding, periodic properties, thermodynamics, chemical kinetics, and descriptive chemistry of the elements. Laboratory involves development of basic skills. This course counts toward the natural science component of the University Core Curriculum. Either CHEM 1305 - Introductory Chemistry or CHEM 1411, but not both, may be applied towards the core requirement. This course is offered in Fall, Spring and typically during both Summer sessions. NOTE: All students registering for this course must also register for SMTE 0093. This is an online Chemistry Lab Safety course that must be completed before the end of the second week of the semester in order to be able to continue attending the lab section of the course. Also not that since lecture and lab are linked you can not drop the lab without dropping the lecture as well. TCCNS Equivalent: CHEM 1411
CHEM 1412 - General Chemistry II

4 sem. hrs. (3:3) The continuation of CHEM 1411 - General Chemistry I*, the foundation course in chemistry with emphasis on quantitative aspects. Laboratory involves development of basic skills. This course counts toward the natural science component of the University Core Curriculum. Prerequisite: CHEM 1411 - General Chemistry I* and MATH 1314 - College Algebra or equivalent math competency. This course is offered in Fall, Spring and typically both Summer sessions. NOTE: All students registering for this course must also register for SMTE 0093. This is an online Chemistry Lab Safety course that must be completed before the end of the second week of the semester in order to be able to continue attending the lab section of the course. Also note that since lecture and lab are linked you cannot drop the lab without dropping the lecture as well. TCCNS Equivalent: CHEM 1412

CHEM 2490 - Special Topics

1-4 sem. hrs. May be repeated for credit. Subject materials variable. Offered on sufficient demand.

CHEM 3411 - Organic Chemistry I

4 sem. hrs. (3:3) The structure, nomenclature, synthesis, reactions, and reaction mechanisms of the principal classes of organic compounds. Stereochemistry and spectroscopy of organic compounds. Laboratory involves separation and synthetic techniques and development of basic skills. This course is offered in Fall, Spring and typically during the Summer I session. Prerequisite: CHEM 1411. NOTE: All students registering for this course must also register for SMTE 0093. This is an online Chemistry Lab Safety course that must be completed before the end of the second week of the semester in order to be able to continue attending the lab section of the course. Also note that since lecture and lab are linked you cannot drop the lab without dropping the lecture as well. This course is offered in Fall, Spring and typically during the Summer I session.

CHEM 3412 - Organic Chemistry II

4 sem. hrs. (3:3) A continuation of CHEM 3411. The course concludes with a survey of the structures of biomolecules. Laboratory involves spectroscopy and qualitative analysis techniques. This course is offered in Fall, Spring and typically during the Summer II session. Prerequisite: CHEM 3411 NOTE: All students registering for this course must also register for SMTE 0093. This is an online Chemistry Lab Safety course that must be completed before the end of the second week of the semester in order to be able to
continue attending the lab section of the course. Also note that since lecture and lab are linked you cannot drop the lab without dropping the lecture as well.

CHEM 3417 - Quantitative Analysis

4 sem. hrs. (3:3) A course in quantitative analysis, which includes chemical statistics and the use of acid-base, complexation, precipitation, and redox reactions to perform analyses and separations. Laboratory includes standard volumetric and gravimetric methods and development of basic quantitative techniques. This course is typically offered in Spring. Prerequisite: CHEM 1412. NOTE: All students registering for this course must also register for SMTE 0093. This is an online Chemistry Lab Safety course that must be completed before the end of the second week of the semester in order to be able to continue attending the lab section of the course. Also note that since lecture and lab are linked you cannot drop the lab without dropping the lecture as well.

CHEM 3418 - Instrumental Analysis

4 sem. hrs. (3:3) An introduction to instrumental methods of analysis: spectroscopy, chromatography, and electrochemical methods. Laboratory involves use of instrumentation in chemical analysis. This course is typically offered in Fall and Spring. Prerequisite: CHEM 1412. NOTE: All students registering for this course must also register for SMTE 0093. This is an online Chemistry Lab Safety course that must be completed before the end of the second week of the semester in order to be able to continue attending the lab section of the course. Also note that since lecture and lab are linked you cannot drop the lab without dropping the lecture as well.

CHEM 4085 - Major Field Test in Chemistry

0 sem. hrs. (0:0) The Major Field Test (MFT) in Chemistry is a national examination given in the Fall and Spring semesters only. It is a graduation requirement for all Chemistry students. Students enroll in this course during the semester that they plan to take the MFT. There is no cost to the student for either this course or for the MFT. Admission is limited to students who have completed 90 or more semester credit hours. This course is typically offered in Fall and Spring.

CHEM 4292 - Senior Chemistry Seminar

2 sem. hrs. (2:0) Presentation and discussion of selected topics in chemistry. Includes literature searches and reviews, paper presentations, survey of professional opportunities and requirements, career guidance and job searching skills. Prerequisite: senior standing or consent of instructor. This course is typically offered in Fall and Spring.
CHEM 4309 - Advanced Instrumental Analysis

3 sem. hrs. (3:0) An advanced course in analytical chemistry covering the underlying theories of instrumental methods. This course is typically offered on an irregular basis. Prerequisites: CHEM 3411, CHEM 3412, and CHEM 3418.

CHEM 4320 - Drugs, Toxins and Natural Products Chemistry

3 sem. hrs. (3:0) The chemistry and biological activity of pharmaceuticals, toxins and selected natural products. Examines how chemical structure relates to biological activity. Also examines action of antibiotics, chemotherapy agents, analgesics, steroids, and compounds targeting the central and peripheral nervous system. This course is typically offered in Fall and Spring. Prerequisite: CHEM 4401.

CHEM 4344 - Chemical Oceanography

3 sem. hrs. (3:0) The study of the oceans and seas as a chemical system, including interactions with both the biota and the solid earth. This course is typically offered in Spring. Prerequisite: CHEM 1412.

CHEM 4350 - Polymer Chemistry

3 sem. hrs. (3:0) An advanced lecture course in organic chemistry. Characterization of polymers. Polymerization mechanisms. Current research directions such as biomedical applications and electroactive polymers. This course is offered on an irregular basis. Prerequisite: CHEM 3412.

CHEM 4401 - Biochemistry I

4 sem. hrs. (3:3) The structure and function of carbohydrates, lipids, proteins, and nucleic acids. An introduction to enzyme kinetics, cell membrane structure and biochemical signaling. Laboratory exercises demonstrate the basic principles and techniques used in Biochemistry. This course is typically offered in Fall, Spring and Summer. Prerequisites: CHEM 3412 and one year of Biology. NOTE: All students registering for this course must also register for SMTE 0093. This is an online Chemistry Lab Safety course that must be completed before the end of the second week of the semester in order to be able to continue attending the lab section of the course. Also note that since lecture and lab are linked you cannot drop the lab without dropping the lecture as well.

CHEM 4402 - Biochemistry II
CHEM 4407 - Advanced Inorganic Chemistry

4 sem. hrs. (3:3) A survey of inorganic chemistry. Theories of atomic structure, covalent bonding, ionic solids, metallic solids, and coordination compounds. Modern acid-base concepts. Laboratory involves the synthesis of inorganic compounds. This course is typically offered on an irregular basis. Prerequisite: CHEM 3412; Physical Chemistry (CHEM 4423) is recommended. NOTE: All students registering for this course must also register for SMTE 0093. This is an online Chemistry Lab Safety course that must be completed before the end of the second week of the semester in order to be able to continue attending the lab section of the course. Also note that since lecture and lab are linked you cannot drop the lab without dropping the lecture as well.

CHEM 4420 - Physical Biochemistry

4 sem. hrs. (3:3) A fundamental approach to the study of physical and chemical phenomena, including the study of thermodynamics, gases and phase equilibria. This course is typically offered on an irregular basis. Prerequisites: CHEM 1412, PHYS 1402 or PHYS 2426, MATH 2414. NOTE: All students registering for this course must also register for SMTE 0093. This is an online Chemistry Lab Safety course that must be completed before the end of the second week of the semester in order to be able to continue attending the lab section of the course. Also note that since lecture and lab are linked you cannot drop the lab without dropping the lecture as well.

CHEM 4423 - Physical Chemistry I

4 sem. hrs. (3:3) A fundamental approach to the study of physical and chemical phenomena, including the study of thermodynamics, gases and phase equilibria. This course is typically offered in Fall. Prerequisites: CHEM 1412, PHYS 1402 or PHYS 2426, MATH 2414. NOTE: All students registering for this course must also register for SMTE 0093. This is an online Chemistry Lab Safety course that must be completed
before the end of the second week of the semester in order to be able to continue attending the lab section of the course. Also note that since lecture and lab are linked you cannot drop the lab without dropping the lecture as well.

CHEM 4424 - Physical Chemistry II

4 sem. hrs. (3:3) A continuation of CHEM 4423, including the study of chemical kinetics, electrochemistry, molecular structure, and quantum mechanics. This course is typically offered in Spring. Prerequisite: CHEM 4423. NOTE: All students registering for this course must also register for SMTE 0093. This is an online Chemistry Lab Safety course that must be completed before the end of the second week of the semester in order to be able to continue attending the lab section of the course. Also note that since lecture and lab are linked you cannot drop the lab without dropping the lecture as well.

CHEM 4443 - Environmental Chemistry

4 sem. hrs. (3:3) A study of the impact of chemistry on the environment, including topics of air pollution, water pollution, and beneficial chemical modifications of the environment. Laboratory devoted to field techniques of sampling, sample preservation, and analytical techniques applied to the environment. This course is typically offered in Spring. Prerequisite: CHEM 1412, CHEM 3411. NOTE: All students registering for this course must also register for SMTE 0093. This is an online Chemistry Lab Safety course that must be completed before the end of the second week of the semester in order to be able to continue attending the lab section of the course. Also note that since lecture and lab are linked you cannot drop the lab without dropping the lecture as well.

CHEM 4490 - Special Topics

1-4 sem. hrs. May be repeated for credit. Subject materials variable. Offered on sufficient demand.

CHEM 4696 - Directed Independent Study

1-6 sem. hrs. Requires a formal proposal of study to be completed in advance of registration, to be approved by the supervising faculty, the chairperson and the dean of the College.
CHIN 1311 - Chinese I

3 sem. hrs. Introduction to listening, speaking, reading and writing skills within a Chinese cultural framework. For students without previous knowledge of Mandarin Chinese. (Language Laboratory required. One hour per week.) A lab fee is required for this course. TCCNS Equivalent: CHIN 1311

CHIN 1312 - Chinese II

3 sem. hrs. Continued practice in listening, speaking, reading and writing skills within a Chinese cultural framework. For students without previous knowledge of Mandarin Chinese. CHIN 1311 - Chinese I or equivalent is required. (Language Laboratory required. One hour per week.) A lab fee is required for this course. TCCNS Equivalent: CHIN 1312

Civil Engineering

CEEN 2315 - Geomatics and Surveying Engineering

3 sem. hrs.
(3:0) Concepts, principles, and applications of surveying methods and technology for planar measurement, geo-positioning and mapping, and civil engineering project design and management are introduced. Topics include: land surveying methods for field measurement; principles of distances, elevation and angles; geodetic datums and coordinate systems; topographic mapping; basic error theory in measurement and computational adjustments; traverse calculations; introduction to Global Positioning System (GPS). Computational exercises to process, analyze, and adjust survey data will provide practical experience in civil survey design and assessment. Prerequisites: MATH 1316 – Trigonometry or MATH 2413 – Calculus I. Offered Fall.

CEEN 3320 - Geotechnical Engineering I

3 sem. hrs.
(3:0) Geotechnical engineering focuses on how soil supports and affects the performance of structures built on or below the earth's surface. This course will introduce the terminology used in geotechnical engineering and provide a basic understanding of important geotechnical principles and analytic methods. The topics to be covered in this class includes: index soil properties and soil classification; soil permeability and pore water movement; soil stresses; soil compressibility, consolidation and settlement; shear
strength of soil; engineering soil properties and measurement. Prerequisites: ENGR 3315 – Fluid Mechanics and ENGR 3320 – Strength of Materials. Offered Spring.

CEEN 3330 - GIS for Civil and Environmental Engineering

3 sem. hrs. (3:0) Introductory design principles presented on the use of geographic information system (GIS) technology for modeling and analysis of civil and environmental engineering systems. Introduction to the integration of geospatial data and analysis for decision making and management for site selection, mitigation, change analysis, modeling and assessment. Topics covered include map projections and georeferencing, vector and raster data models, acquisition and manipulation of data, cartography, current topics, data quality, and basic spatial analysis. The course integrates commercial GIS software (ESRI ArcGIS) for performing engineering analysis and problem solving. Students will participate in both individual software labs and team projects. Prerequisites: COSC 1330 – Programming for Scientists, Engineers and Mathematicians and CEEN 2315 Geomatics and Surveying Engineering (or equivalent). Offered Spring.

CEEN 4302 - Remote Sensing

3 sem. hrs. (3:0) Provides the foundations to interpret, process, and apply remotely sensed data acquired by satellites and sub-orbital platforms (aircraft, UAVs) for mapping and analysis of our natural and built environment. Principles of electromagnetic energy-matter interaction, remote sensing systems and data characteristics, digital image processing, and information extraction methods will be covered. Included is treatment of: aerial photogrammetry; multispectral, thermal, and hyperspectral sensing; earth observation satellites; radar and lidar; emergent topics. Emphasis will be on their use for geospatial and environmental applications. Offered Fall. Prerequisites: PHYS 2425 - University Physics I and GISC 3300 - Geospatial Mathematical Techniques (or equivalent).

CEEN 4304 - Civil and Construction Materials

3 sem. hrs. (3:0) The course provides instruction on civil and construction engineering materials used in the construction of highway structures such as pavements, bridges, retaining walls, box culverts, etc. In particular, the course concentrates on the engineering properties of aggregates, metals, portland cement concrete (PCC) and hot-mix asphalt (HMA) as well as the mixture design of PCC and HMA. The course targets those interested in civil engineering or construction engineering and management. Prerequisites: ENGR 3320 Strength of Materials. Offered Fall.
CEEN 4306 - Transportation Engineering

3 sem. hrs. (3:0) This course will give an introduction to the basic concepts, theory, and practice of transportation engineering as related to planning, design, and operations of the transportation system. The topics to be covered in this class includes: fundamental principles in planning, design and operation of transportation systems; issues and challenges in transportation; driver and vehicle performance capabilities; highway geometric and pavement design principles; traffic analysis and transportation planning. Prerequisites: CEEN 2315 – Geomatics and Surveying Engineering. Offered Fall.

CEEN 4310 - Water Resources Engineering

3 sem. hrs. (3:0) This course will give an overview of the basic concepts, analysis methods, and design procedure. The topics to be covered includes: hydraulic processes, hydrological cycle, streamflow prediction, uncertainty analysis, water demands, water distribution systems, reservoir and dams, urban stormwater drainage, and water resources planning and management. Prerequisites: ENGR 3315 – Fluid Mechanics. Offered Spring.

CEEN 4312 - Principles of Hydraulics and Hydrology

3 sem. hrs. (3:0) This course will give an introduction to the basic concepts, theory, and analytic methods of hydraulics and hydrology. The topics to be covered in this class includes: water flow through pipes and pumping systems, water flow through open channels and hydraulic structures, watershed hydrology, and urban sewer systems. Prerequisites: ENGR 3315 – Fluid Mechanics. Offered Fall.

CEEN 4322 - Geotechnical Engineering II – Coastal Environment

3 sem. hrs. (3:0) This course introduces key concepts and basic analysis and design techniques in geotechnical engineering for coastal environments. Emphasis is on the interaction between oceanic dynamic processes (waves, currents, tides, and sediment transport) and coastal regions (harbors, structures, beaches and estuaries) and on the engineering approaches necessary to prevent adverse effects caused by this interaction. Geotechnical aspects of coastal engineering projects will include design of traditional structures and exposure to softer coastal engineering techniques. Prerequisites: CEEN 3320 – Geotechnical Engineering I. Offered Fall.

CEEN 4324 - Structural Engineering
3 sem. hrs. (3:0) This class will provide students with a solid background on principles of structural engineering. Students will be exposed to the theories and concepts of both concrete and steel design and analysis both at the element and system levels. Hands-on design experience and skills will be gained and learned through problem sets and a comprehensive design project. An understanding of real-world open-ended design issues will be developed. Prerequisites: ENGR 3320 – Strength of Materials and MATH 3315 – Differential Equations. Offered Spring.

CEEN 4330 - Introduction to Bridge and Pavement Engineering

3 sem. hrs. (3:0) This course focuses on the materials, technology and procedures used to design and manage road pavements, with reference to the National Roads Authority (NRA) Design Manual for roads and bridges, and guidelines issued by the Department of Transport, Tourism and Sport (DTTS). Prerequisites: CEEN 4304 – Civil and Construction Materials. Offered Spring.

CEEN 4332 - Traffic Engineering

3 sem. hrs. (3:0) The purpose of this course is to introduce fundamentals of traffic engineering including data collection, analysis, and design. Emphasis is on the safe and efficient operations of roadway intersections. Traffic engineering studies traffic control devices, capacity and level of service analysis of freeways and urban roads. Applications of traffic operations include computer simulation models to the design of isolated intersection and coordinated traffic signal control systems. Prerequisites: CEEN 4306 – Transportation Engineering. Offered Spring.

CEEN 4342 - Construction Management

3 sem. hrs. The course focuses on management techniques to solve the unique problems associated with a construction project. Study of Construction Management functions including Project Management, Cost Management, Time Management, Quality Management, Contract Administration, and Safety Management will be covered. Emphasis is put on the application of each function throughout the project phases. Prerequisite: CEEN 4304 Civil and Construction Materials. Offered Spring.

CEEN 4396 - Directed Independent Study

1-3 sem. hrs. (1-3) Requires a formal proposal of study to be completed in advance of registration, approval of supervising faculty and department chairperson. Prerequisites: Varies. Offered Fall, Spring, and Summer.
Clinical Laboratory Science

CLSC 3102 - Essentials Laboratory for Clinical Laboratory Science

1 sem. hrs. (0:3) Application of essential practices for clinical laboratory science. Prerequisite or Co-requisite: CLSC 3200 - Essentials for Applied Laboratory Sciences. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

CLSC 3200 - Essentials for Applied Laboratory Sciences

2 sem. hrs. (1:0) Introduction to general laboratory procedures, laboratory safety and regulations, quality assurance, professional ethics, specimen acquisition, sample maintenance and microscopy. Includes an introduction to the health care, public health and criminal investigation system. Prerequisites: BIOL 1407 - Biology II and CHEM 1412 - General Chemistry II. Offered fall semester every year.

CLSC 4120 - Hemostasis

1 sem. hrs. Studies of blood coagulation with an emphasis on the interaction of blood vessels, platelets, and certain plasma proteins. Disorders of hemostasis will be discussed along with diagnostic testing. Prerequisite: CLSC 4420 Hematology

CLSC 4182 - Seminar – Clinical Correlations

1 sem. hrs. (1:0) Informal lectures covering the newest developments in laboratory medicine. Includes discussion of the patient's clinical laboratory results, selection and interpretation of laboratory tests, and presentation of research. Requires permission of instructor and application. Offered summer semester (summer II only) every year.

CLSC 4200 - Professional Skills for Clinical Laboratory Scientists

2 sem. hrs. (2:0) Study of the role of the medical laboratory professional in the health care system. Includes professional ethics, legal responsibility, medical laboratory management, instructional methods, evaluation of clinical laboratory methods, medical laboratory instrument selection, clinical research and current professional topics. Requires permission of instructor and application. Offered summer semester (summer I only) every year.

CLSC 4280 - Introduction to the Clinical Laboratory Profession
2 sem. hrs. (2:0) Studies of the latest instrumentation, instrument selection, basic research, quality assurance and statistics used in the clinical laboratory. Permission of instructor and application required. Prerequisites: CLSC 3200 - Essentials for Applied Laboratory Sciences, CHEM 4401 - Biochemistry I, and MATH 1442 - Statistics for Life*. Offered spring semester every year.

CLSC 4297 - Professional Practicum I

2 sem. hrs. Supervised learning experience in selected departments of the clinical laboratories. Clinical Laboratory Science students only. Requires permission of instructor and application. Offered spring semester every year.

CLSC 4325 - Clinical Chemistry I

3 sem. hrs. (2:3) Principles and practice of procedures found in general clinical chemistry. Includes the methodology of diagnostic tests and normal and abnormal human physiology as applied to diagnosis of pathological conditions. Prerequisite: CHEM 4401 - Biochemistry I. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

CLSC 4326 - Clinical Chemistry II

3 sem. hrs. (3:0) Continuation of CLSC 4325 - Clinical Chemistry I. Emphasis on advanced clinical chemistry topics and procedures. Prerequisite: CLSC 4325 - Clinical Chemistry I. Offered spring semester every year.

CLSC 4370 - Clinical Microbiology I

3 sem. hrs. (2:3) Lecture and laboratory studies of common pathogenic bacteria. Emphasis is on staining, cultural, and differential biochemical characteristics, methods of isolation from body fluids and susceptibility to therapeutic agents. Prerequisite or Corequisite: BIOL 2421 - Microbiology. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

CLSC 4371 - Clinical Microbiology II

3 sem. hrs. (2:3) Lecture and laboratory studies of parasitic, viral, mycological and unusual bacterial human pathogens. Emphasis on methods of isolation from body fluids, identification methods and correlation with pathology. Prerequisite: CLSC 4370 - Clinical Microbiology I. Corequisite: Safety training given in SMTE 0092 - Biomedical
Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester every year.

CLSC 4382 - Advanced Medical Laboratory Procedures

3 sem. hrs. (2:3) Lecture and laboratory studies of the newest development in laboratory diagnostic medicine. Includes advanced clinical chemistry, immunology and molecular diagnostic procedures. Permission of instructor and application required. Prerequisites: CLSC 4325 - Clinical Chemistry I, BIMS 4406 - Immunology or BIOL 4406 - Immunology, and CHEM 4401 - Biochemistry I. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered spring semester every year.

CLSC 4420 - Hematology

4 sem. hrs. (3:3) Studies of the formation, function and identifying characteristics of the cellular elements of human blood and other body fluids in health and diseased states and laboratory studies on blood coagulation. Lecture and laboratory emphasize the enumeration, morphology and staining characteristics of normal and abnormal cells and hemostasis. Prerequisites: BIOL 2416 - Genetics and CHEM 4401 - Biochemistry I. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

CLSC 4430 - Clinical Immunology

4 sem. hrs. (3:3) Theoretical aspects of the immune response and its relationship to the diagnosis of disease and clinical immunohematology. Lecture and laboratory stress the detection, identification and characterization of antibodies, blood grouping and typing, compatibility testing, blood component therapy, HLA testing and diagnosis of pathological conditions. Prerequisite: BIMS 4406 - Immunology or BIOL 4406 - Immunology. Corequisite: Safety training given in SMTE 0092 - Biomedical Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

CLSC 4598 - Professional Practicum II

5 sem. hrs. Continuation of CLSC 4297 - Professional Practicum I. Supervised learning experience in selected departments of the clinical laboratories. Prerequisite: CLSC 4297 - Professional Practicum I. Clinical Laboratory Science students only. Requires
permission of instructor and application. Offered summer semester (summer I only) every year.

CLSC 4599 - Professional Practicum III

5 sem. hrs. Continuation of CLSC 4598 - Professional Practicum II. Supervised learning experience in selected departments of the clinical laboratories. Prerequisite: CLSC 4598 - Professional Practicum II. Clinical Laboratory Science students only. Requires permission of instructor and application. Offered summer semester (summer II only) every year.

Communication

COMM 1311 - Foundation of Communication*

3 sem. hrs. This course examines a breadth of topics fundamental to the study of communication and works to improve students' communication skills in three primary contexts: interpersonal relationships, group/teamwork, and presentational speaking. TCCNS Equivalent: SPCH 1311

COMM 1315 - Public Speaking

3 sem. hrs. Research, composition, organization, and delivery of speeches for various purposes and occasions, with emphasis on listener analysis and on informative and persuasive techniques. TCCNS Equivalent: SPCH 1315

COMM 1318 - Interpersonal Communication*^

3 sem. hrs. Predominant issues related to verbal and nonverbal communication with a focus on interpersonal relationships. TCCNS Equivalent: SPCH 1318

COMM 1321 - Business and Professional Communication

3 sem. hrs. Introduces students to basic skills, principles, and contexts of communication in business and professional settings by combining public speaking with aspects of communication ethics and organizational, small group, and interpersonal communication. Students will learn practical skills via presentations, research, resumes, interviews, meetings, and professional writing grounded in communication theory. TCCNS Equivalent: COMM 1321 (or SPCH 1321) Face-to-Face 1-24%
COMM 1342 - Voice and Diction

3 sem. hrs. Basic voice training, including techniques for vocal production, manipulation, and control. Practical application of the vocal apparatus will be emphasized, including techniques of enunciation, projection, articulation, and the use of dialects. (Credit may not be given for both this course and THEA 1342.) TCCNS Equivalent: SPCH 1342

COMM 2330 - Introduction to Public Relations

3 sem. hrs. An exploration of the history and development of public relations including the theory and process of public relations, and the various publics and careers associated with the public relations industry.

COMM 2333 - Small Group Communication

3 sem. hrs. Application of small group theories and techniques as they relate to group process and interaction. TCCNS Equivalent: SPCH 2333

COMM 2335 - Presentational Communication

3 sem. hrs. Advanced study of the principles and methods of formal presentations for various purposes and audiences to further develop students into effective communicators. Course assignments will include various special occasion speeches, dynamic instructional speeches, extemporaneous speaking, creation of effective visual aids, and a group community action presentation.

COMM 3310 - Communication Theory

3 sem. hrs. The foundations, processes, and effects of human communication. A survey of contemporary theory and research, including language theory, nonverbal and small group communication, persuasion, and mass communication.

COMM 3311 - Nonverbal Communication

3 sem. hrs. The study of body movement, touch, paralanguage, space, environment, and other nonverbal factors in the communication process.

COMM 3325 - Relational Communication

3 sem. hrs. Lecture This course is an advanced interpersonal communication course that focuses on communication within relationships, such as family, romantic, friendship, and workplace relationships. Prerequisite: COMM 1318
COMM 3330 - Persuasion

3 sem. hrs. Various theories and forms of rhetorical persuasion. Topics include practical reasoning skills, psychological theories of persuasion, and critical responses to persuasive messages.

COMM 3335 - UIL Debate and Speech

3 sem. hrs. Understanding the University Interscholastic League debate and speech events. Students explore approaches to analytical reasoning, research delivery, and the conceptual basis for debate and gain practical experience in understanding and judging UIL in the high school setting.

COMM 3350 - Leadership

3 sem. hrs. Leadership focuses on the communication of influence that takes place to achieve goals or encourage change. Specific attention will be devoted to a variety of approaches, processes, and theories that will provide students general knowledge of leadership.

COMM 4314 - Gender Communication

3 sem. hrs. Examination of communication about women and men, as well as communication between them. Special course emphasis on explanations of gender, sexist language, media depiction of the sexes, and gender communication in the formation of social and work relationships.

COMM 4325 - Research Methods

3 sem. hrs. The purpose of this course is to increase student's knowledge of the research process used in the Communication Studies discipline. Specifically, the course will allow students the opportunity to learn the goals of communication research and scrutinize various techniques for creating academic research and assessing academic knowledge.

COMM 4331 - Public Relations Campaigns

3 sem. hrs. An application of the public relations process (including primary and secondary research, goals and objective development, the selection of proper strategies and tactics for implementation, and an evaluation of campaign effectiveness) through the production and presentation of a public relations campaign for a local organization. Prerequisite: COMM 2330.
COMM 4335 - Crisis Communication

3 sem. hrs. lecture An application of crisis communication (including organizational research, risk and vulnerability assessment, strategic communication, and performance and damage evaluation) through the development and presentation of a crisis communication plan for a local organization.

COMM 4345 - Intercultural Communication

3 sem. hrs. An investigation of the process by which persons and groups of different cultural backgrounds create understanding. Types of knowledge, skills, and sensitivity necessary for intercultural communication are developed.

COMM 4350 - Organizational Communication

3 sem. hrs. Examination and exploration of realistic applications of communication theories within the framework of an organization. Particular attention will be given to techniques for diagnosing communication problems, as well as strategies for effecting change in communication.

COMM 4360 - International Leadership

3 sem. hrs. Study of international leadership in the context of communication and in multi-cultural and diverse settings. Influence of global economy, politics, social values in international leadership.

COMM 4380 - Senior Seminar in Communication Studies

3 sem. hrs. This course serves as the capstone for the Communication Studies degree. It offers students opportunities to synthesize information learned in other Communication courses and demonstrate abilities to think critically, conduct independent research linked to appropriate communication theories, create individual and collaborative projects that demonstrate effective use of communication strategies, and present written and oral work at an advanced level. Prerequisite: COMM 2335, COMM 3310, COMM 4325, and Senior rank.

COMM 4390 - Topics in Communication Studies

3 sem. hrs. Study of specialized topics and themes in communication studies. May be repeated when topics vary.
COMM 4394 - Professional PR Portfolio

3 sem. hrs. Students prepare documents, explore strategies for enhancing their marketability, and assemble a professional portfolio of public relations work. Prerequisites: COMM 2330, MEDA 2350, COMM 4331, and COMM 4335.

COMM 4396 - Directed Individual Study

1-3 sem. hrs. See College description. By application. Only 3 semester hours of Directed Individual Study credit may be counted toward the major. Prerequisite: Approval of Instructor.

COMM 4399 - Communication Internship

3 sem. hrs. Practical experience in the field through placement in a communication internship position. Students interested in applying for the internship course must have a minimum cumulative GPA of 3.0; have at least junior standing at the university; be a communication studies major or minor, or public relations minor; have completed at least 12 hours of coursework in the major or minor at TAMU-CC. Preferred applicants will have a minimum communication or public relations GPA of 3.25. All applicants must solicit a recommendation from a Department of Communication and Media faculty member. Course may be taken three times for credit; however only 3 semester hours of internship credit may be counted toward the major. A second internship may apply to the communication studies minor or public relations minor; a third internship may be used as a free elective. Authorization to repeat the internship course is contingent on the students' successful completion of the previous internship experience. This course is graded Credit/No Credit. Prerequisite: Approval of Internship Coordinator for the Department of Communication and Media.

MEDA 1305 - Film and Culture*^*^*

3 sem. hrs. Introduction to film aesthetics, history, and criticism for non-communication majors. Establishes a vocabulary for examining films and their roles in American culture. Satisfies the university core curriculum requirement in fine arts.

MEDA 1307 - Media and Society

3 sem. hrs. History and development of mass media in the United States as well as the organizational, institutional, and cultural dynamics of today's major commercial media. Included are substantial components on print media, radio, television, cinema, and computer Internet communication systems. Course themes include media production and
consumption, globalization, cultural imperialism, race, class, gender in media and popular culture. TCCNS Equivalent: COMM 1307

MEDA 1315 - Editing

3 sem. hrs. Intensive instruction in postproduction software, postproduction workflows, and editing techniques for moving images.

Online classification: Face-to-Face 1-24%.

MEDA 1380 - Introduction to Media Production

3 sem. hrs. Overview of tools and skills necessary to produce digital media content such as editing, cinematography, sound recording, producing and directing for film, television and new media.

MEDA 2311 - Media Writing

3 sem. hrs. This course is designed to teach the fundamentals of writing for the mass media. It includes instruction in professional methods and techniques for gathering, processing and delivering content.

MEDA 2313 - Intermediate Production: Documentary

3 sem. hrs. Principles and techniques of media production with a focus on non-fiction filmmaking. Prerequisites: MEDA 1315 and MEDA 1380. Online Classification: Face-to-Face 1-24%.

MEDA 2315 - News Reporting

3 sem. hrs. This course focuses on advanced news-gathering and writing skills. It concentrates on the three-part process of producing news and features, which include discovering the news, reporting the news and writing news in different formats. This course will incorporate all forms of news writing, including: press release, print news, web news and TV and radio broadcast news. Prerequisite: MEDA 2311 Media Writing.

MEDA 2316 - Intermediate Production: Narrative
3 sem. hrs. Principles and techniques of media production with a focus on fictional narrative filmmaking. Prerequisite: MEDA 1315 and MEDA 1380. Online Classification: Face-to-Face 1-24%.

MEDA 2350 - Media Performance

3 sem. hrs. This course is designed to teach students articulation, pronunciation, effective writing and on-air performance techniques for all kinds of media environments with videotaped and audio taped presentations.

MEDA 2366 - Media Forms

3 sem. hrs. Examination of the formal elements of media texts, including cinematography/videography, sound, and editing, across a variety of media platforms and styles. Includes instruction in writing formal analysis. TCCNS Equivalent: DRAM 2366

MEDA 2367 - Media Industries

3 sem. hrs.

Examination of the media industries, including how they have evolved and now operate, as well as broader theoretical and practical implications of changing media organizations and practices. Includes instruction in researching contemporary and historical modes of media production, distribution, and exhibition.

MEDA 3301 - Television Criticism

3 sem. hrs. Exploration of how TV communicates through the study of programming content, production practices, and audiences. Includes a laboratory for screening assigned programs. Prerequisite: MEDA 1307

MEDA 3302 - Film Criticism

3 sem. hrs. Exploration of the critical approaches to the study of film from a variety of historical and theoretical perspectives, with an emphasis on narrative film and some consideration of experimental cinema. Includes a laboratory for screening assigned films. Prerequisite: MEDA 1307.

MEDA 3303 - Documentary Studies
3 sem. hrs. Historical and critical study of the non-fictional film with attention to changing technologies, to varying uses and styles of documentary, and to contemporary critical and theoretical issues. MEDA 1307

MEDA 3310 - Media Theory and Research

3 sem. hrs. This course is intended to immerse students in the leading theoretical and methodological approaches employed within the field of media studies to gain understating of media texts, popular culture, and audiences. Closely affiliated with cultural studies, qualitative research methods will be a primary focus. Readings and case studies will offer students insight into the way these methods are being used in the field, including their limitations and strengths. A series of assignments will allow them to propose, design, and conduct multiple sample research projects and analyze data in ways that engage with a variety of theories.

MEDA 3314 - Television Production

3 sem. hrs. Fundamentals of studio television production. Field-based course, transportation required.

MEDA 3317 - Advanced Postproduction

3 sem. hrs. Intensive instruction in advanced postproduction software, postproduction workflows and editing techniques for moving images. Prerequisite: MEDA 3315 Editing

MEDA 3318 - Editing & Layout

3 sem. hrs. This course will teach the principles of copy editing, with an emphasis on accuracy and fairness, as well as the principles of layout and design for print and web publications. Prerequisite: MEDA 2311 Media Writing

MEDA 3340 - Photojournalism

3 sem. hrs. This course will instruct on photojournalism skills and methods for use in visual communication. It will examine ethical and legal limitations to photography and in editing. Student work in this class will be eligible for possible publication in the student newspaper or its accompanying website.

MEDA 3351 - Screen Comedy
3 sem. hrs. Examination of the varieties of screen comedy, from silent comedy to contemporary forms, with some attention to the history and theory of comic performance. Prerequisite: MEDA 1307.

MEDA 3360 - Screenplay Writing

3 sem. hrs. Writing and analysis of the screenplay for narrative fictional films. Writing projects include problem-solving exercises and work on an original screenplay. Course can be repeated for credit.

MEDA 3361 - Sports Writing

3 sem. hrs. This course will teach the elements of sports writing and reporting to include interviewing and writing to cover different aspects of sports coverage. This course will address content for print, Internet, radio and television. Campus-related sports assignments will be eligible for publication in the student newspaper and its accompanying website.

MEDA 3380 - New Media and Communication*^  

3 sem. hrs. Examines how new media technologies impact society and change communication practices. Particular emphasis placed on different modes of cultural expression and social interaction made possible through digital media and the Internet.

MEDA 4305 - Interpreting and Making the Visual Culture of Hollywood

3 sem. hrs. This course examines the visual culture of Hollywood media production in a focused context, such as during a particular decade, or in relation to a particular genre, star, or cultural topic. The visual culture studied will include not just primary media texts such as films or television programs, but also posters, trailers, and other promotional materials, as well as visual culture not produced directly by the media industries, such as contemporary art. Students will learn and utilize basic design techniques to create their own artwork related to these materials, including movie posters, album covers, and sequential art. As resources and equipment availability allow, these designs will be produced using techniques including print-making.

MEDA 4308 - Advanced Production: Commercial

3 sem. hrs. Advanced techniques in the creation of client based commercial media content with a focus on conceptualization, production, and delivery of a commercial, PSA, or corporate video project. Prerequisite: MEDA 2313, MEDA 1315, and MEDA 2316.
MEDA 4310 - Advanced Production: Documentary

3 sem. hrs. Advanced techniques in the creation of documentary media content with a focus on conceptualization, production, and distribution of a short documentary film. Course can be repeated once for credit. This course serves as a capstone for the Media Production Track. Prerequisites: MEDA 2313

MEDA 4312 - Advanced Production: Narrative

3 sem. hrs. Advanced techniques in the creation of narrative media content with a focus on scripting, production, and distribution of a short narrative film. Course can be repeated once for credit. This course serves as a capstone for the Media Production Track. Prerequisites: MEDA 2316.

MEDA 4317 - After Effects

3 sem. hrs. Conceptualization and execution of digital media projects using visual effects, motion graphics and composition through the creation of video, animation, special effects and more using Adobe’s After Effects postproduction software. Prerequisite: MEDA 1315 (formerly MEDA 3315) TCCNS Equivalent: None

MEDA 4340 - Advertising Criticism

3 sem. hrs. The examination of advertising history through critical and cultural approaches. Prerequisite: MEDA 1307.

MEDA 4341 - First Amendment and Ethical Issues in the Media

3 sem. hrs. Study of legal and ethical issues in mediated communication, including the First Amendment and free speech, control, and regulation of broadcasting, obscenity in the media. Prerequisite: MEDA 1307. Non-majors may be admitted with permission by the instructor. Non-majors may be admitted with permission by the instructor.

MEDA 4342 - Global Media and International Communication

3 sem. hrs. Examines global media in the context of international communication, diversity of media and cultural production, styles of media practices abroad, including differences between U.S. news values and ethical and moral dimensions across differing societies of the world.

MEDA 4343 - News Publication
3 sem. hrs. This course will be a hands-on newsroom experience with the student newspaper the Island Waves and its accompanying website. Individual assignments will be assigned by editors of the student media. Assignments may include writing, advertising, photography, cartooning and video production and editing. Students are required to work on the staff of the official college publication during prescribed hours under faculty supervision. Prerequisite: MEDA 2311 Media Writing. It is also strongly recommended that students successfully complete MEDA 2315 News Reporting and MEDA 3318 Editing & Layout.

MEDA 4370 - Advanced New Media Project

3 sem. hrs. lecture As the capstone course for the New Media Arts Certificate, this course guides students through the planning, development, and execution of new media-based project. Prerequisite: MEDA 2313, MEDA 1315 and ARTS 2356,

MEDA 4381 - Senior Seminar in Media Studies

3 sem. hrs. lecture The capstone course for seniors in the Media Studies offers opportunities to synthesize information learned in other Media Studies courses through in-depth study of a particular topic. Students will demonstrate their abilities to think and write critically, and to conduct independent research or produce media projects at an advanced level. Topics vary by instructor. Prerequisite: MEDA 1307, MEDA 3310, and Senior rank.

MEDA 4390 - Topics in Media Arts

3 sem. hrs. Study of specialized topics and themes in media arts. May be repeated when topics vary.

MEDA 4396 - Directed Individual Study

1-3 sem. hrs. See College description. By application. Only 3 semester hours of Directed Individual Study credit may be counted toward the major. Prerequisite: Approval of Instructor.

MEDA 4399 - Media Arts Internship

3 sem. hrs. Practical experience in the field through placement in a media internship position. Students interested in applying for the internship course must have a minimum cumulative GPA of 3.0; have at least junior standing at the university; be a media arts (media studies or media production emphasis) major or digital journalism minor; have completed at least 12 hours of coursework in the major or minor at TAMU-CC. Preferred
applicants will have a minimum media arts or digital journalism GPA of 3.25. All applicants must solicit a recommendation form from a Department of Communication and Media faculty member. Course may be taken three times for credit; however only 3 semester hours of internship credit may be counted toward the major. A second internship may apply to the digital journalism minor; a third internship may be used as a free elective. Authorization to repeat the internship course is contingent on the students' successful completion of the previous internship experience. This course is graded Credit/No Credit. Prerequisite: Approval of Internship Coordinator for the Department of Communication and Media.

Computer Science

COSC 1100 - Skills for Computing Professionals I
1 sem. hrs. (0:2) This course focuses on beginning to develop professional skills that computer scientists will need to be successful in their careers and lives. Communication skills will include writing and giving oral presentations. Ethical issues will be explored. This is a class for computing professionals. As such, professional decorum will be required at all times. Prerequisites: None. Corequisites: This is a corequisite for computer science majors in COSC 1435. Fall, Spring

COSC 1315 - Computer Literacy
3 sem. hrs. (3:0) A balanced introduction to the use and application of computers in modern society involving both descriptive information and hands-on laboratory participation. Includes a discussion of the general principles of operation of a computer and a brief history of the development of computing. The use of a personal computer operating system, common application software, and simple computer programming concepts are introduced. Satisfies university computer literacy requirement. Prerequisite: None. TCCNS Equivalent: COSC 1301 On demand

COSC 1320 - C Programming
3 sem. hrs. Introduces the fundamental concepts of structured programming in the C language. Topics include data types; control structures; functions, structures, arrays, pointers, pointer arithmetic, unions, and files; the mechanics of running, testing, and debugging programs; introduction to programming; and introduction to the historical and social context of computing. Prerequisite: MATH 1314 or higher.
COSC 1330 - Programming for Scientists, Engineers, and Mathematicians

3 sem. hrs. 3:0 Introduction to computer programming for solving discipline specific problems using computers. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes coverage of language syntax, data and file structures, input/output devices, and disks/files. TCCNS Equivalent: ENGR 2304 Fall, Spring

COSC 1435 - Introduction to Problem Solving with Computers I

4 sem. hrs. (3:2) A broad introduction to many Computer Science topics including: algorithms, problem solving, operating system concepts, computer architecture, and programming languages. Prerequisites: MATH 1314 - College Algebra or placement beyond MATH 1314 - College Algebra. TCCNS Equivalent: COSC 1436 Fall, Spring, Summer

COSC 1436 - Introduction to Problem Solving with Computers II

4 sem. hrs. (3:2) This course is a continuation of COSC 1435, completing the syntax of the language used as the programming tool in COSC 1435 and providing an introduction to basic data structures. It includes the intermediate study of the basic concepts of problem solving. Topics covered include basic one- and two-dimensional array handling, recursion, basic searching and sorting algorithms, abstract data types, and dynamic data structures. Prerequisite: COSC 1435 - Introduction to Problem Solving with Computers I. TCCNS Equivalent: COSC 1437 Fall, Spring, Summer

COSC 2190 - Introduction to Research

1 sem. hrs. (2:0) This course introduces students to the fundamentals of research. Basic research methodologies are introduced. Students will research and study contemporary issues in computer science and present their work in oral and written formats. Class meets two hours per week. Prerequisite: COSC 1435 - Introduction to Problem Solving with Computers I.

COSC 2325 - Game Design

3 sem. hrs. (2:2) This course will teach students the techniques for computer game design and how to work as part of a game development team from initial conception through release, including the game design process, game concepts, how and why we play games, character development, storytelling, user experience, game play, and core mechanics of games. Prerequisite: None. Spring
COSC 2334 - Computer Architecture

3 sem. hrs. (3:0) A concentrated study of internal computer concepts. Computer organization, machine and assembly language are emphasized. Prerequisites: COSC 1435 - Introduction to Problem Solving with Computers I, MATH 2305 - Discrete Mathematics I. Fall, Spring

COSC 2348 - Introduction to Scripting

3 sem. hrs. This course introduces students to Windows and Unix/Linux shell scripting. The course covers basic scripting concepts including decision statements, control statements, functions and files manipulation. Advanced scripting tools such as grep, awk and sed are covered in this course. Prerequisite: COSC 1435. Spring

COSC 2360 - Cyber Security

3 sem. hrs. This course introduces students to cyber security. A broad range of cyber security issues will be covered, including social engineering attacks, secure coding, computer security, Internet of Things (IoT) security, mobile security, data security, network security, physical security and forensics. This course will cover the concepts of prevention, detection, and response to cyber security threats. COSC 1435. Fall, Spring

COSC 2390 - Selected Topics I

3 sem. hrs. (2:2) Variable content. May be repeated for credit depending on topic. Offered on sufficient demand. Does not count toward total hours required for BS in Computer Science. Prerequisite: None.

COSC 2391 - Selected Topics II

3 sem. hrs. (3:0) This is a selected topics course with no lab component. Variable content. May be repeated for credit depending on topic. Offered on sufficient demand. Does not count toward total hours required for BS in Computer Science. Prerequisite: None.

COSC 2437 - Data Structures

4 sem. hrs. (3:2) This course provides a thorough study of standard structures used in the storing and retrieving of data and the processes by which these structures are created and manipulated. Topics include: object oriented design, linked lists, classes, trees, graphs, hashing, stacks, queues, sorting, searching, and recursion. Prerequisite: COSC 1436 - Introduction to Problem Solving with Computers II. Prerequisite or Corequisite: MATH 2305 - Discrete Mathematics I. TCCNS Equivalent: COSC 2436 Fall, Spring
COSC 2465 - Linux Systems

4 sem. hrs. (3:2) This course focuses on providing students with essential knowledge and skills to implement, administer, and troubleshoot servers in a networked environment. Operating system concepts, such as installing a standalone system, file systems authentication, and user support services are explored. Topics will include security issues, user and group administration, active directory services, DHCP, DNS, SSH, backup and restoration strategies and techniques, integrated mass storage technologies and alternative client technologies. Prerequisite: COSC 1435 - Introduction to Problem Solving with Computers I. Fall

COSC 2466 - Network Systems

4 sem. hrs. (3:2) This course focuses on the standards and technologies used to establish inter-network structures that will support a TCP/IP data stream for higher-level services to operate over. This course introduces local area networks (LAN) and wide area networks (WAN). Topics include the TCP/IP and open system interconnection (OSI) models, cabling, switches, routers, protocols, subnetting, and networking hardware and software. Initial switch and router configuration will be examined and evaluated. Prerequisite: COSC 1435 - Introduction to Problem Solving with Computers I, COSC 2465 - Linux Systems. Spring

COSC 2470 - COBOL Programming

4 sem. hrs. (3:2) A concentrated study of the COBOL language as applied to fundamental business computing problems and other data management applications. Prerequisite: COSC 1435 - Introduction to Problem Solving with Computers I. Fall

COSC 3305 - Survey of Computer Security and Societal Issues

3 sem. hrs. (3:0) Survey of contemporary computer security, information assurance and societal issues. Topics may include: protecting the individual and/or business from computer crimes, protecting against system failure, protecting the environment through green computing. The course is intended for all majors and is offered on a credit/no-credit basis. May not be used as a CS elective for CS majors. Prerequisite: None. On demand

COSC 3324 - Object-oriented Programming

3 sem. hrs. (3:0) A study of concepts, terminology, and methodologies used in object-oriented systems, languages, and applications. Students will design and implement
software systems using object-oriented analysis and design techniques. Prerequisite: COSC 2437 - Data Structures. Fall, Spring

COSC 3325 - Game Programming

3 sem. hrs. (2:2) This course will introduce the student to techniques and tools used for all aspects of programming games. Topics will include game graphics, game physics, game AI, and sound. The course will contain lectures and hands-on labs. Students will work independently and in teams. Prerequisite: COSC 2437 - Data Structures. Spring, even years

COSC 3335 - Programming for Unmanned Aircraft Systems

3 sem. hrs. (3:0) This course introduces software development for Unmanned Systems (US). Students will be introduced to a variety of relevant topics including the different US platforms, design and implementation of algorithms for US, user interface for US, and state-of-the-art US applications, challenges & solutions. Prerequisites: COSC 1330 Programming for Scientists, Engineers, and Mathematicians OR COSC 1435 Introduction to Problem Solving with Computers I, MEEN 4335 - Introduction to Aircraft Aerodynamics and Performance On demand

COSC 3336 - Introduction to Database Systems

3 sem. hrs. (3:0) A study of contemporary database management system concepts, terminology, and methodology for use and implementation. Commercially available systems are discussed and used with emphasis upon the relational model. Prerequisite: COSC 2437 - Data Structures. Fall, Spring

COSC 3342 - Network Design and Management

3 sem. hrs. (3:0) A broad-based introduction to all major aspects involved in designing and managing computer networks. Both logical and physical networking technologies are covered including media options, physical topologies, network architectures and communication protocols. Prerequisite: None. Fall, even years

COSC 3346 - Operating Systems

3 sem. hrs. (3:0) Introduction to operating systems concepts, principles, and design. Topics include: processes and threads, CPU scheduling, mutual exclusion and synchronization, deadlock, memory management, file systems, security and protection, networking, and distributed systems. Selected existing operating systems are discussed,
compared, and contrasted. Prerequisites: COSC 2437 - Data Structures and COSC 2334 - Computer Architecture. Fall, Spring

COSC 3351 - Internet Programming

3 sem. hrs. (3:0) Study of prominent web technologies with a focus on creating interactive web applications. Both client-side and server-side programming will be covered. Students will design and implement a web based project using technologies covered in class. Prerequisite or Corequisite: COSC 3336 - Introduction to Database Systems. Fall, Spring

COSC 3352 - Mobile Programming

3 sem. hrs. (3:0) This course introduces software development for mobile platforms. Students will learn skills for creating and deploying mobile applications. Includes software engineering topics as related to mobile programming, primarily in how software design differs on mobile platforms. Prerequisite: COSC 2437 - Data Structures. Spring

COSC 3353 - Survey of Programming Languages

3 sem. hrs. (3:0) A study of selected programming languages for students familiar with programming. Students will write programs in a variety of languages. Prerequisite: COSC 2437 - Data Structures. Spring

COSC 3360 - Human-computer Interaction

3 sem. hrs. (3:0) This course introduces concepts and techniques for Human Computer Interaction. Particular emphasis will be placed on vision, audio, and language solutions for use in human-computer interactive systems. In addition, the students will learn how to apply the methods to solve simple HCI problems. Prerequisite: COSC 1436 - Introduction to Problem Solving with Computers II. Fall, even years

COSC 3370 - Software Engineering

3 sem. hrs. (3:0) This course introduces students to software engineering principles for the development and maintenance of high quality large software systems. Topics include: software life cycle, delivering on time and within budget, and the development and application of processes and tools for managing the complexities inherent in creating these systems. Prerequisite: COSC 2437 - Data Structures. Fall, Spring

COSC 3371 - Computer Information Systems Economics
3 sem. hrs. (3:0) An introduction to concepts in information technology and software engineering with a focus on economics and managerial issues. Topics include cost benefit analysis, software and effort estimation, feasibility analysis, information systems proposals, software team coordination, and project management. May not be used as a CS elective for CS majors. On demand

COSC 3372 - Network Security

3 sem. hrs. This course provides an introduction to the fundamentals of computer and network security and security laws and ethics, topics include, identification of vulnerabilities, forms of attack, appropriate countermeasures, and the detection and defense of the same. Techniques for the securing of hardware, software and data, including physical security are covered. Prerequisites: COSC 2465 - Linux Systems.

COSC 3373 - Software Project Management

3 sem. hrs. This course introduces students to the principles for software project management for small and medium-size projects. Many aspects of software project management, including management process, scope definition, time and cost estimation, quality control, human resources, communication, risks and project procurement management will be discussed. A number of applications and tools will be used to implement a class project. COSC 3370. Spring

COSC 3380 - Undergraduate Research Experience

3 sem. hrs. (3:0) This course provides undergraduate students with a range of practical experiences in conducting real-world research. Students will communicate their ideas in oral and written forms. Students will interact with other students and professionals in ongoing research projects. Experience will be gained in all stages of research: proposing a project, designing an approach, and reporting results. Prerequisite or Corequisite: COSC 2437 - Data Structures. On demand

COSC 3385 - Numerical Methods

3 sem. hrs. (3:0) This course introduces concepts for solving problems numerically using computers. Students will learn about number systems, errors of finite representation, and iteration. A survey of basic numerical methods including: solutions to nonlinear equations, solutions to linear systems, approximation, interpolation, zeros of functions, numerical differentiation and integration, and Monte-Carlo methods. Prerequisites: MATH 2413 - Calculus I, COSC 1330 - Programming for Scientists, Engineers, and Mathematicians or COSC 1435 - Introduction to Problem Solving with
Computers I. MATH 2414 - Calculus II and MATH 3311 - Linear Algebra are recommended. Fall

COSC 3400 - Skills for Computing Professionals

4 sem. hrs. (3:2) This course focuses on the professional skills that computer scientists will need to be successful in their careers. There are two key areas of study, communication skills needed by computer scientists and their ethical responsibilities. Communication skills will include: technical writing from a computer science perspective, presentation skills, client interviewing, and reading technical articles. Ethical issues will be explored from a computer science perspective. Prerequisite: ENGL 1302 - Writing and Rhetoric*. On demand

COSC 3474 - Cyber Defense I

4 sem. hrs. This course covers cryptographic tools, cryptographic algorithms, types of malicious software, forms of attacks and software security. Strengths and weaknesses of cryptographic systems are covered as well as the types of attacks on cryptographic systems. Malicious activity signatures, analysis as well as detection will be covered. This course will also cover secure coding principles and types of software issues. Prerequisites: COSC 3372 - Network Security.

COSC 4100 - Skills for Computing Professionals II

1 sem. hrs. (0:2) This course focuses on technical writing, workplace scenarios and professional skills that computer scientists will need to be successful in their careers and lives. This is a class for computing professionals. As such, professional decorum will be required at all times. Prerequisites: COSC 1100 and ENGL 3310. Fall, Spring

COSC 4310 - Digital Forensics

3 sem. hrs. (3:0) This course will introduce undergraduate students to the fundamentals of computer forensics and cyber-crime scene analysis. The various laws and regulations dealing with computer forensic analysis will be discussed. Students will be introduced to the emerging international standards for computer forensic analysis, as well as a formal methodology for conducting computer forensic investigations. Several Forensics tools such as Encase and FTK will be used to conduct digital forensics investigations. Prerequisite: COSC 2437 - Data Structures. Fall, odd years

COSC 4324 - Image Processing
3 sem. hrs. (3:0) This course introduces concepts and techniques for image processing. The objective of this course is to introduce the fundamental techniques and algorithms used for processing and extracting useful information from digital images. The students will learn how to apply the image processing methods to solve real-world problems. Prerequisites: COSC 2437 - Data Structures. Fall, odd years

COSC 4325 - Advanced Game Programming

3 sem. hrs. (3:0) This course will introduce advanced concepts for game programming to the student. Topics will include game physics, game AI, advanced shaders, 3D techniques, multiplayer techniques, and networking. The course will contain lectures and hands-on labs. Prerequisite: COSC 3325 - Game Programming. Spring, odd years

COSC 4328 - Computer Graphics

3 sem. hrs. (3:0) Basic principles and techniques for computer graphics on modern graphics hardware. Students will gain experience in interactive computer graphics using the OpenGL API. Topics include: 2D viewing, 3D viewing, perspective, lighting, and geometry. Prerequisite: COSC 2437 - Data Structures, MATH 2413 - Calculus I. MATH 3311 - Linear Algebra is recommended. Fall, odd years

COSC 4330 - Introduction to Artificial Intelligence

3 sem. hrs. (3:0) Foundations, directions, and applications of artificial intelligence including search algorithms, knowledge acquisition, representation, and processing. Students will gain practical experience by implementing many of the basic algorithms. Prerequisite: COSC 2437 - Data Structures Fall, even years

COSC 4342 - Computer Networks

3 sem. hrs. (3:0) Computer-based communication systems. Topics include: advanced computer network architectures, protocols, and programming. Prerequisites: COSC 2437 - Data Structures, MATH 2413 - Calculus I. Fall, Spring

COSC 4343 - Algorithms

3 sem. hrs. (3:0) Advanced programming techniques for algorithmic and heuristic solutions of problems. Topics include: analysis and design of algorithms, testing of algorithms, optimum and exhaustive solutions, and recursion. Prerequisites: COSC 2437 - Data Structures, MATH 2413 - Calculus I. Fall

COSC 4345 - Introduction to Machine Learning
3 sem. hrs. This course gives a broad introduction to machine learning with more emphasis on intelligent system design. Topics to be covered include linear and logistic regression, neural networks, clustering, classification, decision tree, evolutionary computation, feature selection, and reinforcement learning. The courses will explore various applications of machine learning to computer science, process modeling, pattern and speech recognition, data mining, and bioinformatics.

COSC 4348 - Systems Programming

3 sem. hrs. (3:0) The design and implementation of system software such as device drivers, application support libraries, and interprocess communication. Students will study and use systems programming tools. Prerequisites: COSC 3346 - Operating Systems, and either COSC 3353 - Survey of Programming Languages or COSC 3324 - Object-oriented Programming. Spring

COSC 4353 - Compiler Construction

3 sem. hrs. (3:0) This course introduces the basic concepts and mechanisms traditionally employed in language translators, with emphasis on compilers. Topics include: strategies for syntactic and semantic analysis, techniques of code optimization and approaches toward code generation. Prerequisites: COSC 3353 - Survey of Programming Languages. Spring, even years

COSC 4354 - Senior Capstone Project

3 sem. hrs. (3:0) Teamwork and formal methods of systems analysis and design are emphasized. Students will complete a large team project. Prerequisites: COSC 3370 - Software Engineering, COSC 3336 - Introduction to Database Systems, and ENGL 3310. Fall, Spring

COSC 4360 - Theory of Programming Languages

3 sem. hrs. (3:0) The study of programming language design including syntax, semantics, behavior, and implementation issues in imperative, functional, logic, and object-oriented languages. Other topics include type theory, concurrency, data dependency, and nondeterminism. Prerequisite: COSC 2437 - Data Structures. Fall, odd years

COSC 4365 - Windows Security

3 sem. hrs. (3:0) This course focuses on advanced system administration topics. An in depth understanding of various concepts such as operating systems, servers, file systems authentication, and user support services are explored. Topics include security issues,
user and group administration, server and work-station integration, central repositories for updates, Active directory, DMZ, web servers, email servers, electronic system update and maintenance, backup and restoration strategies and techniques, integrated mass storage technologies and alternative client technologies. Prerequisite: COSC 2348, COSC 2465. Spring

COSC 4367 - Firewall and Intrusion Detection Systems

3 sem. hrs. (3:0) This is an applied course which focuses on the standards and technologies used to establish inter-network structures that will support a TCP/IP data stream for higher-level services to operate over. This course introduces firewalls, Intrusion Prevention Systems (IPS), and Intrusion Detection Systems (IDS) technology. Topics include Windows, Linux, Check Point and Cisco firewalls, TCP/IP and open system interconnection (OSI) models, attack traffic analysis, and network based and host based hardware and software. Device configuration will be examined and evaluated with appropriate exercises.
Prerequisites: COSC 2437 - Data Structures, COSC 4365 - Windows Security. Fall

COSC 4368 - Cyber Defense II

3 sem. hrs. (3:0) This course focuses to increase the students understanding of how to recognize a potential cyber attacker and identify vulnerabilities through the use of vulnerability analysis tools. Students will audit, monitor, and revise system security to ensure appropriate levels of protection are achieved. Incident response and handling, security log analysis, attacker identification, system recovery and postmortem procedures will be addressed. Prerequisites: COSC 2437 - Data Structures, COSC 3474 - Cyber Defense I, and COSC 4365 - Windows Security. Fall

COSC 4369 - Incident Response

3 sem. hrs. (3:0) This course focuses on the standards and technologies used to establish organization structures that will support information technology incident response, business continuity and disaster recovery efforts. This course introduces incident response, business continuity and disaster recovery planning concepts as well as tools and techniques. Topics include the development and implementation of incident response, business continuity and disaster recovery plans, attack traffic analysis, and network-based and host-based hardware and software. Concepts will be examined and evaluated with appropriate exercises. Prerequisites: COSC 2437 - Data Structures, COSC 4365 - Windows Security. Spring

COSC 4370 - Models of Computation
3 sem. hrs. (3:0) A study of formal languages, grammars, and associated abstract machine models. Topics include regular and context-free languages and grammars, finite state automata, Turing machines, and the Chomsky hierarchy. Prerequisite: MATH 2305 - Discrete Mathematics I. Spring, odd years

COSC 4396 - Directed Independent Study

3 sem. hrs. (3:0) See College description. Offered on sufficient demand.

COSC 4590 - Selected Topics

1-5 sem. hrs. Variable content. May be repeated for credit depending on topic. Offered on sufficient demand.

COSC 4690 - Contracted Field Experience in Computer Science

1-6 sem. hrs. Individual contract agreement involving student, faculty, and cooperating agency to gain practical experience in off-campus setting. Prerequisite: Approval by Department.

Criminal Justice

CRIJ 1301 - Introduction to Criminal Justice

3 sem. hrs. History and philosophy of criminal justice. Overview of criminal justice system: police, prosecution and defense, courts, trial process, and corrections as they affect the individual, as well as their impact on society. The definition, nature, and impact of crime. The functions of criminal justice agencies will be examined in relation to common analytical themes such as ethics and discretion. TCCNS Equivalent: CRIJ 1301

CRIJ 1306 - Court Systems and Processes

3 sem. hrs. Examination of the civil and criminal legal systems and the roles played by political, social and economic factors in the administration of justice. Consideration of the roles and interests of litigants, defendants, police, attorneys, and the judiciary in the process. TCCNS Equivalent: CRIJ 1306

CRIJ 1310 - Fundamentals of Criminal Law
3 sem. hrs. The course will introduce students to the study of criminal law. Major topics include the sources of criminal law, the operation of the criminal courts, constitutional limitations on criminal law, the elements of criminal liability, and the classification of and punishments for different types of criminal offenses. Defenses to criminal liability will also be explored. TCCNS Equivalent: CRIJ 1310

CRIJ 2313 - Correctional Systems & Practices

3 sem. hrs. This course is a survey of institutional and non-institutional corrections. Emphasis will be placed on the organization and operation of correctional systems; treatment and rehabilitation; populations served; Constitutional issues; and current and future issues. TCCNS Equivalent: CRIJ 2313

CRIJ 2328 - Police Systems and Practices

3 sem. hrs. The history and development of police in America. Topics examined include: the police profession, organization of law enforcement systems, the policing role, police discretion, ethics, police-community interaction, current and future issues, and research findings. TCCNS Equivalent: CRIJ 2328

CRIJ 3302 - Police and Society

3 sem. hrs. Examination of policing in a democratic society. A critical review of various professional and community influences on police behavior, together with a consideration of social problems created by such forces, and potential remedial actions.

CRIJ 3313 - The Juvenile Justice System

3 sem. hrs. The administration of the juvenile justice process. Historical and philosophical origins of the juvenile justice system. A systematic analysis of problems and procedures at each stage of the process.

CRIJ 3315 - Crime Prevention


CRIJ 3320 - Issues in Corrections
3 sem. hrs. Analysis of contemporary developments, controversies and management concerns in the field of corrections. Includes examination of theoretical foundations of correctional policy.

CRIJ 3325 - Community-Based Corrections

3 sem. hrs. Examination of the correctional strategies and facilities available in community settings including diversion programs, probation, parole, half-way houses, boot camps, and restitution centers.

CRIJ 3340 - Comparative Criminal Justice

3 sem. hrs. Comparison of the police in selected countries with the U.S. criminal justice system. Particular emphasis on social, political, and economic factors in the development and change in law enforcement.

CRIJ 3341 - Terrorism

3 sem. hrs. Lecture An examination of political violence from criminological, legal, and political perspectives. Application to contemporary events is emphasized. The sociology, psychology, and organization of terrorist groups are also explored as well as counter-terrorism strategies, methods, and dilemmas.

CRIJ 3360 - Organized Crime

3 sem. hrs. The course analyzes and discusses how criminal organizations carry out their illegal activities while laundering money through legal enterprises. It discusses why people belong to organized crime syndicates despite the risks of death and imprisonment. The linkages of poverty, lack of education, social and economic inequalities, and the glorification of capitalist ideology by the phenomenon of organized crime are examined.

CRIJ 3361 - Drugs, the Drug War, and Criminal Justice

3 sem. hrs. This course is an analysis and discussion of drugs, the war on drugs, and how these two phenomena impact the criminal justice system in American society. There is a review of the common assumptions about drugs and its social implications. An examination of the sociocultural interconnections of the nature of drugs, drug use, drug trafficking, and drug policy from a justice perspective is presented.

CRIJ 3365 - Sex Crimes
3 sem. hrs. This course analyzes the nature, etiology, and theories related to sex offenses and sex offenders. It explores the history and current practices employed by the criminal justice systems to deal with sex offending. The course also examines multiple types of sexual offenses, perpetrators and victims, as well as the legal consequences of sexual offenses and its sociocultural ramifications to grasp the complexity of these crimes.

CRIJ 3370 - Crime in the Media

3 sem. hrs. This course will cover the portrayal of crime, criminals, the criminal justice system, and criminal justice practitioners in the media. Specifically, the course will address the goals of the media and how those affect their coverage of crime and the CJ system.

CRIJ 3375 - Applied Statistics in Criminal Justice

3 sem. hrs. This course will teach students the step-by-step process for using statistical techniques that are most applicable in the field of criminal justice. It will teach them when, where, and why each statistical analysis is necessary and/or useful, and it will help students learn those skills by applying them to an actual project.

CRIJ 4085 - Major Field Test

0 sem. hrs. The Major Field Test (MFT) in Criminal Justice is a national examination given in the Fall and Spring semesters only. It is a graduation requirement for all Criminal Justice majors. Students enroll in this course during the semester that they plan to take the MFT. This should be the semester of graduation or the Spring semester for those planning a summer graduation. There is no cost to the student for either this course of the MFT. Admission is limited to students who have completed 90 or more semester credit hours. Graded: CR/NC

CRIJ 4310 - Constitutional Law

3 sem. hrs. A case study of American constitutional law based on the leading decisions of the U.S. Supreme Court. Examination of the evolution of judicial review and the development of due process and the protection of individual rights.

CRIJ 4312 - Law and Evidence

3 sem. hrs. A detailed examination of the use, admissibility, and presentation of evidence. Issues and problems dealing with the rules of evidence and the theories on which those rules are based.
CRIJ 4313 - Criminal Procedure

3 sem. hrs. A detailed examination of the legal constraints on investigation and prosecution of criminal offenses. Analysis of the Texas Code of Criminal Procedure and of Search and Seizure Law under the Fourth Amendment, as well as other due process issues arising under the Fifth and Sixth Amendments.

CRIJ 4320 - Offender Rehabilitation

3 sem. hrs. Theories of rehabilitation, treatment, and correction of criminal offenders. Includes analysis of the historical development of the rehabilitative ideal and contemporary controversies surrounding it, and a survey of therapeutic models and methods.

CRIJ 4321 - American Prisons and Prisoners

3 sem. hrs. Analysis of the history, philosophy, and function of prisons. Examination of control and treatment of offenders in institutional settings. Focus is upon current developments, controversies and management problems.

CRIJ 4322 - Crime and Punishment in Literature

3 sem. hrs. A study of selected literary classics that treat of crime and punishment. The works of literary artists from various cultures which describe experience with crime and the criminal justice system will be placed in historical and theoretical perspective.

CRIJ 4324 - Women and Criminal Justice

3 sem. hrs. An historical and ideological analysis of the role of women in the criminal justice system as offenders, reformers, and professionals.

CRIJ 4325 - Race, Ethnicity, Crime & Criminal Justice

3 sem. hrs. An investigation of the impact of race and ethnicity regrading crime in society and how these two concepts have influenced major institutions (courts, police, and corrections) and policies in the criminal justice system. Exploration of historical trends and contemporary events to discuss, probe, and critically assess how race, crime, and the criminal justice system intertwine in society.

CRIJ 4330 - Understanding Criminal Behavior
3 sem. hrs. This course examines various aspects of human behavior from a criminal justice perspective and is designed to give students a basic understanding of criminal behavior and psychological disorders which are encountered by criminal justice professionals.

CRIJ 4331 - Juvenile Delinquency

3 sem. hrs. Examination of the nature and extent of juvenile crime today. Analysis of the history and theory of delinquency and society's response to it. (Credit may not be given for both this course and SOCI 4331.) Cross listed with SOCI 4331.

CRIJ 4335 - Criminology

3 sem. hrs. An examination of the major sociological explanations for crime, criminal behavior, and the social responses to crime. (Credit may not be given for both this course and SOCI 4335.) Cross listed with SOCI 4335.

CRIJ 4340 - Criminal Investigation

3 sem. hrs. Critical examination of investigation methods and comparison of these to research methods. Advanced examination of investigative procedures, theory, supervision, and evaluative research. Some practical applications.

CRIJ 4345 - Research Methods in Criminal Justice

3 sem. hrs. This course is designed to help students gain a working understanding of the research process with direct application to criminal justice research. Attention will focus on various aspects of the research process including quantitative and qualitative methods. Students will complete literature reviews, create research proposals, conduct observations/interviews, and construct surveys in addition to various assignments and activities. Prerequisite: CRIJ 1301 or CRIJ 1313.

CRIJ 4351 - Police Supervision and Management

3 sem. hrs. Study of contemporary theories of management and supervision as they relate to law enforcement. Management concerns considered include planning, motivation, organizational communication, discipline, productivity, ethics, conflict, and job stress.

CRIJ 4360 - Intimate Relationship Violence

3 sem. hrs. Violence involving acquaintance, spouse, child, and elder abuse is examined within a theoretical construct relating violence to social responses. Alternative causal
theories, prevention, counseling, administration, innovative programs, and inter-agency coordination are addressed.

CRIJ 4365 - White Collar Crime

3 sem. hrs. Critical examination of widespread forms of offending and offenders typically omitted from traditional criminology and criminal justice courses. Critical exploration of white collar, corporate, environmental and governmental crimes/criminals.

CRIJ 4390 - Topics in Criminal Justice

3 sem. hrs. May be repeated for credit when topics vary.

CRIJ 4396 - Directed Individual Study

1-3 sem. hrs. See College description. Offered on application.

CRIJ 4398 - Applied Experience

3 sem. hrs. See College description. Offered on application.

Dance

DANC 1141 - Ballet I

1 sem. hrs. A beginning ballet dance course aligned with the Theatre, Dance, and Musical Theatre disciplines. The student will learn fundamentals of classical ballet; terminology, alignment, barre and floor technique, as well as genres of the contemporary styles.

DANC 1147 - Jazz Dance I

1 sem. hrs. A beginning jazz dance course aligned with the Theatre, Dance, and Musical Theatre disciplines. Students will be introduced to genres of the jazz dance from primitive ritual through contemporary musical theatre compositions.

DANC 1148 - Modern Dance I

1 sem. hrs. A beginning modern dance course aligned with the Theatre, Dance, and Musical Theatre disciplines. Students will be introduced to the fundamentals of Modern
Dance using a variety of modern dance styles, including technique, progressive movement and dance performance.

DANC 1304 - Dance in Performance

3 sem. hrs. Students will be introduced to the fundamentals of choreography using a variety of dance styles and, using those skills, create dance intended for public performance. May be repeated for credit. TCCNS Equivalent: DANC 1304

DANC 2141 - Ballet II

1 sem. hrs. This course focuses on further development of classical ballet as an art form with an emphasis on intermediate to advanced level technique, musicality and performance.

DANC 2147 - Jazz Dance II

1 sem. hrs. This course is for the student with previous jazz dance training. Jazz Dance II emphasizes technique and terminology. The course will focus on improving quality of movement and developing complex rhythms and patterns through the understanding and flexibility of the variety of jazz styles taught.

DANC 2148 - Modern Dance II

1 sem. hrs. This course is geared toward the student with previous modern dance training. The student will continue to develop physical, conceptual and aesthetic skills and explore the principles of movement and language common with variety of modern dance techniques.

DANC 3141 - Ballet III

1 sem. hrs. This course focuses on further development of classical ballet, based on previous training in Ballet I and II, as an art form with an emphasis on intermediate/advanced level technique, musicality and performance. Prerequisites: DANC 1141 and DANC 2141.

DANC 3147 - Jazz Dance III

1 sem. hrs. This course focuses on the student who has taken Jazz I and II and executes the movement at an intermediate/advanced level. The course will focus on improving artistic expression within the quality of movement and developing complex technique
and style through the understanding on rhythms and patterns of a variety of jazz styles. 
Prerequisites: DANC 1147 and DANC 2147.

DANC 3148 - Modern Dance III

1 sem. hrs. This course focuses on the student who has taken Modern Dance I and II. The 
student will continue to develop physical, conceptual and aesthetic skills and explore 
principles of movement and language common with the variety of modern dance 
techniques. Prerequisites: DANC 1148 and DANC 2148.

DANC 3303 - World Dance and Culture

3 sem. hrs. Offers a cross cultural and historical view of a variety of theatrical, vernacular 
and sacred dance forms and investigates ways that dance functions across societies. No 
background in dance is necessary to successfully complete this course.

    TCCNS Equivalent: DANC 3303

DANC 3306 - Dance Choreography I

3 sem. hrs. Introduction to techniques and principles of the craft and art of 
choreography. Solo and group choreography is expected. May be repeated for credit.

DANC 3310 - History of Dance*

3 sem. hrs. In this course, the student will explore the history of dance from an interactive 
arts approach, examining and investigating dance from ancient civilization throughout the 
world to the emerging times of dance in the U.S.

DANC 4141 - Ballet IV

1 sem. hrs. This course focuses on further development of classical ballet, based on 
previous training in Ballet I, II and III as an art form with an emphasis on advanced level 
technique, musicality and performance. Can be repeated for credit. Prerequisites: DANC 
1141, DANC 2141, and DANC 3141.

DANC 4147 - Jazz Dance IV

1 sem. hrs. This course focuses on the student who has taken Jazz Dance I, II and III and 
executes the movement at an advanced level. The course will focus on improving artistic 
expression within the quality of movement from Jazz Dance III and developing complex
DANC 4148 - Modern Dance IV

1 sem. hrs. This course focuses on the student who has taken Modern Dance I, II and III. The student will continue to develop physical, conceptual and aesthetic skills and explore the principles of movement and language common with a variety of modern and contemporary modern dance techniques. Can be repeated for credit. Prerequisites: DANC 1148, DANC 2148, and DANC 3148.

DANC 4306 - Dance Choreography II

3 sem. hrs. Demonstrate choreographic tools in the dance making process as it relates to group work; explore and create movement studies in groups as it pertains to art. May be repeated for credit. Prerequisite: DANC 3306 Dance Choreography I. TCCNS Equivalent: DANC 4306

DANC 4310 - Dance Instruction

3 sem. hrs. In this course, the student will research and explore the various modern philosophies of instruction and learn to apply those that are congruous with instructing dance as art in a variety of settings and to different age levels. Observation and instruction, combined with research satisfies the practical application portion of the course, while critiques from professionals in the field will serve as encouragement and confidence building for the future instructor in dance. May be repeated for credit.

DANC 4390 - Topics in Dance

3 sem. hrs. 3:0 This course will explore aspects of various dance techniques (ballet, jazz, contemporary, and hip hop infused) at the intermediate/advanced level, as well as repertory and yoga for dancers. Time allowing, we will delve into basic elements of choreographic composition.

DANC 4396 - Directed Individual Study (DIS)

1-3 sem. hrs. See college description. Course is available by application. Approval of Instructor

DANC 4398 - Applied Experience
3 sem. hrs. See college description. Course is available by application. Approval of Instructor

Early Childhood Education

ECED 3380 - Developmentally Appropriate Practice in Early Childhood Education

3 sem. hrs. An intensive study of developmentally appropriate practice in early childhood education. Students will learn the components of lesson plans and create several lesson plans. Emphasis will be placed on selecting, defining, developing strategies and techniques, and assessing practices which support developmentally appropriate practices. Prerequisite: ECED 2310 or ECED 3324.

ECED 4310 - Socialization of the Young Child

3 sem. hrs. An intensive study of the social development, the agents of socialization, and the socialization process in early childhood. Prerequisite: ECED 2310 or ECED 3324.

ECED 4320 - The Young Child, Family and Community Resources

3 sem. hrs. A study of current family structures, their relationship to the young child, society, and the community. Emphasis will be placed on an inclusive model which addresses the needs of the global community as it relates to the young child. Prerequisite: ECED 2310 or ECED 3324.

ECED 4330 - Health, Nutrition and Locomotor Concepts for the Young Child

3 sem. hrs. The relationship between health, nutrition, and locomotor development in the young child is investigated.

ECED 4340 - Communication and Aesthetics

3 sem. hrs. A study of language development; early literacy, language arts, and aesthetics. Students will develop an integrated thematic unit plan. Strategies and curriculum materials that are developmentally appropriate for young children will be emphasized to support the Texas Essential Knowledge and Skills (TEKS). Prerequisites: Junior standing and completion of ECED 3311 and ECED 3324.

Economics
ECON 1301 - Introduction to Economics*

3 sem. hrs.
Non-technical introduction to the structure and functioning of the aggregate economy and selected specific markets. Basic concepts regarding how markets function, regulation, monetary and fiscal policy in a macroeconomic context and some special topics of contemporary relevance are studied. Students are introduced to the basic concepts used in the social and behavioral sciences for measuring and interpreting economic and business conditions. This course cannot be taken to fulfill the Business Core or any Business Major requirements. It is recommended that students who might be interested in majoring in business or economics, take either ECON 2301 or ECON 2302 instead. TCCNS Equivalent: ECON 1301

ECON 2301 - Macroeconomics Principles*

3 sem. hrs. An overview of how the economy of the United States is organized and functions in a market price system. Market processes are used to show how resources and incomes are allocated by households and businesses. Determination of national income, employment, price level, interest rates, and growth are the focus of simple analysis techniques. Monetary and fiscal policies are examined including their international dimensions. Satisfies the social and behavioral sciences component of the University core curriculum. A student taking remedial courses in Basic English (ENGL 0399) and/or Mathematics (MATH 0300) is not recommended to take this course concurrently. TCCNS Equivalent: ECON 2301 Satisfies the economics component of the University core curriculum.

ECON 2302 - Microeconomics Principles*

3 sem. hrs. Demand and supply, consumer behavior, elasticity, production costs, perfect and imperfect market structures and models of the modern market price system are analyzed. Emphasis is on use of marginal analysis to determine prices, output, income and economic welfare in a market price system. Satisfies the social and behavioral sciences component of the university core curriculum. A student taking remedial courses in Basic English (ENGL 0399) and/or Mathematics (MATH 0300) is not recommended to take this course concurrently. TCCNS Equivalent: ECON 2302 Satisfies the economics component of the University core curriculum.

ECON 2302.H01 - Microeconomics Principles
Demand and supply, consumer behavior, elasticity, production costs, perfect and imperfect market structures and models of the modern market price system are analyzed. Emphasis is on use of marginal analysis to determine prices, output, income and economic welfare in a market price system. Satisfies the social and behavioral sciences component of the university core curriculum. Prerequisite: A student taking remedial courses in Basic English (ENGL 0399) and/or Mathematics (MATH 0300) is not recommended to take this course concurrently. TCCNS Equivalent: ECON 2301

ECON 3310 - Intermediate Macroeconomics

3 sem. hrs. Theory of the determination of aggregate income, employment and prices is examined. Focus is on the microeconomic foundations of aggregate demand: consumption, investment, foreign trade, and government. Macroeconomic models from the basic through the complete model are examined for the U.S. and global economies. Prerequisites: ECON 2301, ECON 2302, and Junior standing or above.

ECON 3311 - Intermediate Microeconomics

3 sem. hrs. Examines supply and demand analysis, consumption theory, production theory, structure and performance of firms, efficiency of markets, and determination of general welfare in a market price system. Prerequisites: ECON 2301, ECON 2302, and Junior standing or above.

ECON 3312 - Money and Banking

3 sem. hrs. Description of the operations of banking and other financial institutions, examination of the basic tenets of monetary theory, analysis of monetary policy and its contribution to economic policy. Prerequisites: ECON 2301, ECON 2302 and Junior standing or above.

ECON 3315 - International Economic Issues

3 sem. hrs. Evaluates and analyzes various contemporary issues in international economics, using elementary economic theory and recent economic and financial data. The course includes issues such as economic integration, regionalization and globalization, international trade issues, the structure and role of international economic organizations, the foreign exchange market, and economic issues in developing countries. Prerequisites: ECON 2301 and Junior standing or above.

ECON 3316 - Environmental Economics
3 sem. hrs. Uses economic analysis to examine the underlying causes of environmental and natural resource problems, as well as alternative policy issues. The choice of environmental protection goals and the means of achieving them are analyzed and applied to the cases of air pollution (local and global), water pollution, and toxic pollution. The environmental policies of various countries are compared and studied from an economic perspective. Prerequisites: ECON 2301 or ECON 2302, and Junior standing or above.

ECON 3320 - Public Finance

3 sem. hrs. This course examines the role that government plays in the economy. The course discusses the conditions for economic efficiency to be achieved and circumstances where a market fails. It also presents the concepts of public goods and the aggregation of individual preferences into collective priorities as expressed by the general public through the political process. Topics include taxation, welfare economics, environmental and health externalities, cost-benefit analysis, and government budget. Prerequisites: ECON 2301, or ECON 2302, and Junior standing or above.

ECON 3322 - Managerial Economics

3 sem. hrs. Emphasis is on the use of economic principles to make sound business decisions. Students will use economic analysis, knowledge of markets and organizations to address real-world problems. The course emphasizes the role of the business economist as a member of the management team trying to find ways to improve the use of resources available to an organization. Prerequisites: ECON 2302, and Junior standing or above.

ECON 3335 - Labor Economics

3 sem. hrs. The study of labor theory and labor market processes to explain how household labor decisions are made and how household incomes are determined. The effects of labor market imperfections, and the effects of business decisions and labor unions on labor market outcomes are also evaluated. Provides an overview of the U.S. labor movement, including its impact on federal legislation; labor theory; and contemporary labor issues. The effects of federal legislation are examined, including those on the competitiveness of U.S. labor in a global economy. Prerequisites: ECON 2301, ECON 2302, AND Junior standing or above.

ECON 3340 - Healthcare Economics
3 sem. hrs. The supply and demand for health services. Markets for health professionals and healthcare provider firms. Discusses the roles of insurance, managed care and HMO's, professional licensure, for-profit and not-for-profit provider firms, and information problems in health care markets; regulation, government financing of health care and health care reform issues in the U.S. Course Prerequisites: ECON2301 and ECON2302

ECON 4085 - Economics Exit Exam*

0 sem. hrs. 0:0 The Economics Exit Exam (EEE) is an exam given in the Fall and Spring semesters only. It is a graduation requirement for all students with a BBA degree in Economics. Students enroll in this course during the semester that they plan to take the EEE. Admission is limited to students who have completed 90 or more semester credit hours.

ECON 4310 - Introduction to Econometrics

3 sem. hrs. A study of the analysis of quantitative data, with special emphasis on the application of statistical methods to economic problems. The course covers the theory and practice of ordinary least squares regression, application to economics and finance, and selected special topics. Topics include heteroskedasticity, multicollinearity and autocorrelation, qualitative independent and dependent variables, and simple time-series analysis. Prerequisites: ECON 2301, ECON 2302, ORMS 3310 (or MATH 1324 or equivalent) and Junior standing or above.

ECON 4325 - Economics of European Integration

3 sem. hrs. An introduction to the economics of Western Europe, and by implication, the economic functions of the institutions of the European Union (EU). Students are introduced to economic policy issues which are currently of concern in the European Union, and the analysis of economic problems which are of particular relevance to European Union member states. These include (but are not limited to) the theory of customs unions, optimal currency area theory, the single market, competition policy, and the external trade and development policies of the EU. Prerequisites: ECON 2301, ECON 2302, and Junior standing or above.

ECON 4340 - Topics in Health Economics and Healthcare Policy

3 sem. hrs. Examines some aspects of U.S. healthcare decision making and delivery system from an applied and behavioral economics perspective. Topics selected will show students how to apply the principles of economics to analyze healthcare outcomes and
in institutional effectiveness, as well as government decision making in healthcare. The scope of this course may include analysis of current trends and topics in the U.S. healthcare industry; the utilization and application quantitative skills required to understand and evaluate performance of healthcare organizations, health outcomes, and current healthcare issues. Course Prerequisites: ECON 3340, Health Care Economics

ECON 4388 - History of Economic Thought*

3 sem. hrs. A consideration of the philosophical basis, historical context, and development of economic thinking. Focuses on pre-20th-century economists-the Mercantilists, the Physiocrats, Adam Smith, David Ricardo, Karl Marx, and early neoclassical economists. Attention is also given to later economists and schools of thought as continuations and modifications of earlier ideas in economics. Prerequisites: ECON 3310, ECON 3311 and Junior standing or above.

ECON 4390 - Current Topics in Economics

1-3 sem. hrs. Selected topics for special study related to economics, the functioning of the economy or economic issues. May be repeated for credit when topics vary. Prerequisites: ECON 2301 or equivalent, and others depending on topic, and Junior standing or above. Contact the Dean's office for information.

ECON 4396 - Directed Individual Study*

1-3 sem. hrs. Individual supervised study and a final report. Prerequisites: permission of instructor, Junior standing or above, and others depending on selected topic. Inquire at the Dean's office for information.

ECON 4398 - Internship in Economics

3 sem. hrs. Supervised full-time or part-time, off-campus training in a service, manufacturing, or public sector position. Oral and written reports required. Prerequisites: Completion of at least 12 semester credit hours toward a Minor in Economics, and Junior standing or above. Students must apply to program and be accepted prior to registration. May not be repeated for credit.

Educational Curriculum and Instruction

EDCI 3350 - Investigating Student Learning in Middle Level Mathematics (3)
3 sem. hrs. This course is designed to investigate how students learn mathematics in the context of the middle level mathematics curriculum to include a survey of technologies and educational software to develop mathematical thinking.

EDCI 4350 - Assessment in Middle Level Mathematics

3 sem. hrs. This course is designed to help students identify and explore some of the key issues in assessing middle level mathematics. Students will develop assessment practices and a greater awareness of the implications of assessment practice on mathematics learning.

EDUC 2307 - Schooling in a Democracy*

3 sem. hrs. A course to enable citizens, parents, and prospective professional educators to synthesize their general education experiences/courses with current issues and practices related to teaching and learning in the United States. Career opportunities and personal commitments to the teaching profession will be explored. The systematic process of admission to the teacher education program will be initiated. Field observations in communities and schools will be required. TCCNS Equivalent: EDUC 1301

EDUC 3311 - School and Society^

3 sem. hrs. The characteristics, organization, and management of the American School System including: The history of the development of American schools, legal and ethical issues, teaching as a profession, influence of cultural background on instruction of students, characteristics and needs of special populations, and adapting curriculum and instruction for students from special populations. A student interview with Department of Teacher Education faculty will be required. Field experiences required.

EDUC 4312 - Classroom Management: Grades 7-12

3 sem. hrs. A study of classroom organization and management as related to basic principles of human development and learning. Preventative discipline techniques utilizing both group and individual processes are emphasized. This course is to be taken concurrently with Planning, Teaching, Assessment and Technology for Grades 8-12 Teachers.

EDUC 4313 - Classroom Management: Grades 4-8

3 sem. hrs. A study of classroom organization and management as related to basic principles of human development and learning. Preventative discipline techniques utilizing both group and individual processes are emphasized. This course is to be taken
concurrently with Planning, Teaching, Assessment and Technology for Grades 4-8 Teachers.

EDUC 4314 - Classroom Management: Grades EC-6

3 sem. hrs. A study of classroom organization and management as related to basic principles of human development and learning. Preventative discipline techniques utilizing both group and individual processes are emphasized. This course is to be taken concurrently with Planning, Teaching, Assessment and Technology for Grades EC-6 Teachers.

EDUC 4321 - Instructional Design for Special Populations

3 sem. hrs. A study of the characteristics and needs of special student populations in a culturally diverse society. Special populations emphasized will include special education, gifted and talented, at-risk, and bilingual. Instructional strategies, differentiating curriculum, and diversifying assessment will be examined in relation to special populations. This course is to be taken concurrently with clinical teaching.

EDUC 4322 - Instructional Design for Special Populations: Grades 7-12*

3 sem. hrs. A study of the characteristics and needs of special student populations in a culturally diverse society. Special populations emphasized will include special education, gifted and talented, at-risk, and bilingual. Instructional strategies, differentiating curriculum, and diversifying assessment will be examined in relation to special populations. This course is to be taken concurrently with student teaching.

EDUC 4323 - Instructional Design for Special Populations: Grades 4-8*

3 sem. hrs. A study of the characteristics and needs of special student populations in a culturally diverse society. Special populations emphasized will include special education, gifted and talented, at-risk, and bilingual. Instructional strategies, differentiating curriculum, and diversifying assessment will be examined in relation to special populations. This course is to be taken concurrently with student teaching.

EDUC 4324 - Instructional Design for Special Populations: Grades EC-6*

3 sem. hrs. A study of the characteristics and needs of special student populations in a culturally diverse society. Special populations emphasized will include special education, gifted and talented, at-risk, and bilingual. Instructional strategies, differentiating curriculum, and diversifying assessment will be examined in relation to special populations. This course is to be taken concurrently with student teaching.
EDUC 4390 - Special Topics

1-3 sem. hrs. Topics in Curriculum and Pedagogy will be explored at the request of participants or faculty with the approval of the Department Chair, Dean, and Curriculum Coordinating Committee (CCC).

EDUC 4605 - Planning, Teaching, Assessment and Technology

6 sem. hrs. A study of planning, teaching, assessment and technology as they relate to teaching. Lesson planning, teaching, reflection, observation, and collaboration with site professors and cooperating teachers in the field are integral parts of the course. Admission to teacher education. Successful completion of all core curriculum requirements and special permission of chair.

EDUC 4606 - Planning, Teaching, Assessment and Technology for Grades 7-12 Teachers

6 sem. hrs. A study of planning, teaching, assessment and technology as they relate to teaching in grades 7-12. Planning will include general curriculum issues, the lesson cycle, multiple intelligences, learning styles and resources. Teaching will include methods and strategies for delivery of instruction and classroom environment. Assessment will focus on traditional and authentic alternative assessment. Technology will cover media and techniques from transparencies to computer technology, and will incorporate the skills and knowledge for using the microcomputer to plan and develop presentations, instructional materials, and learning activities in the public school curriculum. Observation and collaboration with professional teachers in the field, as well as journal writing, will be integral parts of the course. Two full days per week are required at a partner school site. A student may enroll in this course for a maximum of 2 times only; and it must be completed during the Fall or Spring semesters in order to successfully complete all requirements. Prerequisites: Admission to teacher education. Successful completion of thirty-nine (39) hours of general education requirements. This course will provide at least 6 hrs. of TExES preparation.

EDUC 4607 - Planning, Teaching, Assessment and Technology for Grades 4-8 Teachers

6 sem. hrs. A study of planning, teaching, assessment and technology as they relate to teaching in grades 4-8. Planning will include general curriculum issues, the lesson cycle, multiple intelligences, learning styles and resources. Teaching will include methods and strategies for delivery of instruction and classroom environment. Assessment will focus on traditional and authentic alternative assessment. Technology will cover media and techniques from transparencies to computer technology, and will incorporate the skills and knowledge for using the microcomputer to plan and develop presentations,
EDUC 4608 - Planning, Teaching, Assessment and Technology for Grades EC-6 Teachers

6 sem. hrs. A study of planning, teaching, assessment and technology as they relate to teaching in grades EC-6. Planning will include general curriculum issues, the lesson cycle, multiple intelligences, learning styles and resources. Teaching will include methods and strategies for delivery of instruction and classroom environment. Assessment will focus on traditional and authentic alternative assessment. Technology will cover media and techniques from transparencies to computer technology, and will incorporate the skills and knowledge for using the microcomputer to plan and develop presentations, instructional materials, and learning activities in the public school curriculum. Observation and collaboration with professional teachers in the field, as well as journal writing, will be integral parts of the course. Two full days per week are required at a partner school site. A student may enroll in this course for a maximum of 2 times only; and it must be completed during the Fall or Spring semesters in order to successfully complete all requirements. Prerequisites: Admission to teacher education. Successful completion of SMTE 1350 and READ 3321. Successful completion of SMTE 3315 or SMTE 3316. Successful completion of thirty-nine (39) hours of general education requirements. This course will provide at least 6 hrs. of TExES preparation.

EDUC 4311 - Classroom Management

3 sem. hrs. A study of classroom organization and management as related to basic principles of human development and learning. Preventative discipline techniques utilizing both group and individual processes are emphasized. This course is to be taken concurrently with Planning, Teaching, Assessment, and Technology.
EDUC 4392 - Student Teaching: EC-Grade 6

3 sem. hrs. Laboratory experiences and directed teaching in grades EC-Grade 6. Prerequisite: Admission to Student Teaching. Must be taken with EDUC 4693 Student Teaching: Grades 7-12

EDUC 4393 - Student Teaching: Grades 7-12

3 sem. hrs. Laboratory experiences and directed teaching in grades 7-12. Prerequisite: Admission to Student Teaching. Must be taken with EDUC 4692 Student Teaching: EC-Grade

EDUC 4394 - Student Teaching: EC-Grade 6

3 sem. hrs. Laboratory experiences and directed teaching in grades EC-Grade 6. Prerequisite: Admission to Student Teaching. Must be taken with EDUC 4693 Student Teaching: Grades 7-12

EDUC 4693 - Student Teaching: Grades 7-12

6 sem. hrs. Laboratory experiences and directed teaching in grades 7-12 in the student's teaching field(s). Prerequisite: Admission to Student Teaching.

EDUC 4694 - Student Teaching: EC-Grade 6

6 sem. hrs. Laboratory experiences and directed teaching in grades EC-Grade 6. Prerequisite: Admission to Student Teaching. Must be taken with EDUC 4393 Student Teaching: Grades 7-12.

EDUC 4696 - Directed Individual Study

1-6 sem. hrs. Programs will be designed for individual cases through special permission of the Department Chair and Dean. May be repeated for credit when the topic varies.

EDUC 4699 - Teaching Internship

6 sem. hrs. An internship designed for inservice teachers seeking certification under the post baccalaureate program. Grade assigned will be "credit" (CR) or "no credit" (NC). Prerequisite: Admission to Student Teaching.

EDUC 4992 - Student Teaching: Grades 4-8
9 sem. hrs. Laboratory experiences and directed teaching in grades 4-8 in the student's teaching field(s). Prerequisite: Admission to Student Teaching.

EDUC 4993 - Student Teaching: Grades 7-12

9 sem. hrs. Laboratory experiences and directed teaching in grades 7-12. Prerequisite: Admission to Student Teaching.

EDUC 4994 - Student Teaching: EC-grade 6

9 sem. hrs. Laboratory experiences and directed teaching in an EC-Grade 6 classroom. Prerequisite: Admission to Student Teaching.

EDUC 4995 - Clinical Teaching

9 sem. hrs. Laboratory experiences and directed teaching in student's certification area(s). Prerequisites: Admission to Clinical Teaching and special permission of chair.

Electrical Engineering

EEEN 4334 - Control Systems II

3 sem. hrs. Model identification and parameter estimation (least-square identification of an auto-regressive model; nonparametric identification in the time domain; and nonparametric identification in the frequency domain); Robust Control (Nyquist-plots, small-gain, and passivity); Optimal control (LQR/LQG for state-space systems and time-optimal controller for the positioning of a mass using force actuation); Nonlinear control (Lyapunov's stability method; feedback linearization controller for a fully actuated 2nd order mechanical system; backstepping for triangular nonlinear systems; actuator limitations); writing and presenting reports and analysis. Prerequisite: EEEN 3330 - Control Systems I or ENTC 4446 - Control Systems I or approval of instructor.

EEEN 4345 - Sensors and Systems

3 sem. hrs. (3:0) This course introduces sensors and sensing systems, and the acquisition, processing, and interpretation of signals obtained with selected sensors and systems. The course will also cover sensing modalities, signal transmission and reception. Measurement and uncertainty in sensors and systems will be discussed as applied to signal noise and interference. Filtering and estimation will be introduced. Sensing systems for vision, monitoring, and control applications will be surveyed. Sensor interfacing, signal conditioning and transforms will be applied. Other topics include multidimensional signal and image processing, object tracking, multisensor data fusion,
applications in environmental monitoring, remote sensing and surveillance. Prerequisites: MATH 2414 Calculus II and ENGR 2460 Circuit Analysis (or equivalent); offered in alternating Fall semesters

EEEN 4396 - Directed Independent Study

1-3 sem. hrs. (1-3) Requires a formal proposal of study to be completed in advance of registration, approval of supervising faculty and department chairperson. Prerequisites: Varies. Offered Fall, Spring, and Summer.

Elementary Education

ECED 3324 - Child Development

3 sem. hrs. Provides the student with an overview of the physical, social, emotional, and psychological development of children from infancy through early childhood.

ECED 4345 - EC-6 Assessment and Evaluation

3 sem. hrs. A study of assessment for children EC-6 utilizing both formal and informal instruments will be addressed. A knowledge of choosing, administering, and reporting developmental assessment will be explored with an emphasis on assessment tools that can be used by teachers of young children. Principles of designing and using assessment and evaluation techniques that are culturally fair, intellectually sound, reliable, and content-valid for young children. Differentiation among criterion-referenced, norm-referenced, individual, informal, authentic, and group assessments will be emphasized. Students will review strategies for using assessment data to design instruction, and match assessment techniques to individual children and learning situations

ECED 4350 - EC-6 Social Studies Curriculum

3 sem. hrs. This course will expose students to skills and concepts taught in the Social Studies curriculum in the elementary school. Developmentally appropriate strategies, concepts, and curricular materials used in teaching the Social Studies will be emphasized. Prerequisites: Completion of ECED 3324, EDCI 3311 (or EDCI 5305 for MAC students) with the grade of "C" or better and completion or concurrent enrollment in ECED 3380.

ELEM 3324 - Child Development and Appropriate Practices
3 sem. hrs. Provides the student with an overview of the physical, social, emotional, and psychological development of children from infancy through early childhood.

ELEM 4345 - EC-6 Assessment and Evaluation

3 sem. hrs. A study of assessment for children EC-6 utilizing both formal and informal instruments will be addressed. A knowledge of choosing, administering, and reporting developmental assessment will be explored with an emphasis on assessment tools that can be used by teachers of young children. Principles of designing and using assessment and evaluation techniques that are culturally fair, intellectually sound, reliable, and content-valid for young children. Differentiation among criterion-referenced, norm-referenced, individual, informal, authentic, and group assessments will be emphasized. Students will review strategies for using assessment data to design instruction, and match assessment techniques to individual children and learning situations

ELEM 4350 - Social Studies

3 sem. hrs. This course will expose students to skills and concepts taught in the Social Studies curriculum in the elementary school. Developmentally appropriate strategies, concepts, and curricular materials used in teaching the Social Studies will be emphasized. Prerequisites: Completion of ECED 3324, EDCI 3311 (or EDCI 5305 for MAC students) with the grade of “C” or better and completion or concurrent enrollment in ECED 3380.

ELEM 4696 - Directed Individual Study

1-6 sem. hrs. Programs will be designed for individual cases through special permission of the Department Chair and Dean. May be repeated for credit when the topic varies.

English

ENGL 0001 - Grammar I

0 sem. hrs. Grammatical structures that enable students to better comprehend and use academic English are the focus of the course. Students will learn to appreciate the relevance of acquiring and applying grammatical knowledge to express themselves confidently and appropriately in different academic situations, as well as social situations relevant to the American college context.

ENGL 0002 - Listening and Speaking I
0 sem. hrs. This course provides short and focused activities to help students improve their English listening and speaking skills. It includes practice in both mastering the larger message and key words, phrases and specific sounds to assist students in developing better speaking and comprehension skills. Students will practice giving academic presentations as well as practice speaking in small groups and individually.

ENGL 0003 - Reading I

0 sem. hrs. In this course, students will develop the reading skills essential for academic learning and inquiry in the context of authentic academic reading tasks. Students will work to build fluency, comprehension, and vocabulary skills through extensive and intensive reading tasks of increasing complexity. Contemporary academic and literary texts will be used to develop students' critical reading and vocabulary, writing, listening, and speaking skills.

ENGL 0004 - Writing I

0 sem. hrs. In this course, students will learn and apply the writing skills essential for academic success including sentence, paragraph, and basic essay writing. This course is aimed at students planning to study, or are already studying, at university level in English.

ENGL 0005 - Recitation I

0 sem. hrs. This course provides students with a structured, scheduled academic environment providing the opportunity to complete assignments and work closely with their language instructor. Instructors utilize materials from student courses to facilitate activities and discussions that will increase comprehension of academic material and further students' abilities to work independently in academic settings. Each week, the course will focus on the language skills and vocabulary needed for the students' courses. Additionally, there will be a focus on study skills and time management needed for success in academic settings. Students will leave the course better equipped for university level academic course work and a thorough understanding of time management and appropriate study habits for the university.

ENGL 0011 - Grammar II

0 sem. hrs. This course will focus on high-intermediate grammatical structures that enable students to better comprehend and use academic English. Students will learn to appreciate the relevance of acquiring and applying grammatical knowledge to express
themselves confidently and appropriately in different academic situations, as well as social situation relevant to the American college context.

ENGL 0012 - Listening and Speaking II

0 sem. hrs. In this course, students will learn and apply the listening, note-taking, and presentation skills essential for academic learning, inquiry, and communication in the context of authentic academic listening and speaking tasks. Students will work to build fluency, comprehension, and vocabulary skills through extensive and intensive listening tasks of increasing complexity. Contemporary academic lectures and seminars will be sued to develop students' critical thinking skills.

ENGL 0013 - Reading and Writing II

0 sem. hrs. In this course, students develop and apply the reading skills essential for academic learning and inquiry, in the context of authentic academic reading tasks. Students will work to build fluency, comprehension, and vocabulary skills through extensive and intensive reading tasks of increasing complexity.

Those course will serve as preparation for college composition course and any writing intensive courses. There will be a number written tasks and prompts that will stimulate free writing practice and introduce students to various styles of writing. Students will also use these written tasks to develop editing skills through the writing process. The final project will be a collection of these written tasks in the form of a portfolio.

ENGL 0016 - College Life

0 sem. hrs. College Life focuses on the study skills necessary for students to be successful in an American university setting. Students will develop critical skills and strategies for incorporating researched materials into written work, working in groups, giving presentations, navigating an American university campus, and building language skills through immersion in the new culture. In addition, students will prepare for their future careers through the Career Ahead Program. Interactive activities on campus require learners in the course to use and understand college-level academic English. This course will equip students with the skills to survive and thrive in a new academic setting, and more importantly, provide the opportunity to examine and reposition students' learning, organization, and time management skills to enable them to become successful students.

ENGL 0022 - Listening and Speaking III
0 sem. hrs. In this course students will learn and apply listening, note-taking, and presentation skills essential for academic learning, inquiry, and discourse in the context of authentic academic listening and speaking tasks. Students will work to build fluency, comprehension, and vocabulary skills through extensive and intensive listening tasks of increasing complexity. Contemporary academic lectures and seminar will be used to develop students' critical thinking skills.

ENGL 0023 - Reading and Writing III

0 sem. hrs. In this course students will improve upon and apply the reading skills essential for academic learning, inquiry, and discourse in the context of authentic academic reading tasks. Students will build vocabulary through extensive and intensive reading tasks of increasing complexity.

Contemporary academic tests about writing will be used to develop students' critical reading, academic vocabulary, and complex writing skills. There will be a number of in-class written tasks and prompts that will stimulate free writing practice and introduce students to various styles of writing. Students will also use these written tasks to develop editing skills through the writing process. The final project will be a collection of these written tasks in the form of a portfolio.

ENGL 0036 - US Culture

0 sem. hrs. This course will offer English Language Learners a means for analyzing and evaluating the complex social and moral issues that are specific to the social and moral landscape of the United States. As students examine their own cultures and compare them with others, culture shock and cultural conflict may be lessened and appreciation for cultural differences may be strengthened. Students will engage in interactive tasks, including researching and case analysis of topics and social, academic and professional issues, especially those suggested by the extensive reading component of this course. Through the process of reading, discussion, analysis and writing students in this class will enrich their understanding of today's global society while at the same time they are sharpening their academic English skills.

ENGL 0037 - Critical Thinking

0 sem. hrs. The purpose of this course is to develop the critical thinking skills needed to interpret and assess arguments and information. This course will highlight the language skills essential for critically analyzing and discussing the quality of the information and opinions presented in authentic texts and listening selections. The course will concentrate on detecting errors of reasoning in short and long passages, evaluating evidence in written and verbal arguments, detecting logical inconsistencies, removing vagueness and
ambiguity through word choice and phrasing, and identifying the point or purpose of someone's remarks. Through examining these topics, students will be able to thoughtfully respond to others' opinions in a clear, logical, and informed way. Students will leave the course better prepared to collect, synthesize, and evaluate information and feel more confident in presenting their perspectives in an academic setting.

ENGL 0099 - Integrated Reading and Writing Non-Course Based Development

0-5 sem. hrs. (0:0) ENGL 0099 is designed to develop student's critical reading and academic writing skills on an individualized basis through tutoring. The course fulfills TSI requirements for reading and writing. TSI compliance staff will approve each student for this course. Approval is based on test score and/or by academic standing.

ENGL 0399 - Integrated Reading and Writing

3 sem. hrs. A portfolio-based course with required tutoring (lab) time focused on the writing and reading processes, including strategies for invention, revision, and editing, and techniques of active reading, such as analysis, inference, summary, and evaluating texts. Students will enter ENGL 0399 through Texas Success Initiative (TSI) mandated remediation. (Not counted toward graduation) (Co-Requisite: ENGL 1301)

ENGL 1301 - Composition I

3 sem. hrs. Principles, techniques, and processes of written composition, textual analysis, and critical thinking. TCCNS Equivalent: ENGL 1301 Satisfies the university core curriculum requirement in composition

ENGL 1302 - Writing and Rhetoric*

3 sem. hrs. Introduces students to writing studies, rhetoric, and academic research (information literacy). Students will read, apply, and reflect on the current research and scholarship in writing studies, especially threshold concepts, kinds of knowledge about writing, and rhetoric. Students will learn how to transfer, deepen, and extend their ability to use writing in various contexts. Prerequisite: ENGL 1301. TCCNS Equivalent: ENGL 1302 Satisfies the university core curriculum requirement in composition

ENGL 2303 - Introduction to Writing Studies

3 sem. hrs. This course will review current scholarship on writing studies, including threshold concepts, activity theory, and genre studies. It will consider various perspectives on the uses of writing to provide students with an intellectual and practical understanding of writing. This course provides a starting point for the more specific
studies of writing that occur in other writing studies courses. Prerequisites: Core Communication Component Area complete or permission from instructor.

ENGL 2316 - Literature and Culture*

3 sem. hrs. Introduction to literatures that raise aesthetic, cultural, social, and/or political issues that affect and reflect the human condition across regions, cultures, and nations. Sample topics: Crossing Borders, The City in Literature, Islands and Islanders, Science and Fiction. Pre-requisite: ENGL 1301. TCCNS Equivalent: ENGL 2331 May be used to satisfy the university core requirement in Language, Philosophy, and Culture.

ENGL 2332 - Literature of the Western World: From the Classics to the Renaissance*

3 sem. hrs. Study of important literary texts from the Ancient World to the Renaissance. Pre-requisite: ENGL 1301. TCCNS Equivalent: ENGL 2332 May be used to satisfy the university core curriculum requirement in literature.

ENGL 2333 - Literature of the Western World: From the Enlightenment to the Present*

3 sem. hrs. Study of important literary texts from the Enlightenment to the present. Pre-requisite: ENGL 1301. TCCNS Equivalent: ENGL 2333 May be used to satisfy the university core curriculum requirement in literature.

ENGL 2370 - Introduction to Literary Studies

3 sem. hrs. An introduction to literary analysis and scholarship for the intermediate writer. Emphasis placed on genres of literature, literary research, and expository and analytical composition. Familiarizes students with the various disciplines and related conversations within English Studies. Should be taken by sophomore-level English majors in the Literary Studies emphasis, and by Literary Studies and Creative Writing minors. Prerequisites: ENGL 1302.

ENGL 2371 - Exploring Social Media

3 sem. hrs. In this course we will examine and discuss current issues related to social media within a rhetorical framework. We will use different social media platforms to share and discuss in order to provide hands-on experience in these environments. Social media will be explored at the micro level as students will review their online social media presence to better understand how readers view them online. From the macro level we will identify current topics that affect the design and use of social media platforms and applications.
ENGL 3167 - English as a Second/Foreign Language Tutoring

1 sem. hrs. Students pursuing the Advanced TESOL Certificate will supplement ENGL 3367 (TESOL Seminar: Methods) with practical experience tutoring English learners. Students will write reflectively about those experiences. As needed, students will undergo site-specific training. ENGL 3367 (co-req)

ENGL 3301 - Technical and Professional Writing

3 sem. hrs. A course designed to help students gain practical experience in finding and interpreting information and writing reports and documents for specialized audiences in the technical and professional world. ENGL 3301 will be held in a computer-assisted classroom. Prerequisites: Core Communication Component Area complete or permission from instructor.

ENGL 3302 - Techniques of Creative Writing

3 sem. hrs. Introduces students to the theoretical knowledge and practical experience used in creative writing. Focuses on poetry, creative nonfiction, and short fiction. For all majors. Prerequisites: Core Communication Component Area complete or permission from instructor.

ENGL 3310 - Technical and Professional Writing for Computer Science

3 sem. hrs. Designed specifically for computer science majors, this course focuses on developing students ability to (1) use writing to communicate effectively with a range of audiences about technology; (2) identify, analyze, and appropriately integrate relevant information in their writing; (3) make informed judgments about their uses of writing based on ACM's and IEEE's code of ethics; and (4) develop their ability to function effectively individually and as members of a team to establish goals, plan tasks, meet deadlines, manage risk, and produce deliverables.

ENGL 3321 - Film and Literature

3 sem. hrs. Studies the connections between the formal elements of literature and of film, with emphasis on theme, narrative style, and genre. By viewing films based on literary sources, students will analyze how literature is adapted into film as well as identify strategies to view and read critically. For all majors. Prerequisites: ENGL 2316, 2332, and 2333.

ENGL 3323 - Young Adult Fiction
3 sem. hrs. Literary study of young adult literature through analysis, discussion, and interpretation. The course emphasizes literary issues connected with society, culture, history, and genre.

ENGL 3325 - Interdisciplinary Approaches to Literature

3 sem. hrs. In recent decades, it has become common to study literature in light of other disciplinary perspectives-and to study other disciplines as they are depicted in literature. From these interdisciplinary approaches has emerged a distinct mode of analysis that examines texts within their broader social and cultural milieu. In this course students will learn to use cross-disciplinary methods to interpret literature and culture. Topics will vary, but may include Religion, Medicine, and American Literature, Disability Narratives in the Eighteenth Century, Trauma and the City in Twentieth-Century Literature.

ENGL 3330 - Current Events and Literature

3 sem. hrs. This course examines literature in the context of current issues and events. Students will place literature in conversation with social, political, and cultural trends as a means of engaging with and understanding these trends and the debates associated with them. Using reading, writing, and discussion as modes of critical inquiry, students will discover the critical role that literature plays in representing, responding to, and shaping current events.

ENGL 3339 - Introduction to Linguistics

3 sem. hrs. Introductory survey course covering phonetics, morphology, syntax, semantics, sociolinguistics, neurolinguistics, and language acquisition.

ENGL 3340 - Grammar

3 sem. hrs. Presents a general descriptive overview of English grammar and provides a structural framework for analyzing English sentences.

ENGL 3341 - British Literature before 1800

3 sem. hrs. Study of significant works of poetry, drama, and prose before 1800 with emphasis on historical context and the exploration of literary and cultural values through written texts. Prerequisite or corequisite: ENGL 2370, or ENGL 2303, or instructor approval.

ENGL 3345 - British Literature since 1800
3 sem. hrs. Study of significant works of British poetry, drama, and prose since 1800 with emphasis on historical context and the exploration of literary and cultural values through written texts. Prerequisite or corequisite: ENGL 2370, or ENGL 2303, or instructor approval.

ENGL 3348 - Drama


ENGL 3349 - Poetry


ENGL 3354 - American Literatures before 1900

3 sem. hrs. Study of significant works of American poetry, drama, and prose from the country's pre-European beginnings to 1900 with emphasis on historical context and the exploration of literary and cultural values through written texts. Prerequisite or corequisite: ENGL 2370, or ENGL 2303, or instructor approval.

ENGL 3355 - American Literatures since 1900

3 sem. hrs. Study of significant works of American poetry, drama, and prose from 1900 to the present with emphasis on historical context and the exploration of literary and cultural values through written texts. Prerequisite or corequisite: ENGL 2370, or ENGL 2303, or instructor approval.

ENGL 3360 - Current Approaches to Composition and Literature

3 sem. hrs. Prepares prospective teachers to create developmentally appropriate learning environments and tasks that enable student success in writing and the study of literature in Language Arts and English courses. Prepares students to meet the increased writing and reading expectations in all subject areas, including their own writing. Prerequisite: One Reading Course.

ENGL 3361 - Strategies and Genres of Advanced Writing

3 sem. hrs. Students will practice-writing in situated contexts (such as their majors, careers, and/or other professional interests) and across genres to develop more advanced and reflective writing strategies. By studying theories of writing; engaging in writing as a
craft; and drafting, revising, and editing texts; students will refine and become more reflective in their writing processes.

ENGL 3362 - Creative Writing Workshop: Survey and Practice of Genres

3 sem. hrs. Develops students' skills as critics and writers of fiction, poetry, and creative nonfiction in a workshop setting. For all majors. Prerequisite: Core Communication Component Area complete or permission of instructor.

ENGL 3363 - Foundations of Rhetoric

3 sem. hrs. This course will study the historical and theoretical development of rhetoric through the works of principal thinkers. Students will analyze rhetorical concepts in their relation to civic, cultural, political, and pedagogical developments and the construction of knowledge and will use rhetorical concepts to produce logical, ethical, and moral arguments. Prerequisites: Core Communication Component Area complete or permission from instructor.

ENGL 3363.H01 - Honors Rhetoric

3 sem. hrs.

A study of the historical and theoretical development of rhetoric within the works of principal thinkers in the classical period, the Enlightenment, and the contemporary period. The analysis of rhetorical concepts in their relation to civic, cultural, political, and pedagogical developments and the construction of knowledge.

ENGL 3364 - Strategies of Writing Creative Nonfiction

3 sem. hrs. Explores the uses of creative nonfiction through reading and writing about published works of experienced writers and scholars in the field and practicing a variety of creative nonfiction techniques and genres (e.g. literary journalism, memoir, and the personal narrative). Prerequisite: Core Communication Component Area complete or permission of instructor. For all Majors.

ENGL 3365 - Second Language Acquisition

3 sem. hrs. This course is an introduction to second language acquisition. The course is designed to be accessible to students from a wide variety of backgrounds and no basic knowledge of the linguistic structure of English will be assumed. This course will address issues related to how second language is learned by both children and adults.
ENGL 3366 - Language in Society

3 sem. hrs. An introduction to the study of language as a function of several societal variables. Introduces basic concepts of language such as linguistic varieties, dialect, speech communities, and linguistic attitudes.

ENGL 3367 - TESOL Seminar

3 sem. hrs. This course presents an introduction to and a critique of current and traditional methodologies of teaching English to speakers of other languages, with emphasis on aural comprehension; speaking, reading, and writing skills; testing and assessment; and linguistic-cultural differences. This course is open to all majors, but is required for students seeking the Certificate in TESOL. ENGL 3365 Second Language Acquisition or Approval of Instructor

ENGL 3369 - Topics in Linguistics

3 sem. hrs. Exploration of topics such as second language acquisition, language assessment, history of English, and contrastive analysis. May be repeated when topics vary.

ENGL 3378 - Document Design and Publishing

3 sem. hrs. Focuses on the integration of text and visual rhetoric, such as graphics, for all kinds of professional publications including technical documents, media, public relations pieces, and advertisements.

ENGL 3379 - Writing for the Web

3 sem. hrs. Emphasizes practical concepts related to writing and communication on the internet and the World Wide Web. Attention is given to finding and analyzing information; analyzing and designing WWW sites and other digital, hypertextual environments; and analyzing and composing hypertext-hypermedia materials for digital, networked environments. For all majors.

ENGL 3380 - Visual Rhetoric

3 sem. hrs. Focuses on the analysis, design, and production of visual representations and multi-modal texts that integrate visual elements.

ENGL 4123 - Nonprofit Writing Project
1 sem. hrs. Students will gain practical experience with a nonprofit agency by developing a significant project that meets an agency identified need. Students should take this course in the last semester of their nonprofit certificate program in conjunction with one of the following: ENGL 3378, ENGL 3379, ENGL 4322, or ENGL 4321. The students' professor in the regular course will be the instructor of record for the projects course.

ENGL 4300 - Technologies and Cultures of the Book

3 sem. hrs. Working with a range of print media, students will learn to analyze the interplay between the text's content and its formal features. Students will build the skills to think and write analytically about the materiality of texts.

ENGL 4305 - Major Authors

3 sem. hrs. This course studies the significant works of a major literary author. Texts are viewed through a variety of critical perspectives and placed in the context of the writer's life and of the society, culture, and history of the times. May be repeated once for credit when authors vary.

ENGL 4320 - Professional Writing Workshop

3 sem. hrs. This course is tailored for individual students' writing and publishing projects in their disciplines.

ENGL 4321 - Grants and Proposals

3 sem. hrs. This course will teach students the grant proposal writing process, including identifying sources of funding, conducting research to support funding applications, and tailoring each proposal to a specific funding agency. Students will receive experience writing actual proposals on behalf of local organizations and agencies.

ENGL 4322 - Writing in the Nonprofit Agencies

3 sem. hrs. Focuses on the specific kinds writing of professionals in the nonprofit world do, including internal communication in an agency, writing for the public, document creation, fund raising, board relations, and other relevant topics.

ENGL 4324 - Editing & Style

3 sem. hrs. Practice in methods, tools, and principles of editing for nonfiction and technical publications. Emphasis on a rhetorical understanding of levels of editing, managing the editorial process, and grammar and style.
ENGL 4325 - Writing Across Cultures and Contexts

3 sem. hrs. Through writing, students will study how groups perceive, understand, and communicate with and about each other. The course may focus on a specific type of writing (cross cultural expository writing, travel writing, cross cultural writing in industry), or on the linguistic and rhetorical practices of a cross-cultural community (latino/a rhetoric, African-American rhetorics, etc).

ENGL 4335 - Creative Writing Studio: Development of Craft

3 sem. hrs. Develops students' skills as critics and writers of fiction, poetry, and creative nonfiction in a studio setting. Guides students to focus on a major project in one genre with sustained practice of techniques and revision. Open to students of all levels, from the novice to the advanced. For all majors. Prerequisites: Core Communication Component Area complete or permission of instructor.

ENGL 4340 - The Novel


ENGL 4345 - Rhetorics, Literacies, and Writing

3 sem. hrs. This course examines the history and major theories of rhetoric, literacy, and composition, and explores how they influence contemporary cultural productions.

ENGL 4350 - Studies in Poetics: Theory, Form, and Practice

3 sem. hrs. Develops students' theoretical knowledge of poetics and practical experience of writing in traditional forms, from the Anglo-American tradition to the culturally diverse movements and innovation of form. Focusing on works written by poets about poetry and poetics primarily from the 19th to the 21st centuries. For all majors. Prerequisite: Core Communication Component Area complete or permission from instructor.

ENGL 4351 - Senior Capstone: Literature and Writing

3 sem. hrs. A study of literature in English for graduating seniors in the Literary Studies Emphasis. Emphasis is placed on genre, research, and analytical expository writing. Prerequisite: ENGL 2370 or ENGL 2303. This course should be taken during the student's final year of academic study.
ENGL 4352 - Capstone in Writing Studies

3 sem. hrs. This course is the culminating experience for the Writing Studies emphasis in English. Students review, reflect on, integrate, and apply their learning from previous courses and experiences. Students create digital portfolios for career and publishing opportunities, emphasizing selection, revision, reflection, and presentation. In addition, students identify, evaluate, and annotate texts and resources to include in a curated digital collection/publication that will be available for students in future Writing Studies courses.

ENGL 4360 - Gender, Sexuality and Literature

3 sem. hrs. This course introduces students to literature that explores issues of gender and sexuality. It focuses on relevant literary periods and conventions, as well as on the historical, social, and cultural contexts of artistic productions. Sample topics: women's literature, queer literature, literature and masculinity.

ENGL 4361 - Race and Ethnicity in Literature

3 sem. hrs. Topics focus on a variety of cross-cultural issues in historical and/or contemporary texts by Caribbean, British Indian, Native American, African American, Chicano/a, and/or other underrepresented authors.

ENGL 4362 - Texts and Contexts

3 sem. hrs. Study of literary and cultural texts that raise issues of community and social relations, diversity, multiculturalism, and/or globalization. Sample topics: Medicine and Religion in American Literature, Traveling Histories, the Global City, and Literary Regionalism in Transnational Context. May be repeated once for credit when topics vary.

ENGL 4370 - Oral Interpretation of Children's Literature

3 sem. hrs. A study, primarily through the medium of performance, of various types and forms of literature for children. Strongly oriented toward teaching literature in the elementary school classroom. (Credit may not be given for both this course and COMM 4323 or THEA 4323.)

ENGL 4380 - Critical Approaches to Literature and Culture

3 sem. hrs. A study of selected perspectives and critical approaches to literature and culture, including an examination of some of the theoretical assumptions upon which they are based, as well as their implications for the way we think about literature, human identity, and the power of language. Prerequisite: ENGL 2370.
ENGL 4385 - Studies in Creative Writing

3 sem. hrs. Students will focus on the craft of a specific genre or type of writing through reading experts' advice, reading and analyzing examples written by practitioners, and engaging in peer-response workshops with classmates. Attention will be paid to publication opportunities available for writers in that genre.

ENGL 4390 - Topics in Literary Studies

3 sem. hrs. May be repeated when topics vary—see S.A.I.L. or advisor for further information.

ENGL 4391 - Topics in Writing Studies

3 sem. hrs. May be repeated when topics vary--see S.A.I.L. or advisor for further information.

ENGL 4396 - Directed Individual Study

1-3 sem. hrs. See College description. Offered on application.

ENGL 4398 - Applied Experience

3 sem. hrs. See College description. Offered on application.

ENGL 4399 - TESOL Practicum

3 sem. hrs. Practical experience teaching English to second language learners. Students will observe, plan, and teach ESL lessons. Instructional support provides opportunities to discuss and reflect upon teaching experiences and help students connect theory, methods, and practice. This course enhances the TESOL Certification, but is not required for it. Cannot be repeated for credit. Approval of Instructor. Completion of ENGL 3339, 3340, 3365, 3367 preferred.

Engineering

EEEN 3310 - Electromagnetic Theory

3 sem. hrs. (3:0)
An introduction to the theory of static and dynamic electromagnetic fields with a focus on engineering applications. Principles will be illustrated with applications in various areas. Topics include computational electromagnetics, transmission lines, antennas, electromagnetic interference, and signal propagation in high speed circuits. Prerequisites: PHYS 2426 University Physics II, MATH 2415 Calculus III, MATH 3315 Differential Equations, EEEN 3315 Electrical Circuits II

Offering: Spring

EEEN 3315 - Electrical Circuits II

3 sem. hrs. (3:0) AC circuit analysis principles: AC generation, periodic functions, complex numbers, phasors, impedance and admittance, network theorems, power, frequency response, filters, transformers, and balanced three-phase systems; and use of analysis software. Prerequisite: ENGR 2305 - Electrical Circuits or ENGR 2460 - Circuit Analysis. Offering: Fall and Spring.

EEEN 3320 - Introduction to Communication Theory and Systems

3 sem. hrs. (3:0) Frequency domain and time domain response of linear systems; analog modulation methods including amplitude modulation, frequency modulation and phase modulation; signal and noise modeling using probabilistic descriptions; narrowband random processes and the performance of analog modulation techniques in the presence of noise; design of communication links. Prerequisite: ENGR 2305 - Electrical Circuits + ENGR 2105 - Electrical Circuits Laboratory, or ENGR 2460; and MATH 3345 - Statistical Modeling and Data Analysis. Offered: Fall and Spring

EEEN 3330 - Control Systems I

3 sem. hrs. (3:0) Introduction to control systems; open and feedback; Laplace transform and frequency response; control valves; electric motors; P, PI, and PID modes of control; analog and digital controllers Process characteristics; analysis of control systems; gain and phase margin; stability. Prerequisite: ENGR 2305 - Electrical Circuits or ENGR 2460 - Circuit Analysis. Offering: Spring.

EEEN 3350 - Electronic Systems Design

3 sem. hrs. (3:0) Principles of engineering design of electronic circuits and systems; time and frequency responses; network analysis; systems specifications; evaluation, testing, and verification; use of electronic design automation tools. Prerequisites: ENGR 2306 - Digital Systems, ENGR 2305 - Electrical Circuits or ENGR 2460 - Circuit Analysis or equivalent, and EEEN 3315 - Electrical Circuits II. Offered: Fall and Spring.
EEEN 3418 - Microprocessors and Microcontrollers

4 sem. hrs. (3:3) Introduction to microprocessor/microcontroller architecture, assembly language programming, and interfacing. Topics include computer organization, addressing modes, instruction set, interrupts, timing, memory, and interfacing. Prerequisite: COSC 1320 - C Programming, ENGR 2306 - Digital Systems, and ENGR 2106 - Digital Systems Laboratory.

EEEN 4240 - Project Management

2 sem. hrs. (2:2) Foundations of engineering economy, cash flow and equivalence, and project justification. Introduction to project management, planning, scheduling, and control, use of project management software, GANTT charts, PERT charts, and critical path. Students prepare proposals, including specifications, timelines, schedule, and budget, for projects to be implemented in EEEN 4370 - Capstone Projects. This course should be taken the semester preceding EEEN 4370 Capstone Design. Prerequisite: EEEN 3330 Control Systems I, EEEN 3310 Electromagnetic Theory, and EEEN 3350 Electronic Systems Design

EEEN 4310 - Signal Processing

3 sem. hrs. (3:0) Discrete time signals & systems, z-transform, discrete Fourier transform, flow graph and matrix representation of digital filters, digital filter design techniques and computation of the fast Fourier transform (FFT). MATLAB software package is heavily utilized in this course. Prerequisites: EEEN 3320 Introduction to Communications Theory and Systems and EEEN 3330 Control Systems I. Offering: Fall

EEEN 4330 - Introduction to Plasma Engineering and Applications

(3:0) Physical, electrical, chemical properties of plasmas; differences in properties of thermal and non-thermal plasmas, direct and alternating current plasma sources, inductive and capacitive coupled plasma sources, diagnostics and applications of plasmas. Prerequisites: ENGR 3322 Materials Science, ENGR 2460 Circuit Analysis OR ENGR 2305 Electrical Circuits OR PHYS 2426 University Physics II

EEEN 4333 - Machine Vision and Image Processing

3 sem. hrs. (3:0) Introduces students to automated vision systems and components, camera models, testing and measurement, and fundamentals of image processing. Topics include image analysis and processing in binary, gray scale and color images in spatial- and frequency-domain. Texture and shape analysis, hyperspectral imaging, other
transforms, and filters are discussed and applied. Prerequisites: COSC 1330 Programming for Scientists, Engineers, and Mathematicians or COSC 1435 Introduction to Problem Solving with Computers I, ENGR 2460 Circuit Analysis or ENGR 2305 Electrical Circuits, and MATH 2414 Calculus II and EEEN 4310 Signal Processing.

EEEN 4370 - Capstone Design

3 sem. hrs. (1:5)
This course allows students to employ the knowledge attained in other courses to implement (including building, testing, and documenting) an approved project, within budget and on schedule. Course requirements include a written report and oral presentations. Prerequisite: EEEN 4240 - Project Management. Corequisites: EEEN 4333 Machine Vision and Image Processing, COMM 1315 Public Speaking. To be taken in the student's final long semester before graduation.

EEEN 4390 - Special Topics

3 sem. hrs. (3:0) Course that addresses a specialized field in electrical engineering. Prerequisites differ according to the course being offered.

ENGR 1211 - Introduction to Engineering

2 sem. hrs. (1:2) Introduction to the engineering profession, ethics, and disciplines; development of skills in teamwork, problem solving and design; other topics include computer applications and programming; visualization, orthographic drawings and CAD tools; introduction to electrical circuits, semiconductor devices, digital logic, communications and their application in systems; Newton's laws, unit conversions, statistics, Excel; basic graphics skills. Offering: Fall and Spring. Pre-req: MATH 1314 - College Algebra or equivalent academic preparation. TCCNS Equivalent: ENGR 1201

ENGR 1312 - Engineering Graphics I

3 sem. hrs. (2:2) Topics include, depending on the major: emphasis on computer applications and programming and solids modeling using CAD tools or other software; fundamentals of engineering science; advanced graphic skills. Offered Fall and Spring. Pre-req: MATH 1314 - College Algebra or equivalent academic preparation. TCCNS Equivalent: ENGR 1304

ENGR 2105 - Electrical Circuits Laboratory

1 sem. hrs. (0:3) Laboratory experiments supporting theoretical principles presented in ENGR 2305 involving DC and AC circuit theory, network theorems, time, and frequency
domain circuit analysis. Introduction to principles and operation of basic laboratory equipment; laboratory report preparation. Prerequisite or co-requisite: ENGR 2305 - Electrical Circuits or equivalent.

ENGR 2106 - Digital Systems Laboratory

1 sem. hrs. (0:3)
Basic laboratory experiments supporting theoretical principles presented in ENGR 2306 involving design, construction, and analysis of combinational and sequential digital circuits and systems, including logic gates, adders, multiplexers, encoders, decoders, arithmetic logic units, latches, flip-flops, registers, and counters; preparation of laboratory reports.

Co-requisite: ENGR 2306 Digital Systems

ENGR 2305 - Electrical Circuits

3 sem. hrs. (3:0) Principles of electrical circuits and systems. Basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources). Topology of electrical networks; Kirchhoff’s laws; node and mesh analysis; DC circuit analysis; operational amplifiers; transient and sinusoidal steady-state analysis; AC circuit analysis; first- and second-order circuits; Bode plots; and use of computer simulation software to solve circuit problems. Prerequisites: PHYS 2425 - University Physics I, MATH 2414 - Calculus II. Co-requisite: ENGR 2105 - Electrical Circuits Laboratory.

ENGR 2306 - Digital Systems

3 sem. hrs. (3:0) Introduction to theory and design of digital logic, circuits, and systems. Number systems, operations and codes; logic gates; Boolean Algebra and logic simplification; Karnaugh maps; combinational logic; functions of combinational Logic; flip-flops and related devices; counters; shift registers; sequential logic; memory and storage. Prerequisite: MATH 1314 - College Algebra. Co-requisite: ENGR 2106 - Digital Systems Laboratory. Prerequisite or co-requisite: MATH 2305 - Discrete Mathematics I. Offered: Fall and Spring.

ENGR 2325 - Statics

3 sem. hrs. (3:0) Theory of engineering mechanics involving forces, moments, and couples on stationary structures; equilibrium in two and three dimensions; free body diagrams; truss analysis; friction; centroids; centers of gravity and moments of inertia.
Pre-req: PHYS 2425 - University Physics I and pre-req/co-req: MATH 2414 - Calculus II. Offering: Fall Spring. TCCNS Equivalent: ENGR 2301

ENGR 2326 - Dynamics

3 sem. hrs. (3:0) Theory of engineering mechanics involving the motion of particles, rigid bodies and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems. Prerequisite: ENGR 2325 - Statics. Offered: Fall Spring TCCNS Equivalent: ENGR 2302

ENGR 2460 - Circuit Analysis

4 sem. hrs. (3:3) This course covers principles of electronics: charge, voltage, resistance, current, and power; Ohm's Law; Kirchhoff's voltage and current laws; RC and LC circuits; periodic functions, average and RMS measurements; transformers, electrical measurement instruments. The laboratory provides hands-on experience with devices and circuits discussed in the classroom. Prerequisite: PHYS 2426 - University Physics II. Offered: Fall/Spring TCCNS Equivalent: ENGR 2305

ENGR 3315 - Fluid Mechanics

3 sem. hrs. (3:0) Fluid properties, fluid statics, dynamics, and kinematics, conservation of energy and momentum incompressible, laminar and turbulent flow. Similitude and dimensional analysis, and viscous flow. Prerequisites: ENGR 2326 - Dynamics and MATH 2415 - Calculus III. Prerequisite or corequisite: MATH 3315 - Differential Equations. Offered: Fall Spring

ENGR 3316 - Thermodynamics

3 sem. hrs. (3:0) Theory and application of energy methods in engineering; conservation of mass and energy; energy transfer by heat, work and mass; thermodynamic properties; analysis of open and closed systems; the second law of thermodynamics and entropy; gas, vapor and refrigeration cycles. Prerequisites: PHYS 2425 - University Physics I and MATH 2414 - Calculus II. Offering: Fall, Spring

ENGR 3320 - Strength of Materials

3 sem. hrs. (3:0) Concepts in strength of materials, stress, strain; deformation under load, direct, shear, and combined stresses; stress concentrations, bending stresses and torsional shear stresses, deflection in beams and shafts; columns, and pressure vessels.
Prerequisite: ENGR 2325 - Statics and ENGR 3322 - Materials Science. Offered: Fall Spring TCCNS Equivalent: ENGR 2332

ENGR 3322 - Materials Science

3 sem. hrs. (2:3) Structure and properties of metallic and nonmetallic materials; microstructure, mechanical testing, phase diagrams, heat treatment, testing, ceramics, polymers, composites, construction materials, failure analysis, nondestructive evaluation, corrosion and thermal properties of materials. Prerequisites: CHEM 1411 - General Chemistry I*, PHYS 2425 - University Physics I. Offering: Fall, Spring

ENGR 3350 - Manufacturing Processes

3 sem. hrs. (2:3) Introduction to metal and non-metallic manufacturing processes; casting, forging, rolling, extrusion, sheet metal forming, cutting tools turning and milling operations, abrasive machining, welding and joining, powder compaction, molding, forming of plastics, surface treatment, human factors and safety. Prerequisite: ENGR 1312 - Engineering Graphics I, ENGR 3320 - Strength of Materials and ENGR 2326 - Dynamics. Offered: Fall Spring

ENGR 4240 - Project Management

2 sem. hrs. (1:2) Foundations of engineering economy, cash flow and equivalence, and project justification. Introduction to project management, planning, scheduling, and control, use of project management software, GANTT charts, PERT charts, and critical path. Students prepare proposals, including specifications, timelines, schedule, and budget, for projects to be implemented in ENGR 4370 - Capstone Projects. This course should be taken the semester preceding ENGR 4370 - Capstone Projects. Prerequisite: MEEN 3330 - Solid Mechanics for Mechanical Engineering and MEEN 3345 - Heat Transfer, OR EEEN 3330 Control Systems I, EEEN 3310 Electromagnetic Theory, and EEEN 3350 Electronic Systems Design.

In good academic standing with the Department of Engineering (minimum GPA of 2.25 in major).

Offered: Fall and Spring.

ENGR 4350 - Machine Vision and Image Processing Applications

3 sem. hrs. (3:0) Introduces students to automated vision systems and components, camera models, testing and measurement, and fundamentals of image processing. Topics include image analysis and processing in binary, gray scale and color images in spatial-
and frequency-domain. Texture and shape analysis, hyperspectral imaging, other transforms, and filters are discussed and applied. Prerequisites: COSC 1330 - Programming for Scientists, Engineers, and Mathematicians or COSC 1435 - Introduction to Problem Solving with Computers I, and ENGR 2460 - Circuit Analysis, and MATH 2414 - Calculus II. Offered: As needed

ENGR 4370 - Capstone Projects

3 sem. hrs. (1:5) This course allows students to employ the knowledge attained in other courses to implement (including building, testing, and documenting) an approved project, within budget and on schedule. Course requirements include a written report and oral presentations. Prerequisite: ENGR 4240 - Project Management. Prerequisite or Corequisite: MEEN 4360 - Thermal Systems Design and MEEN 4365 - Mechanical Systems Design, OR EEEN 4333 Machine Vision and Image Processing, OR CEEN 4304 - Civil and Construction Materials, OR IEEN 4310 - Process Engineering. Offered: Fall and Spring. To be taken in the student's final long semester before graduation.

ENGR 4390 - Special Topics in Engineering

1-3 sem. hrs. Subject material variable. May be repeated for credit when topics are different. Prerequisite: Junior or senior level standing, specifics vary depending upon topic. Offered: As needed Offered on demand. May be repeated for a total of 6 hours.

ENGR 4420 - Engineering Lab Measurements

4 sem. hrs. (2:4) Principles of physical measurements; standards, calibration, error estimation; static and dynamic performance of measuring systems; laboratory experience, experiment planning, report writing. The purpose of this course is for students to gain proficiency in designing, assembling, and operating an experiment; and analyzing and presenting experimental results. This encompasses skills such as an understanding control and data acquisition electronics, operation and limitation of modern sensors, calibration and error analysis, assessing applicability of theory and the impact of secondary experimental variables, and writing and presenting reports and analysis. Offered Fall and Spring. Prerequisite: ENGR 2460 Circuit Analysis (or equivalent) and senior standing.

ENGR 4444 - Engineering Measurements

4 sem. hrs. (3:3) A very significant part of designing electronic instruments involves selecting the appropriate physical devices to translate quantities to be measured into voltages or currents that can be sensed with electronic circuits. The range of sensors and transducers
available will be studied with examples from industry and medical instrumentation. The course will explore in some detail the use of analog to digital (A/D) and digital to analog (D/A) converters and their applications. Students will also learn to use complete A/D-microprocessor-D/A systems since these are part of nearly all instruments now. In this course students will learn to build a complete instrument by combining analog and digital components and using advanced algorithms. We will review the basic concepts from analog electronics and real-time event driven programming one needs to understand in order to construct such instruments and experiment through a series of labs.

Prerequisites: EEEN 2306 Digital Systems, EEEN 3315 EEEN 3315 - Electrical Circuits II  Offered: Fall

Engineering Technology

EEEN 3345 - Electronic Devices and Circuits

3 sem. hrs. (3:0) The applications of electronic devices, including linear and non-linear Op-Amp circuits, oscillators, wave-shaping circuits, active filters, rectifiers, voltage regulators, and power supplies; industrial electronics. Prerequisite: EEEN 3315 - Electrical Circuits II. Offered Fall and Spring.

EEEN 4331 - Power Transmission and Distribution

3 sem. hrs. (3:0) This course covers principles of power transmission and distribution. Topics include unbalanced distribution; point to point measurements, operation control of systems; power systems; transmission lines; fault analysis; line modeling and unit analysis. Prerequisites: EEEN 3315 - Electrical Circuits II (or equivalent), and senior standing. Offered Fall or Spring.

EEEN 4332 - Power Protection Systems

3 sem. hrs. (3:0) Course topics include safety, reliability and availability in power systems; breaker operation; relay operation and relay circuit design; fault tolerance; cost analysis; control systems and sytem surveillance. Prerequisites: EEEN 3315 - Electrical Circuits II (or equivalent) and senior standing. Offered in Fall.

ENTC 2325 - Statics

3 sem. hrs. (3:0) Theory of engineering mechanics involving forces, moments, and couples on stationary structures; equilibrium in two and three dimensions; free body
diagrams; truss analysis; friction; centroids; centers of gravity and moments of inertia. Prerequisite: PHYS 2425 - University Physics I. Offered: Fall/Spring

ENTC 2326 - Dynamics

3 sem. hrs. (3:0) Theory of engineering mechanics involving the motion of particles, rigid bodies and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems. Prerequisite: ENTC 2325 - Statics. Offered: Fall/Spring

ENTC 2414 - Circuit Analysis I

4 sem. hrs. (3:3) Fundamental aspects of DC circuit analysis: charge, voltage, resistance, current, and power; Ohm's Law; methods of analysis; series and parallel circuits; Kirchhoff's voltage and current laws; Thevenin and Norton Theorems; electrical measurement instruments; and use of analysis software. Prerequisite: MATH 2413 - Calculus I Co-requisite: PHYS 2426 - University Physics II. Offered: Fall/Spring TCCNS Equivalent: ENGT 1401

ENTC 2490 - Special Topics

1-4 sem. hrs. Subject material variable. May be repeated for different topics. Prerequisites: Varies. May be repeated for a total of 6 hours.

ENTC 3220 - Thermal-Fluids Laboratory

2 sem. hrs. (0:4) Application of measurement instrumentation and experimental techniques utilized in thermodynamics and fluid mechanics. Experiments and project in hydrostatics, hydrodynamics, and thermodynamics. Prerequisites / corequisites: ENTC 3306 - Fluid Mechanics and ENTC 3320 - Thermodynamics. Offered in Spring.

ENTC 3302 - Manufacturing Processes

3 sem. hrs. (2:3) Introduction to metal and non-metallic manufacturing processes; casting, forging, rolling, extrusion, sheet metal forming, cutting tools turning and milling operations, abrasive machining, welding and joining, powder compaction, molding, forming of plastics, surface treatment, human factors and safety. Prerequisites: ENGR
1312 - Engineering Graphics I, ENTC 3308 - Strength of Materials, and ENTC 2326 - Dynamics or ENGR 2326 - Dynamics. Offered: Fall/Spring.

ENTC 3306 - Fluid Mechanics

3 sem. hrs. (3:0) Fluid properties, fluid statics, dynamics, and kinematics, conservation of energy and momentum incompressible, laminar and turbulent flow. Similitude and dimensional analysis, and viscous flow. Prerequisite: ENTC 2326 - Dynamics or ENGR 2326 - Dynamics. Offered: Fall (Spring as needed).

ENTC 3308 - Strength of Materials

3 sem. hrs. (3:0) Concepts in strength of materials, stress, strain; torsion; deformation under load; direct, shear, and combined stresses; shear and moment diagrams; Mohr's circle; stress concentrations, bending stresses and torsional shear stresses, deflection in beams and shafts; columns, connections, and pressure vessels. Prerequisites: ENTC 2325 - Statics or ENGR 2325 - Statics, and ENTC 3410 - Material Science. Offered: Fall (Spring as needed).

ENTC 3320 - Thermodynamics

3 sem. hrs. (3:0) Theory and application of energy methods in engineering; conservation of mass and energy; energy transfer by heat, work and mass; thermodynamic properties; analysis of open and closed systems; the second law of thermodynamics and entropy; gas, vapor and refrigeration cycles. Prerequisites: PHYS 2425 - University Physics I and MATH 2414 - Calculus II. Offered: Fall/Spring

ENTC 3323 - Robotics and Automation

3 sem. hrs. (2:3) Automation in a manufacturing and assembly setting, material handling systems, remote guided vehicles, automated storage and retrieval systems, computer numerical machine tools, robotics. Prerequisite: ENTC 3415 - Circuit Analysis II Offered: Spring

ENTC 3350 - Human Factors Engineering

3 sem. hrs. (3:0) Application of human factors engineering principles utilized in mechanical system and product design. Overview of human characteristics and research and design techniques. Prerequisite / corequisite: ENTC 3302 - Manufacturing Processes. Offered in Fall and Spring.

ENTC 3410 - Material Science
4 sem. hrs. (3:3) Structure and properties of metallic and nonmetallic materials; microstructure, mechanical testing, phase diagrams, heat treatment, testing, ceramics, polymers, composites, construction materials, failure analysis, nondestructive evaluation, corrosion and thermal properties of materials. Prerequisite: CHEM 1411 - General Chemistry I* and PHYS 2425 - University Physics I.

ENTC 3415 - Circuit Analysis II

4 sem. hrs. (3:3) AC circuit analysis principles: AC generation, periodic functions, complex numbers, phasors, impedance and admittance, network theorems, power, frequency response, filters, transformers, and balanced three-phase systems; and use of analysis software. Prerequisites: ENTC 2414 - Circuit Analysis I.

ENTC 3416 - Digital Fundamentals

4 sem. hrs. (3:3) Introduces the principles of digital logic analysis and design: logic functions; logic gates, number systems and conversions; Boolean algebra; logic simplification, combinational circuits, programmable logic devices, sequential circuits, and use of analysis and simulation software. Co-requisite: ENTC 2414 - Circuit Analysis I.

ENTC 3418 - Microprocessors/Microcontrollers

4 sem. hrs. (3:3) Introduction to microprocessor architecture, assembly language programming, and interfacing. Topics include computer organization, addressing modes, instruction set, interrupts, timing, memory, and interfacing. Prerequisite: COSC 1330 - Programming for Scientists, Engineers, and Mathematicians or COSC 1435 - Introduction to Problem Solving with Computers I.

ENTC 3444 - Electronic Devices and Circuits I

4 sem. hrs. (3:3) An introduction to semiconductor theory; solid state devices, including diodes, Bipolar Junction transistors, JFETs, and MOSFETs; principles of operational amplifiers; transducers and sensors. Prerequisites: ENTC 3415 - Circuit Analysis II.

ENTC 3450 - Electronic System Design

4 sem. hrs. (3:3) Principles of engineering design of electronic circuits and systems; time and frequency responses; network analysis; systems specifications; evaluation, testing, and verification; use of electronic design automation tools. Prerequisites: EEEN 3345 - Electronic Devices and Circuits.
ENTC 3455 - Solid Modeling and Finite Elements

4 sem. hrs. (3:3) Use of computer aided design and solid modeling tools in engineering design and manufacturing including: solid modeling, stress, flow and heat transfer analysis using finite element methods, and rapid prototyping. Prerequisite: ENTC 3308 - Strength of Materials. Offered: Spring

ENTC 4210 - Solid Mechanics Laboratory


ENTC 4320 - Heat Transfer

3 sem. hrs. (3:0) Fundamental study of convection, conduction and radiation as applied to heat transfer, heat exchangers, boilers, other heat transfer equipment. Prerequisite: ENTC 3306 - Fluid Mechanics and ENTC 3320 - Thermodynamics. Offered: Spring

ENTC 4322 - Programmable Logic Controllers

3 sem. hrs. (2:3) Introduction to PLCs and their use in industrial automation. Topics include programming, counters, timers, interrupts, and process control applications. Prerequisite: ENTC 3416 - Digital Fundamentals. Offered: As needed

ENTC 4330 - Solid Mechanics

3 sem. hrs. (3:0) Stress analysis of deformable bodies and mechanical elements; stress transformation; combined loading; failure modes; material failure theories; fracture and fatigue; deflections and instabilities; thick cylinders; curved beams; design of structural/mechanical members; design processes for shafts, bearings, springs, fasteners, and mechanical joints. Prerequisite: ENTC 3308 - Strength of Materials. Offered in Fall and Spring

ENTC 4331 - Unit Processes

3 sem. hrs. (3:0) Principles and methods for staged separation processes including distillation, absorption and stripping, extraction, and adsorption systems. Offered in Fall and Spring Prerequisite: ENTC 4320 Heat Transfer

ENTC 4332 - Process Modeling and Control

ENTC 4333 - Chemical Reaction Engineering

3 sem. hrs. (3:0) Fundamental principles of chemical reaction engineering and application to design and analysis of basic chemical reactors containing both homogeneous and heterogeneous reactions. Offered Fall and Spring. Prerequisites: ENTC 4331 Unit Processes and ENTC 4332 Process Modeling and Control

ENTC 4335 - Energy Conversion

3 sem. hrs. (2:3) Installation, design characteristics, operational performance, and maintenance of motors, turbines, pumps and compressors. Introduction to global energy concerns; fossil and nuclear fuels; energy consumption analysis; energy management and conservation techniques; renewable and alternative energy sources. Modern energy conversion devices such as fuel cells, photovoltaic cells, and micro-power turbines. Prerequisite: ENTC 3320 - Thermodynamics. Offered: as needed

ENTC 4350 - Capstone Projects

3 sem. hrs. (1:5) This course allows students to employ the knowledge attained in other courses to implement (including building, testing, and documenting) the project approved in ENTC 4415 - Project Justification and Management, within budget and on schedule. Course requirements include a written report and oral presentations. Normally taken in the student's last semester. Prerequisite: ENTC 4415 - Project Justification and Management

ENTC 4360 - Mechanical System Design

3 sem. hrs. (3:0) Analysis, management and cost, team work, optimal design, and computer simulation of mechanical systems and components; Applications in fluid flow and heat transfer, machine elements, and stress analysis. Selected course topics are assigned as projects. Prerequisite: ENTC 3308 - Strength of Materials.

ENTC 4415 - Project Justification and Management
4 sem. hrs. (3:2) Foundations of engineering economy, cash flow and equivalence, and project justification. Introduction to project management, planning, scheduling, and control, use of project management software, GANTT charts, PERT charts, critical path. Students prepare proposals, including specifications, timelines, schedule, and budget, for projects to be implemented in ENTC 4350 - Capstone Projects. Prerequisite: Senior Standing. This course should be taken the semester preceding ENTC 4350 - Capstone Projects. Offered: Spring

ENTC 4420 - Embedded Systems

4 sem. hrs. (3:3) Characteristics of embedded systems, system design, interface devices, memory management, interrupt support, input/output applications, software-hardware co-design, modular programming, multitasking, simulation, and control of external devices. Prerequisites: ENTC 3416 - Digital Fundamentals or ENTC 3418 - Microprocessors/Microcontrollers.

ENTC 4446 - Control Systems I

4 sem. hrs. (3:3) Introduction to control systems; open and feedback; Laplace transform and frequency response; control valves; electric motors; P, PI, and PID modes of control; analog and digital controllers Process characteristics; analysis of control systems; gain and phase margin; stability. Prerequisites: ENTC 2414 - Circuit Analysis I.

ENTC 4490 - Selected Topics

3-4 sem. hrs. Subject material variable. May be repeated for different topics. Prerequisites: Vary. Offered: As needed

ENTC 4496 - Directed Independent Study

1-4 sem. hrs. Requires a formal proposal of study to be completed in advance of registration, approval of supervising faculty and chairperson. Prerequisites: Varies.

Environmental Science

ESCI 1401 - Environmental Science I: Intro to Environmental Science

4 sem. hrs. (3:2) Principles of the scientific method and critical thinking provide a foundation for subsequent consideration of environmental issues through a multidisciplinary approach. Laboratory exercises and local field experiences reinforce
concepts introduced in the lectures. Corequisite: SMTE 0096 Environmental Science Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. TCCNS Equivalent: ENVR 1401 This course counts toward the natural science component of the University Core Curriculum. Fall, Spring.

ESCI 1490 - Selected Topics

1-4 sem. hrs. Subject materials variable. May be repeated for credit when topics are significantly different. Faculty approval required. Offered on sufficient demand.

ESCI 3202 - Professional Skills

2 sem. hrs. (2:0) Presentation and discussion of selected topics relating to the professional skills of practicing environmental scientists including literature searches, reviews, paper presentation, professional and career opportunities, professional ethics. Fall, Spring.

ESCI 3351 - Oceanography

3 sem. hrs. (3:0) Methods and principles of oceanography. A survey of oceanography with emphasis placed on the physical processes affecting water and water masses of the world oceans. Prerequisites: CHEM 1412, or ESCI 1401, or GEOL 1403, or permission of instructor. Fall (on sufficient demand), Spring.

ESCI 3403 - Introduction to Meteorology

4 sem. hrs. (3:2) This course is an introduction to meteorology and the dynamics of planetary atmospheres. Emphasis on atmospheric accretion, composition, evolution, structure, and dynamics. Lab exercises cover basic measurement techniques, weather maps, and forecasting. A student cannot receive credit for both this course and ATSC 2403 - Introduction to Meteorology. Co-requisite: SMTE 0094 - Environmental Science Laboratory Safety Seminar - Required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Fall, Spring (on sufficient demand).

ESCI 3443 - Environmental Biology

4 sem. hrs. (3:2) Historical, contemporary, and projected concerns of human activities on biological aspects of ecosystem functioning. Prerequisite: BIOL 1407 or consent of instructor. Corequisite: SMTE 0096 Environmental Science Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed
before the Census Date of the semester to participate in the lab portion of this course. Fall, Spring (on sufficient demand).

ESCI 4130 - Oil Spill Prevention and Response Lab

1 sem. hrs. (0:2) Practical techniques for control, containment, countermeasures, removal, and disposal of oil spills in an environmentally safe manner. Field exercises will include use of boats, booms and skimmers. Prerequisite or corequisite: ESCI 4230. Corequisite: SMTE 0096 - Environmental Science Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in this course. Fall, Spring, Summer (on sufficient demand).

ESCI 4170 - Hazardous Waste Operations and Emergency Response Lab

1 sem. hrs. (0:2) Practical techniques for handling, reducing, and disposing of hazardous wastes in an environmentally safe manner. Lab exercises in use of personal protective gear and safe handling of hazardous substances. Prerequisite or corequisite: ESCI 4270. Co-requisite: SMTE 0096 - Environmental Science Laboratory Safety Seminar - Required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in this course. Fall, Spring, Summer (on sufficient demand).

ESCI 4201 - Scientific Diving Techniques

2 sem. hrs. (2:0) Theory, science, and art of underwater diving technology and its application to scientific objectives. Course helps fulfill some training requirements of the Texas A&M University-Corpus Christi Guidelines for scientific diving. Prerequisite: PADI certification or permission of instructor. Offered on sufficient demand.

ESCI 4202 - Issues in Environmental Science

2 sem. hrs. (2:0) Exploration of major issues in environmental science posing past, present and future challenges. Selected readings, student presentations and papers. Prerequisites: Juniors/seniors only and ESCI 1401 - Environmental Science I: Intro to Environmental Science or permission of instructor.

Prerequisite: ESCI 1401 Fall (on sufficient demand), Spring.

ESCI 4230 - Oil Spill Prevention and Response Theory
2 sem. hrs. (2:0) Historical perspective of laws and regulations governing oil spill prevention and response. Current methods for control, containment, countermeasures, removal, and disposal of oil spills in an environmentally safe manner. Fall, Spring, Summer (on sufficient demand).

ESCI 4270 - Hazardous Waste Operations and Emergency Response Theory

2 sem. hrs. (2:0) Study of the laws and regulations of hazardous waste management from an historical perspective followed by current techniques for handling, reducing, and disposing of hazardous wastes in an environmentally safe manner. Fall, Spring, Summer (on sufficient demand).

ESCI 4301 - Environmental Regulations

3 sem. hrs. (3:0) A survey of state and federal environmental laws and regulations, and their impact on the environment. Case studies of environmental issues and legislated regulations. Prerequisites: POLS 2305 - U.S. Government and Politics* and POLS 2306 - State and Local Government*. Fall, Spring (on sufficient demand), Summer (on sufficient demand).

ESCI 4320 - Environmental Health

3 sem. hrs. (3:0) Overview of the toxicology and epidemiology of pollutants in the air, water and soil. Associations of environmental exposure with adverse health effects such as cancer, cardiovascular disease, and reproductive outcomes; also chemical markers and symptoms of disease. Pollutants studied include lead, asbestos, radiation, radon, noise, metals, halogenated hydrocarbons, aromatic hydrocarbons, silica, indoor air quality, formaldehyde, and outdoor air pollutants. Offered on sufficient demand.

ESCI 4321 - Introduction to Soil and Groundwater Restoration

3 sem. hrs. (3:0) Introduction to methods for restoring contaminated soil and groundwater by examining the factors and processes influencing the efficacy of remediation systems. An emphasis will be placed on the scientific principles upon which soil and groundwater remediation is based. Cross listed with GEOL 4321. Offered on sufficient demand.

ESCI 4322 - Introduction to Industrial Hygiene

3 sem. hrs. (3:0)
Introduction to health protection practices in the industrial environment. Health basis for OSHA laws, regulations. Sampling and testing procedures.

Offered on sufficient demand.

ESCI 4324 - Introduction to Industrial Toxicology

3 sem. hrs. (3:0)

Review of human physiology, general concepts of toxicology: dose-response relationship, interactions between the host and the agents, risk assessment, to provide an introductory understanding of toxicology related to the chemicals in the workplace.

Offered on sufficient demand.

ESCI 4332 - Wetlands and Water Quality

3 sem. hrs. (3:0) Introduction to wetland ecosystems (natural, constructed and restored) with an emphasis on the role of wetlands in water quality. Topics include wetland systems, their history and role in society, relationships between biology, geology, ecology, hydrology and chemistry in wetland environments. Prerequisite: BIOL 3428 Principles of Ecology, CHEM 4443 Environmental Chemistry, or ESCI 3443 Environmental Biology. Offered on sufficient demand.

ESCI 4335 - Climate and Climate Variability

3 sem. hrs. (3:0) Course intended to guide environmental science majors in developing a conceptual understanding of Earth's global climate and its variability. Review of past climates, present mean state of the climate system, climate variability from seasonal to multidecadal time scales, and climate change. Special attention given to climates of the Gulf of Mexico, Caribbean Sea and surrounding land regions. Plausible climate-change scenarios, as well as mitigation and adaptation strategies are also discussed. Cross listed with ATSC 4335. Prerequisite: ESCI 3351 or ESCI 3403, and PHYS 1401 or PHYS 2425, or instructor's consent. Spring.

ESCI 4340 - Severe Weather

3 sem. hrs. (3:0) Introduction to mesoscale weather systems including thunderstorms, squall lines and hurricanes, as well as the mechanisms of tornado and lighting. Methods of observing, analyzing, and predicting these severe weather systems with the interpretation of satellite and radar images will also be introduced in this class. Prerequisite: ESCI 3403 - Introduction to Meteorology. Offered on sufficient demand.
ESCI 4344 - Air Pollution and the Clean Air Act

3 sem. hrs. 3:0 Introduction to the chemistry and physics of air pollution and regulations. Topics include photochemistry, acid rain, air pollution meteorology and dispersion, global change, and the Clean Air Act. Offered on sufficient demand.

ESCI 4360 - Physical Oceanography

3 sem. hrs. (3:0) Physical description of the sea, physical properties of seawater and sea ice, methods and measurements, wind-driven ocean circulation, thermohaline ocean circulation, boundary processes, waves, tides and mixing. Seasonal and interannual variability such as El Niño/Southern Oscillation phenomena. Implications for marine biology, marine geology, human impacts, other topics. Prerequisites: PHYS 1401 or PHYS 2425 or consent of instructor. Fall.

ESCI 4365 - Occupational Safety and Accident Prevention

3 sem. hrs. (3:0) This course provides students with fundamental knowledge of regulatory requirements on occupational safety and practical techniques on accident prevention in the work environment. Offered on sufficient demand.

ESCI 4408 - Environmental Microbiology

4 sem. hrs. (3:3) Relationships between microorganisms and their biotic and abiotic environment. Current topics such as air quality (i.e., molds), water quality and bioremediation will be discussed. Laboratory will include techniques for sampling from soil, air and water. Prerequisite: BIOL 2421 Microbiology or consent of instructor. Co-requisite: SMTE 0096 Environmental Science Laboratory Safety Seminar - Required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Offered on sufficient demand.

ESCI 4480 - Environmental Site Assessment

4 sem. hrs. (3:2) Interdisciplinary application of environmental regulations, risk assessment to specific examples. Knowledge of United States environmental regulations assumed; ESCI 4301 Environmental Regulations recommended. Co-requisite: SMTE 0094 Geology Laboratory Safety Seminar - Required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the Semester to participate in the lab portion of this course. Offered on sufficient demand.

ESCI 4490 - Selected Topics
0-4 sem. hrs. Subject materials variable. May be repeated for credit when topics are significantly different. Faculty approval required. Offered on sufficient demand.

ESCI 4496 - Directed Independent Study

1-4 sem. hrs. Requires a formal proposal of study to be completed in advance of registration and to be approved by the supervising faculty, the Chairperson, and the Dean of the College. Fall, Spring, Summer.

ESCI 4498 - Internship in Environmental Science

2 sem. hrs. (Ind study) Two to four semester hours of credit may be earned by working in an internship position in a governmental agency or industry. Prerequisite: senior environmental science majors only; requires approval of the faculty. May be repeated for credit. Fall, Spring, Summer.

Educational Technology

EDCI 4301 - STEM Mathematics

3 sem. hrs. This course provides the conceptual framework for exploring EC-6 mathematics integrated with engineering for deeper understanding, connections, and communication. Formal and informal geometry and measurement concepts and skills will be developed through problem-solving scenarios in collaborative groups. Manipulatives and technology will support the problem-solving approach. This course is designed to emphasize in-depth basic understandings of geometry and measurement, which is a core idea in the EC-6 mathematics curriculum. Communicating concepts, processes or solutions effectively, in oral and written forms, will be emphasized.

EDCI 4302 - STEM Science EC-6

3 sem. hrs. This course provides the conceptual framework for exploring EC-6 science with deeper understanding, connections, and communication. It is designed to provide preservice teachers with a global understanding of teaching science in the EC-6 school setting. The major goal is to prepare teachers who can educate students to become scientifically literate. This aim requires preservice teachers to learn about the nature of science, to engage in science investigations, and to construct understanding of natural phenomena, forming an elaborate cognitive framework of scientific concepts. Students' prior knowledge from previous courses will be essential to their performance in this
course, namely: technology in the classroom, lesson planning, curriculum organization, and student assessment.

IDET 3100 - Educational Technology for Preservice Teachers in Schools

1 sem. hrs. This field-based integrated course is designed to provide educators with an overview of basic resource tools and instructional methods to be considered when designing and developing educational technology integrated curriculum plans. This field-based infused seminar will look at basic integrated applications in creating electronic portfolios for all students. Aspects of online collaborative tools and their pedagogical implications in EC-12 environments will also be incorporated.

IDET 3310 - Technology Applications for Teachers

3 sem. hrs. This course enables preservice and inservice teachers to effectively use computer-based technology for instructional and professional purposes, and provides participants with the skills and knowledge required for teacher certification in Texas.

IDET 4300 - STEM Technology

3 sem. hrs. This course provides the conceptual framework for exploring EC-6 technology integrated with computational thinking skills and engineering for deeper understanding, connections, and communication. Technology integration concepts and skills will be developed through flipped instruction, face to face, and collaborative group instruction. Maker Spaces and collaborative technology tools will support the problem-based learning approach. The major goal of this course is to prepare teachers who can educate students to become technologically literate with basic understandings in applicable computational thinking and engineering concepts.

Finance

FINA 1307 - Personal Finance*

3 sem. hrs. Covers the foundations of financial planning, managing basic assets, managing credit, managing insurance needs, managing investments, and retirement and estate planning. This course is designed for nonbusiness as well as business majors to give them a basic understanding of the aspects of personal financial planning. TCCNS Equivalent: FINA 1307

FINA 3310 - Financial Management*
3 sem. hrs. A survey of financial management issues emphasizing planning and decision making. Specific topics covered include discounted cash flow analysis, stock and bond valuation, financial intermediation, organizing, raising and managing capital, capital investment, risk analysis, and financial statement analysis. Prerequisites: ACCT 2301, BUSI 0011, MATH 1325, or equivalent and Junior standing or above.

FINA 3312 - Financial Markets and Institutions

3 sem. hrs. Course coverage includes an analysis of financial markets and institutions; regulation, money market operations, global impact of central banking principles and monetary policy, and determinants of interest rates with financial asset pricing. Prerequisites: Junior standing or above.

FINA 3320 - Intermediate Corporate Finance

3 sem. hrs. The study of asset pricing, capital budgeting, capital management, growth through mergers, and leasing. Emphasis is on the development of problem-solving capabilities. Prerequisites: FINA 3310 and Junior standing or above.

FINA 3331 - Investments

3 sem. hrs. Framework of financial markets, valuation of the firm, security analysis, investment equity versus debt, efficiency of market evaluation, diversification efforts, investment goals, and portfolio selection. Prerequisites: ACCT 2301, MATH 1325 or equivalent and Junior standing or above.

FINA 3335 - Financial Modeling

3 sem. hrs. This course will cover the use of spreadsheet analysis in financial applications and introduce students to spreadsheet tools and functions to conduct business and personal financial analysis, valuation of bonds and stocks, and financial forecasting.

FINA 3350 - Cash Management

3 sem. hrs. An examination of the principles and methods of cash and liquidity management with particular attention to funds transfer procedures and requirements. Specific topics include the role of cash management in corporate financial management, a review of relevant accounting concepts, the structure of the financial environment, the system of disbursements and collections, accounts receivable management, accounts payable management, information technology and electronic commerce, cash flow forecasting, short-term investing and borrowing, financial risk management, international
treasury management, and management of relationships. Prerequisites: FINA 3310 or consent of instructor and Junior standing or above.

FINA 3351 - Insurance Principles

3 sem. hrs. Fundamentals of risk management as practiced in the commercial life, health, property, and casualty insurance industries. Prerequisite: Junior standing or above.

FINA 3354 - Real Estate Principles*

3 sem. hrs. Fundamental real estate covering the basic principles of real estate, providing the background necessary for advanced study in specialized real estate courses. Prerequisite: Junior standing or above.

FINA 3355 - Employee Benefits and Retirement Planning

3 sem. hrs. This course examines the financial aspects of retirement planning as well as employee benefit planning including group insurance plans and the characteristics of the various types of employee benefit plans: life insurance, medical expense, disability, and retirement income. Prerequisite: Junior standing or above.

FINA 4310 - Advanced Financial Management

3 sem. hrs. Application of financial management tools, examination and interpretation of financial statements, and integration of financial policy and structure on overall management of the enterprise. Prerequisites: FINA 3320 and Junior standing or above.

FINA 4315 - International Finance

3 sem. hrs. A study of the institutions and relationships of the international financial system as it relates to the balance of payments, foreign exchange risk, arbitrage and the Eurocurrency market. The emphasis is on methods of arbitrage, forecasting exchange rates, and hedging against foreign exchange risk. Prerequisites: ECON 2301, ECON 2302, FINA 3310, and Junior standing or above.

FINA 4321 - Financial Institutions Management

3 sem. hrs. A study of major financial institutions and the markets in which they operate, with emphasis on financial decision making and risk management. Topics include financial intermediation theory; measurement and management of interest rate risk, credit risk, off-balance-sheet risk, foreign exchange risk, country risk, and liquidity risk; capital
adequacy; and product/market diversification. Prerequisites: FINA 3310, ECON 2302, and Junior standing or above.

FINA 4330 - Introduction to Derivative Securities

3 sem. hrs. Course coverage includes an analysis of financial derivative contracts. The class includes options, futures and forward contracts; in particular commodity trading and hedging strategies will be covered in detail. Swaps and Interest Rate Options will be included in the presentation if time permits. (Prerequisites: MATH 1324 or equivalent or approval of instructor).

FINA 4332 - Security Analysis and Portfolio Management

3 sem. hrs. Evaluation of investment securities of both private and public institutions through external analysis of financial statements and economic conditions, portfolio selection, expected return and risk selection, and conditions of market efficiency. Prerequisites: FINA 3310, FINA 3331, ORMS 3310, and Junior standing or above.

FINA 4334 - Financial Statement Analysis

3 sem. hrs. A detailed study of financial reporting with emphasis upon practical interpretations. Attention will be given to financial statement analysis using financial accounting information and its finance implications. Assignments may differ depending on major. Prerequisites: ACCT 2301, ACCT 2302, FINA 3310, and Junior standing or above.

FINA 4390 - Current Topics in Finance

1-3 sem. hrs. Selected topics for special study related to finance functions, processes or issues. May be repeated for credit when topics vary. Prerequisites: Junior standing or above, and others depending on topic. Contact the Dean's office for information.

FINA 4396 - Directed Individual Study

1-3 sem. hrs. Individual supervised study and completion of a final report. Prerequisites: permission of instructor, Junior standing or above, and others depending on selected topic. Inquire at the Dean's office for information.

FINA 4398 - Internship in Finance

3 sem. hrs. Supervised full-time or part-time, off-campus training in business or government finance office. Oral and written reports required. Prerequisites: finance
major, and Junior standing or above. Students must apply to program and be accepted prior to registration. May not be repeated for credit.

French

FREN 1311 - French I

3 sem. hrs. Introduction to listening, speaking, reading, and writing skills within a French cultural framework. For students without previous knowledge of the language. (Language laboratory required. One hour per week minimum.) A lab fee is required for this course. TCCNS Equivalent: FREN 1311

FREN 1312 - French II

3 sem. hrs. Continued practice in listening, speaking, reading and writing skills within a French cultural framework. French 1311 or equivalent required. (Language laboratory required. One hour per week minimum.) A lab fee is required for this course. TCCNS Equivalent: FREN 1312

FREN 2311 - French III

3 sem. hrs. Reviews French grammar through oral and written practice with emphasis on language proficiency. Utilizes cultural readings in French to expand vocabulary and knowledge of the French culture. TCCNS Equivalent: FREN 2311

FREN 2312 - French IV

3 sem. hrs. Continued advanced development and review of all language skills within a French framework with an emphasis in the linguistic perspective. Successful completion of 2311 is required to receive credit for 2312. TCCNS Equivalent: FREN 2312

FREN 3306 - French Lit 1800 to Present

3 sem. hrs. This course will deal with a short story, a novel, a film script and a play written by three of the big names from the nineteenth and twentieth centuries, two men and a woman. Each work deals in its way with the relationships between men and women, loneliness and alienation, faith and other modern considerations. (Teleconference course)

Geography
GEOG 1300 - World Geography

3 sem. hrs. This is a survey course of the major regions of the world. The significant physical and cultural aspects of each region will be covered. TCCNS Equivalent: GEOG 1300

GEOG 1470 - Geographic Information Systems I

4 sem. hrs. (3:2) Introduction to topics in modern geography, including elements of Physical Geography (studies of the atmosphere, ocean, and land, surface environments) and an introduction to Geographic Information Systems (GISC). A significant part of course work will include computer-assisted mapping and GISC assignments. Prerequisite or corequisite: COSC 1315. (Credit may not be given for both this course and GISC 1470.)

GEOG 3331 - Geography of North America

3 sem. hrs. This course introduces the five themes in geography and uses these themes to analyze the relationships between the physical and cultural aspects of the United States. The textbook information will be supplemented with satellite images and visual materials to enhance the learning experience of the student.

Geology

GEOL 1303 - Essentials of Geology*

3 sem. hrs. (3:0) One-semester introductory Earth science course for students majoring in a non-science subject area. Covers basic geologic material and concepts, such as minerals, rocks, the rock cycle, and plate tectonics theory. Origin, composition, and evolution of our planet, as well as the importance of geology in everyday life, including geologic resources, global change, earthquakes, and volcanism are examined. This course is not recommended for students majoring in Geology or Environmental Sciences. Course counts toward the natural science component of the Core Curriculum Program. TCCNS Equivalent: GEOL 1303 Physical Geology Fall, Spring, Summer (on sufficient demand).

GEOL 1403 - Physical Geology
4 sem. hrs. (3:2) Introduction to the origin, classification, and composition of Earth materials. Study of internal and surface processes which shape and modify Earth. Laboratory studies of minerals and rocks, as well as topographic maps, geologic maps and geologic cross-sections. Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. TCCNS Equivalent: GEOL 1403. This course counts toward the natural science component of the University Core Curriculum. Fall, Spring (on sufficient demand).

GEOL 1404 - Historical Geology

4 sem. hrs. (3:2) Introduction to the origin and evolution of Earth and other planets. Changes in the form and distribution of Earth's continents and oceans, and succession of plants and animals through geologic time. Laboratory studies of fossils, geological maps, and the interpretation of ancient environments of rock formation. Prerequisite: GEOL 1403 or GEOL 1303. Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. TCCNS Equivalent: GEOL 1404. This course counts toward the natural science component of the University Core Curriculum. Spring.

GEOL 2102 - Undergraduate Seminar in Geology-Careers in the Geosciences

1 sem. hrs. (1:0) Introductory level seminar featuring diverse topics and speakers. Focus on careers in the geosciences as well as on how to successfully plan a college career. In-house as well as external speakers. May not be repeated for credit but attendance in subsequent semesters is encouraged. Offered on sufficient demand.

GEOL 2103 - Undergraduate Seminar in Geology-Research in the Geosciences

1 sem. hrs. (1:0) Introductory level seminar featuring diverse topics and speakers. Focus on current geologic research. In-house as well as external speakers. May not be repeated for credit but attendance in subsequent semesters is highly encouraged. Credit/no credit Offered on sufficient demand.

GEOL 2222 - Karst Geology and Paleoclimatology

2 sem. hrs.
This course describes the different types of caves and karst rocks, the water rock interactions in carbonate rock systems, and it explains cave formation via hydrological and geochemical processes. It also deals with how speleothem proxies such as oxygen
and carbon stable isotope, trace elements, carbonate petrography are used to decipher past changes in climate.

Prerequisites: None

Corequisites: GEOL 1403, SMTE 0094 Geology Laboratory Safety Seminar

GEOL 2490 - Selected Topics

1-4 sem. hrs. (1-4 : 0-6) May be repeated for credit if topics are significantly different. Subject material variable. Faculty approval required. Offered on sufficient demand.

GEOL 3326 - Introduction to Geological Field Methods

3 sem. hrs. (2:3) Introduction to the basic techniques of geological fieldwork. Note taking in the field, proper use of geological field equipment, measurement and description of rock sections by several methods and degrees of detail, plus small area mapping of several types of terrain with topographic maps. Reports, sections, and maps will be produced from the field notes. Field trips required. Prerequisites: GEOL 1403, GEOL 1404, and GEOL 3411 (may be taken concurrently). Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Spring.

GEOL 3329 - Geology of National Parks

3 sem. hrs. (3:0) Introduction to the regional geology of the United States using selected U.S. National Parks representing a wide variety of geologic settings as examples. Application of major geologic principles and basic geologic concepts such as plate tectonics, rock cycle, stratigraphy, and geologic time. Prerequisite: GEOL 1303, or GEOL 1403, or GEOL 1404. Offered on sufficient demand.

GEOL 3411 - Mineralogy

4 sem. hrs. (3:2) Study of the physical and chemical properties of minerals. Introduction to the crystallography of minerals, optical mineralogy, and the use of the polarized light microscope. Laboratory study of mineral identification in hand specimens and thin sections. Prerequisites: GEOL 1403, CHEM 1411, and CHEM 1412 (may be taken concurrently). Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Fall.
GEOL 3414 - Igneous and Metamorphic Petrology

4 sem. hrs. (3:2) Genesis and occurrence of igneous and metamorphic rocks. Mineralogical composition and thermodynamics of geologic systems. Determination of rock types in hand specimens and thin sections. Prerequisites: GEOL 1403 - Physical Geology, CHEM 1411 - General Chemistry I*, CHEM 1412 - General Chemistry II, GEOL 3411 - Mineralogy. Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Spring.

GEOL 3441 - Invertebrate Paleontology

4 sem. hrs. (3:2) Morphology, classification, and paleoecology of fossil invertebrates. Applications to marine geology including paleoceanography, stratigraphy, economic geology. Field trip to Texas invertebrate fossil beds. Prerequisite: GEOL 1404 or permission of instructor. Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Fall.

GEOL 3442 - Geomorphology

4 sem. hrs. (3:2) Study of landscapes and landforms at the surface of the Earth, and the processes and mechanisms by which they are developed. Prerequisite: GEOL 1403 or permission of instructor. Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Fall.

GEOL 3443 - Environmental Geology

4 sem. hrs. (3:2) Study of the relationships of humans to Earth's physical environment. Geologic aspects of waste disposal, resources, conservation, land reclamation, geologic hazards, and land-use planning. Prerequisite: GEOL 1403, and science major or minor, or permission of instructor. Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Fall (on sufficient demand), Spring.

GEOL 3490 - Selected Topics
1-4 sem. hrs. May be repeated for credit if topics are significantly different. Subject materials variable. Faculty approval required. Offered on sufficient demand.

GEOL 4050 - Geology Field Safety Seminar

0 sem. hrs. Restricted to geology majors attending field camp. Students required to meet with geology program coordinator prior to registration for this course. Offered on sufficient demand.

GEOL 4311 - Paleoclimatology

3 sem. hrs. (3:0) Reconstruction of Earth's climate system through time using natural archives and proxy evidence. Focus is mostly towards the Quaternary, though longer time spans will be considered, too. Mixed format with lectures, hand-on activities involving paleoclimate data sets, and seminar-style readings and discussions. Prerequisites: GEOL 1404 - Historical Geology, GEOL 3441 - Invertebrate Paleontology. Offered on sufficient demand.

GEOL 4316 - Marine Geoscience

3 sem. hrs. (3:0) Introduction to the geology of the marine environment. Review of plate tectonic processes relevant to the evolution of continental margins and plate boundaries; geophysics and ocean morphology; geology of ocean crust; controls on the types, origin, and distribution of marine sediments; marine geochemistry; nearshore geological processes and the continental shelf; introduction to paleoceanography; global paleoceanographic evolution; critical events in ocean history. Special focus on the Gulf of Mexico. Prerequisites: GEOL 1403 - Physical Geology, GEOL 1404 - Historical Geology, CHEM 1411 - General Chemistry I*, CHEM 1412 - General Chemistry II. Offered on sufficient demand.

GEOL 4321 - Introduction to Soil and Groundwater Restoration

3 sem. hrs. (3:0) Introduction to methods for restoring contaminated soil and groundwater by examining the factors and processes influencing the efficacy of remediation systems. An emphasis will be placed on the scientific principles upon which soil and groundwater remediation is based. Prerequisites: GEOL 1403 - Physical Geology, CHEM 1411 - General Chemistry I*, CHEM 1412 - General Chemistry II, GEOL 3443 - Environmental Geology or equivalents, and/or with instructor's permission. Cross listed with ESCI 4321. Offered on sufficient demand.

GEOL 4326 - Field Seminar in Geology
3 sem. hrs. (1:4) Designed to prepare students for summer field camp. Basic techniques of geologic mapping in the field, data analysis and interpretation, and report writing. Prerequisites: GEOL 4411 and GEOL 4421. Corequisite: SMTE 0094

Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Offered on sufficient demand.

GEOL 4411 - Sedimentation and Stratigraphy

4 sem. hrs. (3:2) Composition and origin of sediments and sedimentary rocks. Description and classification of rocks in hand specimen. Principles of stratigraphy, including stratigraphic units and correlation. Facies models for major depositional systems. Field trips. Prerequisites: GEOL 1403, GEOL 1404, and GEOL 3411 (may be taken concurrently), or permission of instructor. (May be taken for graduate credit.) Safety training given during a laboratory meeting early in the semester is required for continued participation in this course.

GEOL 4415 - Economic Geology

4 sem. hrs. (3:2) Study of geologic and tectonic parameters of mineral and metals formation. Ore geology and geochemistry. Mining, processing, fabrication, and marketing of natural resources. Field trip to mining operations. Prerequisites: GEOL 1403 and GEOL 3411. Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Offered on sufficient demand.

GEOL 4416 - Introduction to Geochemistry

4 sem. hrs. (3:2) Introductory study of the Earth processes using principles of chemical equilibrium, thermodynamics, isotope geochemistry and organic geochemistry. Applications of low-temperature geochemistry to geologic problems. CHEM 1411, CHEM 1412, MATH 2413, and GEOL 3411, or instructor's permission. Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Offered on sufficient demand.

GEOL 4421 - Structural Geology
4 sem. hrs. (3:2) PHYS 1401 Geometric and quantitative description of deformation of the Earth's crust, mechanics of brittle and crystal-plastic deformation processes of Earth materials, introduction to continuum mechanics of geologic systems, crustal deformation from micro-scale to global tectonics. Laboratory introduces principles of three-dimensional data representation and analysis, geologic map interpretation, cross-section techniques, and problems in stress and strain analysis. Prerequisites: GEOL 3411, MATH 2413, and PHYS 1401 or PHYS 2425. Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Spring.

GEOL 4422 - Geophysics

4 sem. hrs. (3:2) Introduction to quantitative techniques to assess physical properties and processes of the Earth. Topics include earthquake seismology, refraction and reflection seismology, gravimetry, magnetism, electrical methods, and radioactivity of Earth materials. Application of geophysical methods to the study of the Earth, in oil and gas exploration, and in economic and environmental geology. Prerequisites: GEOL 4421, PHYS 1401 or 2425, PHYS 1402 or 2426, MATH 2413, or permission of instructor.

GEOL 4423 - Seismic Methods

4 sem. hrs. Introduction to the acquisition, processing, and interpretation of 2D and 3D seismic data. Lectures and field exercises are covered. Topics include conceptual and historical foundations of modern reflection seismology; an overview of seismic wave phenomena in acoustic, elastic, and porous media; acquisition principles for land and marine seismic surveys; methods used to create 2D and 3D seismic images from field data; concepts of dip moveout, prestack migration, and depth migration; concepts and limitations of 3D seismic interpretation for structure, stratigraphy, and rock property estimation; and the interpretation role of attributes, impedance estimation, and AVO. Prerequisites: GEOL 4422 - Geophysics.

GEOL 4424 - Environmental and Engineering Geophysics

4 sem. hrs. Geophysical techniques for exploring the shallow subsurface for environmental and engineering purposes. Topics include seismic, resistivity, ground penetrating radar, electromagnetic, gravity, and magnetic methods. This course includes both lectures and labs (field exercises) components. Prerequisites: PHYS 1401 - General Physics I or PHYS 2425 - University Physics I, PHYS 1402 - General Physics II or PHYS 2426 - University Physics II, MATH 2413 - Calculus I.
GEOL 4430 - Internship in Geology

1-4 sem. hrs. (Independent Study) One to four semester hours of credit may be earned by working in an internship position in industry, with local government, a private firm, or an independent geologist. Prerequisite: Junior or Senior geology majors only; requires approval of the geology faculty. May be repeated for credit, but only four semester hours will count towards degree. Spring, Summer, Fall.

GEOL 4436 - Introduction to Petroleum Geology

4 sem. hrs. (3:2) Basic concepts of petroleum geology and techniques used in the exploration and production of hydrocarbon systems. Lectures and lab exercises will cover principles of stratigraphy, sedimentology, hydrocarbon generation, hydrocarbon-trapping mechanisms, reservoir characterization, seismic interpretation, well-log interpretation, and geologic risk analysis. Prerequisites: GEOL 4411 (may be taken concurrently). Recommended: GEOL 4422 and GEOL 4421. Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Offered on sufficient demand.

GEOL 4444 - Hydrogeology

4 sem. hrs. (3:2) Introduction to the fundamentals of groundwater and surface water flow; well hydraulics and evaluation of groundwater as a resource; chemical properties of groundwater and groundwater contamination; groundwater and the environment; and groundwater modeling. This course also examines some of the techniques associated with field hydrogeology and laboratory methods in hydrogeology. Prerequisites: GEOL 1403, PHYS 1401 or PHYS 2425, and MATH 2413, or permission of instructor. Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Offered on sufficient demand.

GEOL 4490 - Selected Topics

1-4 sem. hrs. May be repeated for credit if topics are significantly different. Subject materials variable. Faculty approval required. Offered on sufficient demand.

GEOL 4496 - Directed Independent Study

1-4 sem. hrs. Requires a formal proposal of study to be completed in advance of registration and to be approved by the supervising faculty, the chairperson, and the Dean of the College. Spring, Summer, Fall.
GEOL 4650 - Field Geology

6 sem. hrs. (0:12) Field course involving practical application of geologic principles to field problems. Locations visited and material covered depends on hosting institution. Generally should include: mapping and outcrop data collection; measurement of stratigraphic sections; mapping and preparation of geologic cross-sections; preparation of geologic reports. Prerequisites: as required by hosting institution; generally includes: GEOL 3326 - Introduction to Geological Field Methods, GEOL 3414 - Igneous and Metamorphic Petrology, GEOL 3441 - Invertebrate Paleontology, GEOL 4411 - Sedimentation and Stratigraphy, GEOL 4421 - Structural Geology. Corequisite: SMTE 0094 Geology Laboratory Safety Seminar required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Offered on sufficient demand.

German

GERM 1311 - German I

3 sem. hrs. Introduction to listening, speaking, reading, and writing skills within a German cultural framework. For students without previous knowledge of the language. (Language laboratory required. One hour per week.) A lab fee is required for this course. TCCNS Equivalent: GERM 1311

GERM 1312 - German II

3 sem. hrs. Continued practice in listening, speaking, reading, and writing skills within a German cultural framework. German 1311 or equivalent required. (Language laboratory required. One hour per week.) A lab fee is required for this course. TCCNS Equivalent: GERM 1312

GERM 2311 - German III

3 sem. hrs. Reviews German grammar through oral and written practice with emphasis on language proficiency. Utilizes cultural readings in German to expand vocabulary and knowledge of the German culture. TCCNS Equivalent: GERM 2311

GERM 2312 - German IV

3 sem. hrs. Continued advanced development and review of all language skills within a German framework with an emphasis in the linguistic and cultural perspective.
Successful completion of 2311 is required to receive credit for 2312. TCCNS Equivalent: GERM 2312

Geographic Information Science

GISC 1301 - Physical Geography

3 sem. hrs. (3:0) The goal of this course is to encourage you to think geographically, examining the interactions between physical systems and human activities. Introduction to topics covered include elements of Physical Geography (studies of atmosphere, ocean and land surface environments), Geographic Information Systems (computer systems that capture, analysis, and display of geographic information), and human environmental interactions. Cross listed with GEOG 1301. TCCNS Equivalent: GEOG 1301 This course counts toward the life and physical sciences foundational component area of the University Core Curriculum.

GISC 1336 - Digital Drafting and Design

3 sem. hrs. (2:2) An introduction to graphic and drafting principles and practices in surveying and mapping science. This course includes the development of the basic drafting skills needed to produce surveying plats and graphical presentations. The elements of descriptive geometry are addressed. A major component of the course is an introduction to the fundamentals of computer-aided drafting and design (CADD). Spring.

GISC 1470 - Geospatial Systems I

4 sem. hrs. (3:3) Introduction to geographic information systems (GIS) and its theoretical foundations. Topics covered include vector and raster data models, acquisition and manipulation of data, cartography, current topics, data quality, and basic spatial analysis. Principles and uses of GIS software also covered. Fall and Spring.

GISC 2250 - Field Camp I

2 sem. hrs. (0:6) A one-week field camp with intensive field data collection and computations. Traversing between control points. Digital contour data and leveling control. Detail spatial data by total station. Construction set out using total station and steel band. Taken during the sophomore or junior year. Spring. Prerequisite: GISC 2470.

GISC 2301 - Geospatial Systems II
3 sem. hrs. (2:3) An intermediate level course in the concepts and applications of geographic information systems (GIS). Topics covered include spatial database design and management, raster analysis, terrain mapping, analysis, and applications. Spring. Prerequisite: GISC 1470 - Geospatial Systems I.

GISC 2438 - Geospatial Software Systems I

4 sem. hrs. (3:3) Introduction to the design and development of GIS software to solve spatial problems. Topics covered include programming basics, design and implementation common tasks in GIS applications. Fall. Prerequisites: GISC 1470 - Geospatial Systems I and COSC 1435 - Introduction to Problem Solving with Computers I.

GISC 2470 - Geospatial Plane Measurement I

4 sem. hrs. (2:4) Historical introduction to field measurement and mapping; distance measurement using electronic distance meters; calibration and reduction. Leveling instruments; principles, construction, testing and adjustment; ancillary equipment. Optical and electronic theodolites. Traverse computations and adjustment. Coordinate systems. Map projections. Fall. Prerequisite: MATH 1316 - Trigonometry or MATH 2413 - Calculus I.

GISC 3300 - Geospatial Mathematical Techniques

3 sem. hrs. (3:0) Characteristics of geographic/spatial information; overview of relevant sections of numbers, algebra and geometry, plane and spherical trigonometry, matrices, determinants and vectors, curves and surfaces, integral and differential calculus, partial derivatives, with an emphasis on geospatial applications. Concepts of geospatial coordinate systems and geospatial coordinate transformations; overview of spatial statistics and best-fit solutions with geospatial applications. Prerequisite: MATH 2413 - Calculus I and MATH 3342 - Applied Probability and Statistics*. Fall.

GISC 3325 - Geodetic Science


GISC 3412 - Geospatial Plane Measurement II

GISC 3420 - Geospatial Software Systems II

4 sem. hrs. (3:3) Advanced programming course focusing on the design and implementation of GIS scripts and GIS web applications. Topics covered include GIS web applications, web mashups, GIS scripts, GIS tool creation, and advanced user interface design and implementation. Spring. Prerequisite: GISC 2438 - Geospatial Software Systems I.

GISC 3421 - Visualization for GIS

4 sem. hrs. (3:3) Basic elements of thematic cartography, cartographic theory, and cartographic projections. Integration of cartographic principles with GIS visualization. Principles of map design with GIS data. Spring. Prerequisite: GISC 2301 - Geospatial Systems II.

GISC 4180 - Geospatial Systems Internship

1 sem. hrs. (1:0) Internship education requires work with approved Geospatial Systems related industry employer. Students provide weekly written reports and final presentation to program at the end of internship. Must have completed 60 semester hours before attempting. Fall, Spring, and Summer.

GISC 4305 - Legal Aspects of Spatial Information

3 sem. hrs. (3:0) Legal ownership of spatial data and information collected in the public sector. Public access to large digital databases. Copyright law as applied to spatial data. Legal issues related to property boundaries, statutory boundaries, voter district boundaries, and jurisdictional boundaries. Government fees and charges for access to spatial data. Social and economic value of spatial data. Spring. Prerequisite: GISC 2470.

GISC 4315 - Satellite Positioning

3 sem. hrs. (2:2) Global reference systems. Use of satellite for navigation and positioning systems. History and review of satellite positioning systems. Measurement techniques using GPS. Point, differential, and kinetic positioning techniques. Error sources in
satellite positioning. Future trends in satellite positioning technology. Fall. Prerequisites: GISC 2470 - Geospatial Plane Measurement I and MATH 2413 - Calculus I.

GISC 4318 - Cadastral Systems


GISC 4320 - Hydrography

3 sem. hrs. (2:2) Introduction to offshore and inshore hydrographic mapping. Tidal datums and their computation. Review of hydrographic and nautical charts. Electronic position finding and bathymetric data collection. Echo sounding, side scan sonar. Seafloor mapping and underwater locating. Beach (combined land and hydrographic) mapping. Spring even years. Prerequisites: GISC 2470 and MATH 2413.

GISC 4326 - Geomatics Professional Practice

3 sem. hrs. (2:2) An intensive one-week summer course presented by practicing geomatics professionals covering many of the aspects of operating a professional surveying practice in the State of Texas. Topics cover surveyor responsibility and liability, the surveyor in court, standards of practice, surveying mathematics, Texas coordinate system, celestial observations, and project control. Prerequisite: GISC 2250.

GISC 4335 - Geospatial Systems III

3 sem. hrs. (2:2) Advanced spatial analysis and modeling in GIS. Topics covered include exploratory analysis of spatial data, network analysis, spatial point patterns, area objects and spatial autocorrelation, and spatial interpolation. Also covers new approaches to spatial analysis. Fall. Prerequisite: GISC 2301 - Geospatial Systems II and GISC 3421 - Visualization for GIS and MATH 3342 - Applied Probability & Stats.

GISC 4340 - Geospatial Computations and Adjustment


GISC 4350 - Field Camp II

3 sem. hrs. (0:6) A one-week field camp undertaking projects in cadastral, engineering, hydrographic, and geodetic positioning. Reduction of digital field data to produce final plans and reports. Taken during the senior year. Spring. Prerequisites: GISC 3412 - Geospatial Plane Measurement II and GISC 4318 - Cadastral Systems and GISC 2250 - Field Camp I.

GISC 4351 - Geospatial Systems Project

3 sem. hrs. (0:0:6) This course allows students to employ knowledge attained in other courses to create a project to spatially analyze information of interest to you and your field of study. Students will either undertake a GIS project to manage, analyze, and visualize spatial data, or a survey project in cadastral, topographic, engineering, hydrographic, or geodetic positioning survey. Spring. Prerequisite: GISC 4350 - Field Camp II or GISC 4335 - Geospatial Systems III

GISC 4371 - History of Texas Land Ownership


GISC 4431 - Remote Sensing

4 sem. hrs. (3:3) Provides the foundations to interpret, process, and apply remotely sensed data acquired by satellites and sub-orbital platforms (aircraft, UAVs) for mapping and analysis of our natural and built environment. Principles of electromagnetic energy-matter interaction, remote sensing systems and data characteristics, digital image processing, and information extraction methods will be covered. Included is treatment of: aerial photogrammetry; multispectral, thermal, and hyperspectral sensing; earth
observation satellites; radar and lidar; emergent topics. Emphasis will be on their use for geospatial and environmental applications. Fall.


GISC 4590 - Selected Topics

1-5 sem. hrs. May be repeated for credit depending on topic. Variable content. Offered on request.

GISC 4596 - Directed Independent Study

1-5 sem. hrs. See College description. Offered on request. May be repeated for credit.

GISC 4690 - Co-operative Education

1 sem. hrs. Co-op education allows students to take time off their full-time studies to gain valuable experience-based learning with employers willing to put on students for a semester (14 weeks), six months, or over the summer. The Co-op program allows students to maintain their full-time status as a student (continue health insurance coverage with parents, not effect student loan repayment, access to college activities, etc.) while undertaking work in their field of interest. The Co-op program is a partnership between the employer, the student, and the university. Prerequisite: acceptance by Cooperative Education Coordinator.

Graphic Design

GRDS 1301 - Foundations of Graphic Design

3 sem. hrs. This course explores fundamental components of design theory, concept, and composition. Students will explore presentation techniques, printing processes, technical tactile skills associated with the field, defining and exploring a targeted audience, and appropriate software introductions. Students will create printed works utilizing these skill sets.

GRDS 1302 - Typography I
3 sem. hrs. Through the use of lectures, demonstrations and studio work students are introduced to the art of typography. An emphasis is placed on the history of type, anatomy of letter forms and appropriate uses of prescribed type faces. Hand rendering and digital media are used. Prerequisites: GRDS 1301

GRDS 2301 - Historical Perspectives of Graphic Design

3 sem. hrs. This studio course examines the history of graphic design from the invention of writing to present day composition. Students will explore various movements in graphic design history and create design works that reflect these periods.

GRDS 2302 - Design Studio I

3 sem. hrs. 3:0 This course introduces the fundamental principles of the graphic design industry. Students strengthen their vocabularies in design, theory, and visual communication. Exploring various two-dimensional projects, students will conduct research, form opinions, foster ideas, solve communication problems, learn to analyze and discuss graphic design work, and continue to develop their own creative process. Prerequisites: GRDS 1301 and 1302.

GRDS 3301 - Typography II

3 sem. hrs. Through readings, writing assignments, lectures, and studio projects, students explore the relationship of type to cultural, political, and psychological dynamics of information exchange. The ideas of intellectual impact, complex hierarchy, active/passive readership, and emotional expression are all explored with the emphasis on user experience in typographic design. Prerequisites: GRDS 1301, 1302, 2301, and 2302.

GRDS 3302 - Design Studio II

3 sem. hrs. This course encourages students to further develop their design process by reflecting on their own personal and artistic identities, while identifying and communicating to a specific audience. Through a series of print and three-dimensional projects, students work to balance their own voice and develop strong conceptual thinking and formal experimentation methods. Prerequisites: GRDS 1301, 1302, 2301, and 2302.

GRDS 3303 - Design for Good

3 sem. hrs. The studio course examines the role of design in society, specifically investigating areas that affect well-being, cultural intelligence and political propaganda. The topics in this course are explored through lectures, independent
research and the creative development of body of work. Prerequisites: GRDS 1301, 1302, 2301, and 2302.

GRDS 3305 - Packaging Design

3 sem. hrs. This studio course will teach students how to develop creative strategies for problem solving in a client-based environment. Focusing on three-dimensional packaging, students will learn how design applies to various surfaces, products, and audiences. Prerequisites: GRDS 1301, 1302, 2301, and 2302.

GRDS 3306 - Environmental Design

3 sem. hrs. 3:0 This studio course examines the role of environmental graphics within a user experience context. Students will observe human interaction with environmental design pieces and then create works that reflect an enhanced user experience.

GRDS 3307 - Book & Jacket Design

3 sem. hrs. 3:0 This course will cover concept and content development, design, and execution of single edition and limited edition books through lectures, demonstrations, and studio work. Emphasis placed on creativity, problem solving, organizational ability, technical precision, and independent work ethic.

GRDS 3308 - Copywriting

3 sem. hrs. 3:0 This studio course explores copywriting for design, advertising, and media. Students will create writing and messaging for a variety of media including print design, web design, and advertising design within a consumer-driven context. Prerequisites: GRDS 1301, GRDS 1302, GRDS 2301, and GRDS 2302

GRDS 3310 - Corporate Identity

3 sem. hrs. The conceptual and visual standards pertinent to creating a brand will be explored. Major aspects of visual identity will be emphasized and developed including logotypes, typographic sets, color palettes, graphic standards, and stationary sets. Prerequisites: GRDS 1301, 1302, 2301, and 2302.

GRDS 4304 - Emerging Technologies
3 sem. hrs. This studio course will teach students how to develop creative strategies for problem solving in a client-based environment. This studio explores the use of emerging technology in a computer-aided environment to enhance the user experience in interactive media. Prerequisites: GRDS 1301, 1302, 2301, 2302, 3301, and 3302.

GRDS 4305 - Poster Design

3 sem. hrs. 3:0 This studio course focuses history and practice of 2-dimensional poster design within a socially responsible context, advertising, and commercial context. During the course, students will complete project-based works to communicate to a specific audience while maintaining a call to action. The posters may be created using digital media or mixed media.

GRDS 4306 - Publication and Editorial Design

3 sem. hrs. This studio course explores the foundations of publication and editorial design to expand students' design vocabulary. Students will explore the role of a graphic designer/art director in developing effective and innovative communication for editorial design. Prerequisites: GRDS 1301, 1302, 2301, 2302, 3301, and 3302.

GRDS 4308 - Business of Design

3 sem. hrs. 3:0 This studio course examines the modern day design studio and informs students on best practices when creating and initializing a business within the field. Students will create a business model for pricing, estimating and invoicing their work. Students will interact with a local client to conduct a professional mock business interview, strategy for their company, and proposal.

GRDS 4309 - Design in Advertising

3 sem. hrs. This studio course will teach students how to develop creative strategies for problem solving in a client-based environment. This studio focuses on advertising design as it applies to print, multimedia, outdoor, and direct mail design for a chosen audience. Prerequisites: GRDS 1301, 1302, 2301, 2302, 3301, and 3302.

GRDS 4310 - Portfolio and Professional Practices

3 sem. hrs. This studio course teaches students the importance of self-promotion while focusing on professional practices. Guest speakers will join the class for discussion,
critique and lecture pertaining to various facets of the fine art and digital art professions. Students will develop printed and digital portfolios, a resume, and an artist statement. Prerequisites: GRDS 1301, 1302, 2301, 2302, 3301, and 3302. Note: May be taken three times for credit.

GRDS 4391 - Topics in Graphic Design

1 or 3 sem. hrs. Study of specialized topics and themes in Graphic Design. May be repeated when topics vary.

GRDS 4396 - Directed Independent Study

1 or 3 sem. hrs. See College description. Offered on application.

GRDS 4399 - Internship

3 sem. hrs. This course allows students to complete a semester long internship within their area of interest in the design or advertising field. The student must work on-site at an approved local company a maximum of 10 hours per week. Through the use of reflective journals, project portfolios, and employer feedback, the student will report his/her experience to their supervising professor throughout the experience. Can be repeated for credit. Prerequisites: Approval of Instructor. Note: May be repeated for credit.

History

HIST 1301 - U.S. History to 1865*

3 sem. hrs. A survey of the political, social, economic, military, cultural and intellectual history of the United States from 1492 to 1865. TCCNS Equivalent: HIST 1301 Satisfies the university core curriculum requirement in U.S. History.

HIST 1302 - U.S. History Since 1865*

3 sem. hrs. A survey of the political, social, economic, military, cultural and intellectual history of the United States from 1865 to the present. TCCNS Equivalent: HIST 1302 Satisfies the university core curriculum requirement in U.S. History.

HIST 2301 - Texas History
3 sem. hrs. Spanish colonial period, Mexican statehood, independence, the development of the Republic, annexation and growth as a state. TCCNS Equivalent: 2301 Online Classification Face-to-Face 1-24%

HIST 2311 - Western Civilization I

3 sem. hrs. Survey of the cultures and civilizations of the Ancient Mediterranean world and the political, social, economic, military, cultural, and intellectual influences shaping the emergence and development of Europe to 1500. TCCNS Equivalent: HIST 2311

HIST 2312 - Western Civilization II

3 sem. hrs. A survey of the political, social, economic, military, cultural, and intellectual development of Europe from 1500 to the present. TCCNS Equivalent: HIST 2312

HIST 2322 - World History Since 1500

3 sem. hrs. World History Since 1500 examines major global issues over the past 500 years. Topics may include European expansion and colonialism, the integration of the Americans into world economic systems, changes in science and technology, decolonization, and modern environmental problems. This course will help students understand historical events within a global framework. TCCNS Equivalent: HIST 2322

HIST 3301 - History of World Religions

3 sem. hrs. Surveys the key beliefs, practices, rituals, figures, and historical developments of the world's major religious traditions, including Hinduism, Buddhism, Confucianism, Judaism, Christianity, Islam, and New Age religions. Gives particular attention to their encounter with modernity and their complicated place in today's global, diverse, post-modern world.

HIST 3303 - Colonial Latin America

3 sem. hrs. An overview of Latin American history from pre-Columbian times until Independence.

HIST 3304 - Modern Latin America

3 sem. hrs. A study of the major political, economic and cultural processes that marked the development of modern Latin America.

HIST 3307 - The Ancient World
3 sem. hrs. This course examines the ancient history of the human race. It begins with the evolution of Homo sapiens in Africa and continues through approximately the 4th century CE. Topics examined include the formation of cultures, societies, states, and empires around the world including those in Egypt, Southwest Asia, India, China, and the Mediterranean.

HIST 3315 - Europe 1750-1815

3 sem. hrs. Explores the processes which contributes to the establishment of a new political, economic, and social order in Europe. The course includes an in-depth focus upon the causes and consequences of the French Revolution as well as an examination of the European response to Napoleon.

HIST 3317 - Europe 1815-1914

3 sem. hrs. The evolution of European industrial society from the Congress of Vienna to the outbreak of World War I. Themes include changes in the nature of work and family life, urbanization, and the emergence and growth of liberalism, socialism, nationalism, and romanticism as competing ideologies.

HIST 3319 - Europe 1914 to the Present

3 sem. hrs. Political, social, economic and cultural developments since 1914: includes the impact of World War I, the Russian Revolution, Fascism, the origins of the Cold War, the tension between European unification and growing ethnic tensions and the dissolution of the Soviet empire.

HIST 3320 - Colonial and Revolutionary U.S.

3 sem. hrs. Traces regional economic, social, and political change in the Americas from 1607 to the end of the Revolution.

HIST 3321 - The Early American Republic

3 sem. hrs. This course examines American history from the end of the revolutionary war to 1850. Political, economic, and social issues including, but not limited to, the creation of the Constitution, the development of the first and second party systems, the market revolution, antebellum reform, the Old South, and westward expansion.

HIST 3323 - Civil War and Reconstruction
3 sem. hrs. Background and causes of the Civil War; military, political, diplomatic, and economic developments during the War; Reconstruction and post-war adjustments.

HIST 3324 - U.S. Gilded Age and Progressive Era

3 sem. hrs. An examination of the dramatic period when the United States definitively settled the remaining portions of the continent and decisively moved towards becoming an industrial, urban nation with world-wide economic and political influence.

HIST 3325 - Emergence of Modern U.S.

3 sem. hrs. Study of American life from World War I through World War II. Topics include America's rise to a world power, the social, cultural, and political effects of corporate enterprise, urbanization, and immigration, women's suffrage, the Twenties, and the New Deal.

HIST 3326 - U.S. Since 2nd World War

3 sem. hrs. A study of American life and development as a world power since World War II.

HIST 3335 - The U.S. Urban Experience

3 sem. hrs. A general survey of the social, cultural, and political history of the American city, with particular emphasis on Corpus Christi and the ways our city illustrates these larger trends.

HIST 3340 - Modern Asia

3 sem. hrs. This course will examine Asia from 1600 to the present. Topics include politics, the nation state, colonialism, empire, war, nationalism, the Cold War and revolution, all in a historical context.

HIST 3345 - America by Nature

3 sem. hrs. Examines the role of nature in the nation's past, looking beyond more traditional historical topics to discover how the environment has shaped society and the ways in which humans, in turn, have shaped nature throughout American history. Community-engaged learning component.

HIST 3350 - Dictators and Dirty Wars in Latin America
3 sem. hrs. Explores the rise of dictatorships and military regimes in twentieth century Latin America. Focuses on human rights struggles and popular movements in Mexico, Central America and the Southern Cone.

HIST 3360 - Introduction to Museum Studies

3 sem. hrs. In this cross-disciplinary class, students of history, sciences, the arts, and more will be introduced to the different departments of a museum and gain experience in programming, exhibits, research, public engagement, and other various aspects of museum management through their participation in a real working museum (Corpus Christi Museum of Science and History).

HIST 3370 - Introduction to Public History

3 sem. hrs. A Project-centered class that examines public history practices and debates, including the changing field over time, the relationship between history and memory, and the interpretive and sometimes controversial nature of historical sites and exhibits. Students will also learn methods and practices of museums, archives, oral history, digital history, and more. Includes community-engaged learning, workshops, local field trips.

HIST 3373 - Oral History and Podcasting

3 sem. hrs. A project-based course designed to teach students oral history, audio recording, and editing. Topics include oral history theory and methods, the role of testimony and memory in constructing historical narratives, interview techniques, archival practices, and the technical aspects of audio production, audio storytelling, and podcasting. Online classification: Face-to-Face 1-24%

HIST 3385 - The Art and Practice of History

3 sem. hrs. Introduces students to the most significant historiographical problems that face historians, focusing on recent and current controversies that have shaken the profession and been the subject of public and political debate. Provides examples of how historians think about and do history. Prerequisites: HIST 1301 and HIST 1302 or equivalent, and either HIST 2311 or 2312. Online Classification: Face-to-Face 1-24%.

HIST 4320 - U.S. Cultural Experience

3 sem. hrs. Explores ways that the myriad groups who have made up American society from the colonial period to the "information age" understood and expressed themselves and related to each other. (The chronological scope of this course may vary.)
HIST 4327 - U.S. Modern Popular Culture

3 sem. hrs. The historical development of modern popular culture—including television, movies, fiction, newspapers, music and consumption—and its effect on the structure and experience of U.S. society and work from the nineteenth century to the present.

HIST 4335 - The Military and United States History

3 sem. hrs. The development of U.S. military strategy and policy from the Colonial Wars through Vietnam.

HIST 4336 - Mexican American History

3 sem. hrs. Spanish and Mesoamerican backgrounds, conquest and mestizaje, settlement of Aztlan, interaction with Anglo-Americans, 20th century immigration, urbanization, identity, the Chicano Movement, and Mexican American organizational/political development.

HIST 4337 - United States Women's History

3 sem. hrs. Themes include transformations in the notion of womanhood and of sexual differences, changes in the structure, function, and concept of "family" and "household," and historical factors that have shaped women's role in the work force and public life.

HIST 4340 - European Women's History

3 sem. hrs. Study of the experiences of European women from the 18th to the 20th centuries. Also addresses the role that gender has played in the development of modern European societies. Some topics covered are women and the French Revolution, gender and class in industrial Europe, feminism and suffrage, and women and fashion.

HIST 4342 - The Holocaust

3 sem. hrs. Examines the Holocaust by exploring the role of racism and anti-Semitism, the rise of Nazi policies, Jewish responses and resistance to them, deportation and genocide, the role of war, and the aftermath and memory of an event "beyond human imagination."

HIST 4345 - European Thought and Culture, 1750-present

3 sem. hrs. Survey of the major European intellectual and cultural movements from the Enlightenment to the present. Broader than a traditional course in intellectual history,
special attention will be given to the emergence and development of the concepts of "modernity" and the challenges of "postmodernism."

HIST 4346 - The Search for Modern China: From 1600 to the Present

3 sem. hrs. This course surveys modern Chinese history from the late Ming dynasty to the present, with an emphasis on the late 19th and 20th centuries. Topics include empire, colonialism, nationalism, the nation state, modernization, revolution and the Cold War, all in a historical context.

HIST 4347 - The History of Sexuality in the West

3 sem. hrs. This course will examine how ideas about sexuality as well as sexual practices and identities have evolved over time and in different places; how the categories of homosexuality and heterosexuality were created and how they have been perceived. The course will focus on the 19th and 20th centuries in Europe and the United States, and address the themes of gender, body, race, class, image, representation, and the law.

HIST 4349 - Transnational Histories of Asia and the Pacific

3 sem. hrs. Explores the transnational relations of Asia and the Pacific with the West from the 19th century to the present day. Themes include colonialism and imperialism, diaspora and migration, labor and economy, war and displacement. Topics include the Opium Wars, Immigration and Exclusion, Atomic Bombing of Hiroshima, Military War Brides, Third World Radicalism, Transnational Adoption Complex, and Environmentalism and Globalization.

HIST 4350 - Narratives of World War II in the Pacific

3 sem. hrs. Examines how the relations between history, memory, and contemporary politics in post-WWII U.S. and Asia-Pacific have shaped the meaning of various contentious issues related to the Pacific War—such as war origins and responsibility, atrocities, racism, reparations, and nationalism—in textbooks, monuments, literature, art, films, political debates, exhibits, commemorative events, and scholarly works in different social and temporal contexts.

HIST 4352 - Mexican American Women's History

3 sem. hrs. Examines the broad political, economic, social, and cultural trends in the lives of Mexican American women since 1848.
HIST 4374 - Mexico: the National Period

3 sem. hrs. Traces economic, social, and political change in Mexico from independence to the present. Prerequisite: Junior standing or above

HIST 4375 - Cold War Kids: Youth in Modern Latin America

3 sem. hrs. An examination of the experiences of Latin American youth in modern Latin America. Special emphasis on the role of young people in the revolutions and rebellions that marked the Cold War period.

HIST 4385 - Historical Research and Writing

3 sem. hrs. The study and writing of history, with emphasis on historical analysis, research, and writing. Designed as the capstone course for history majors and prospective social science teachers. This course will feature a senior research paper, and should be taken during the student's final year of undergraduate study. Required of all history majors and those seeking social studies teaching certificates.

HIST 4390 - Topics in History

3 sem. hrs. Study of significant periods, countries, regions, or themes in history. May be repeated when topics vary. Offered on sufficient demand.

HIST 4396 - Directed Individual Study

1-3 sem. hrs. See College description. Offered on application.

HIST 4398 - Applied Experience

3 sem. hrs. See College description. Offered on application.

HIST 4399 - Internship

3 sem. hrs. Best practices and methods in digital archives, museums, and/or public history through field work at a local organization or museum. Offered on application. Repeatable up to 6 hours. Permission of instructor. Online Classification: Face-to-Face 1-24%

Health Care Administration

HCAD 3300 - The Health Care System
Addresses how the U.S. Health Services System is organized, how health services are delivered, and the mechanisms by which health services are financed in the United States. Provides an undergraduate level overview of the U.S. health services system and its key components, including health system resources, health system foundations, health system resources, health system processes, and health system outcomes. Should be taken during first semester of Health Sciences courses. Cross listed with HLSC 3300.

HCAD 3310 - Epidemiology

3 sem. hrs. (3:0) Applies epidemiologic methods and procedures to the study of the distribution and determinants of health and diseases, morbidity, injuries, disability, and mortality in populations. Epidemiologic methods for the control of conditions such as infectious and chronic health hazards, and unintentional injuries are discussed. Other topics include quantitative aspects of epidemiology, for example, data sources, measures of morbidity and mortality, evaluation of association and causality, and study design. Cross listed with HLSC 3310. Prerequisite/Corequisite: HCAD 3300 or instructor approval.

HCAD 3320 - Health Care Marketing

3 sem. hrs. (3:0) Provides an introductory study of the essentials of marketing within the dynamically evolving health care system. The marketing framework is provided as a basis for decisions related to marketing mix variables. Content includes buyer behavior, marketing research, market segmentation, and marketing strategy. Cross listed with HLSC 3320. Prerequisite/Corequisite: HCAD 3300.

HCAD 3330 - Financial Management in Health Care

3 sem. hrs. (3:0) Provides an introduction to health care financial management including selected topics from financial accounting, management accounting, finance, internal audit and personal finance. Health care payment and classification systems are studied and practical applications are emphasized. Cross listed with HLSC 3330. Prerequisite/Corequisite: HCAD 3300.

HCAD 3340 - Health Program Planning and Evaluation

3 sem. hrs. (3:0) Introduces the skills and techniques required to research and develop culturally competent health programs. Students create new data and utilize existing data to assess community needs, implement community health programs, and evaluate program effectiveness, exploring the concepts, processes and techniques used in health
program planning, implementation, and evaluation. The course emphasizes the importance of teams and partnerships in successful community health programs. This is an intensive writing course. Cross listed with HLSC 3340. Prerequisite: MATH 1442, 1342, or 2342. Prerequisite/Corequisite: HCAD 3300.

HCAD 3350 - Information Systems and Technology in Health Care

3 sem. hrs. (3:0) Provides an overview of the role technology plays in management of health care information. Emphasis is placed on system analysis, techniques, and skills used in information management. 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. Satisfies university computer literacy requirement. Cross listed with HLSC 3350. Prerequisite/Corequisite: HCAD 3300.

HCAD 3360 - Health Education and Promotion

3 sem. hrs. (3:0) Provides an introduction to the discipline and profession of health education and promotion. It examines the concepts of health and wellness, national and global health status, theories of behavior change, and the implementation and assessment of health promotion interventions. It provides an introduction to medical terminology for health educators. This is a writing intense course. Cross listed with HLSC 3360. Prerequisite/Corequisite: HCAD 3300.

HCAD 3370 - Complementary and Alternative Medicine

3 sem. hrs. (3:0) Provides an introduction to complementary and alternative medicine with an emphasis on related economic, political, legal, and social issues. The course identifies the processes, interventions, and funding agencies available for providing alternative care; reviews the various professions within alternative and complementary medicine; and addresses the holistic approach to health and well-being. Cross listed with HLSC 3370.

HCAD 4100 - Assessment of Accumulated Knowledge

1 sem. hrs. (1:0) Provides an assessment of student knowledge garnered from Health Science program course work. Allows creation of a business resume and mock interview experience. Prepares students for the capstone Practicum course. Cross listed with HLSC 4100. Prerequisite: Completion of 3000 level courses.

HCAD 4300 - Management and Organizational Behavior in Health Care
3 sem. hrs. (3:0) Introduces students to principles of management and organization behavior in healthcare. Topics include management, planning, organizing, staffing, leading, controlling, decision making, communicating, and professionalism, as well as the connective processes of decision making, coordinating, and communicating in healthcare organizations. This is an intensive writing course. Cross listed with HLSC 4300. Prerequisite: Completion of 3000 level courses.

HCAD 4310 - Health Law, Policy and Ethics

3 sem. hrs. (3:0) Introduces law and the legal system with special emphasis on health-related topics and policies, and key health law issues. Includes the study of the legal and regulatory environment of health care and the administration of health services with 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. Cross listed with HLSC 4310. Prerequisite: Completion of 3000 level courses.

HCAD 4320 - Project Management in Health Care

3 sem. hrs. (3:0) Introduces the fundamental project management concepts required to design, develop and deploy project plans successfully within the healthcare industry. The management of resources, schedules, risks, and scope of a project are examined for successful project implementation. Students are exposed to the role of healthcare project managers and the project management process as they provide structure and oversight to the constantly growing and changing healthcare industry. Cross listed with HLSC 4320. Prerequisite: Completion of 3000 level courses.

HCAD 4330 - Human Resource Management in Health Care

3 sem. hrs. (3:0) Presents the foundational concepts of healthcare human resource management. Students are introduced to fundamental human resource management techniques needed within health organizations including leadership, workforce planning, recruitment, employee selection, compensation, employee development, workload management, human resource law, and ethics. Future healthcare management and leadership professionals must understand these concepts to comply with human resource department policies and support the strategic plan. Cross listed with HLSC 4330. Prerequisite: Completion of 3000 level courses.

HCAD 4340 - Quality Management and Evaluation in Health Care
3 sem. hrs. (3:0) Introduces the principles of quality assessment and outcome management in healthcare organizations. 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. Cross listed with HLSC 4340. Prerequisite: Completion of 3000 level courses.

HCAD 4350 - Global Health/Health Disparities

3 sem. hrs. (3:0) Provides students with an historical perspective on global health issues and leads to an understanding of current and future concerns. Emphasis is on the global burden of disease and determinants of health as well as health disparities. Provides students with an introduction to the study of health disparities in the United States, examining how health disparities are defined and measured and exploring issues such as how the structure of American society affects who gets sick and who gets care. Case studies expose students to a variety of real-life scenarios and explore a range of issues. This is an intensive writing course. Prerequisite: Completion of 3000 level courses.

HCAD 4680 - Practicum

6 sem. hrs. (3:9) The Health Science Practicum is an institution-based project course requiring the student to complete on-site practicum hours. It provides a structured and guided learning environment to help students make the most of their practicum experience. Course components facilitate students' professional development, focusing on the transition from the role of a student to the role of a healthcare professional. Cross listed with HLSC 4680. Prerequisites: HCAD 4100 and completion of 3000 level courses or last semester of enrollment.

Health Sciences

HLSC 3300 - The Health Care System*

3 sem. hrs. (3:0) Addresses how the U.S. Health Services System is organized, how health services are delivered, and the mechanisms by which health services are financed in the United States. Provides an undergraduate level overview of the U.S. health services system and its key components, including health system resources, health system foundations, health system resources, health system processes, and health system outcomes. Should be taken during first semester of Health Sciences courses. Cross listed with HCAD 3300.
HLSC 3310 - Epidemiology

3 sem. hrs. (3:0) Application of epidemiologic methods and procedures to the study of the distribution and determinants of health and diseases, morbidity, injuries, disability, and mortality in populations. Epidemiologic methods for the control of conditions such as infectious and chronic health hazards, and unintentional injuries are discussed. Other topics include quantitative aspects of epidemiology, for example, data sources, measures of morbidity and mortality, evaluation of association and causality, and study design. Cross listed with HCAD 3310.

HLSC 3320 - Health Care Marketing

3 sem. hrs. (3:0) An introductory study of the essentials of marketing within the dynamically evolving health care system Cross listed with HCAD 3320.

HLSC 3330 - Financial Management in Health Care

3 sem. hrs. (3:0) Introduction to health care financial management including selected topics from financial accounting, management accounting, finance, internal audit and personal finance. Health care payment and classification systems will be studied and practical applications will be emphasized. Cross listed with HCAD 3330.

HLSC 3340 - Health Program Planning and Evaluation

3 sem. hrs. (3:0) Introduction to the skills and techniques required to research and develop culturally competent health programs. Students will gain a basic understanding of how to utilize existing data to assess community needs, implement community health programs, and evaluate program effectiveness, exploring the concepts, processes and techniques used in health program planning, implementation, and evaluation. The course will emphasize the importance of teams and partnerships in successful community health programs. Cross listed with HCAD 3340. Prerequisite: MATH 1442, 1342, or 2342

HLSC 3350 - Information Systems and Technology in Health Care

3 sem. hrs. (3:0) Provides an overview of the role technology plays in management of health care information. Emphasis is placed on system analysis, techniques, and skills used in information management. Cross listed with HCAD 3350.

HLSC 3360 - Health Education and Promotion

3 sem. hrs. This course provides an introduction to the discipline and profession of health education and promotion. It examines the concepts of health and wellness, the national
and global health status, theories of behavior change, and the implementation and assessment of health promotion interventions. Cross listed with HCAD 3360.

HLSC 3370 - Complementary and Alternative Medicine^ 
3 sem. hrs. (3:0) Introduction to complementary and alternative medicine with an emphasis on related economic, political, legal, and social issues. Cross listed with HCAD 3370.

HLSC 4100 - Assessment of Accumulated Knowledge 
1 sem. hrs. This course provides an assessment of student knowledge garnered from Health Science program course work. It also prepares students for the capstone Practicum course. Cross listed with HCAD 4100.

HLSC 4300 - Management and Organization Behavior in Health Care^ 
3 sem. hrs. (3:0) Introduction to principles of management and organization behavior in healthcare with emphasis on human resource management topics and issues. Cross listed with HCAD 4300.

HLSC 4310 - Health Law^ 
3 sem. hrs. (3:0) Introduction to law and the legal system with special emphasis on health related topics including quarantine and key health law issues. Cross listed with HCAD 4310.

HLSC 4320 - Project Management in Healthcare 
3 sem. hrs. This course introduces the fundamental project management concepts required to design, develop and deploy project plans successfully within the healthcare industry. The management of resources, schedules, risks, and scope of a project are examined for successful project implementation. Students are exposed to the role of healthcare project managers and the project management process as they provide structure and oversight to the constantly growing and changing healthcare industry. Cross listed with HCAD 4320.

HLSC 4330 - Human Resource Management in Healthcare 
3 sem. hrs. This course presents the foundational concepts of healthcare human resource management. Students are introduced to fundamental human resource management techniques needed within health organizations including leadership, workforce planning,
recruitment, employee selection, compensation, employee development, workload management, human resource law, and ethics. Future healthcare management and leadership professionals must understand these concepts to comply with human resource department policies and support the strategic plan. Cross listed with HCAD 4330.

HLSC 4340 - Quality Management and Evaluation in Health Care

3 sem. hrs. (3:0) Introduction to principles of quality assessment and outcome management in healthcare organizations. Cross listed with HCAD 4340.

HLSC 4390 - Selected Topics in Health Science

1-3 sem. hrs. Selected topics for special study related to health science issues. May be repeated for credit when topics vary. Not required for the BSHS but may be used to fulfill elective requirement.

HLSC 4396 - Directed Independent Study

1-3 sem. hrs. Course not required for the BSHS but may be used to fulfill elective requirement. Permission of Instructor required.

HLSC 4680 - Practicum

6 sem. hrs. (3:9) The Health Science Practicum is an institution-based project course requiring the student to complete on-site practicum hours. It provides a structured and guided learning environment to help students make the most of their practicum experience. Course components facilitate students' professional development, focusing on the transition from the role of a student to the role of a healthcare professional. Prerequisites: Completion of 3000 level courses or last semester of enrollment. Cross listed with HCAD 4680. Prerequisites: Completion of 3000 level courses or last semester of enrollment.

Health

HLTH 2370 - Introduction to Health

3 sem. hrs. Concepts essential to understanding the health profession: competencies and career opportunities for professional health educators in school and community settings.

HLTH 3342 - Sexuality in Health Education
3 sem. hrs. Many aspects of human sexuality; physiology and function of human reproductive system, factors involved in learning sex roles, biological and emotional motivations associated with the sexual aspects of life and their relationship to marriage and family planning.

HLTH 3353 - Substance Abuse and Health

3 sem. hrs. A basic knowledge and understanding of the physiological, psychological, social, environmental and behavioral aspects of drug use and abuse in this country to prepare students to make mature and responsible decisions regarding drug use and to assist others in making similar decisions affecting drug-taking behavior.

HLTH 3361 - Consumer Health

3 sem. hrs. This course is designed to provide general concepts, strategies and sources of information in selecting health products and services.

HLTH 3371 - Community and Environmental Health

3 sem. hrs. An overview of the function, organization, and leadership of health agencies at the national, state, and local levels as well as the dimensions of health affected by our environment.

HLTH 4308 - Organization and Administration of Health

3 sem. hrs. Theory and practice in the development and use of creative and traditional health education strategies in schools, community settings; emphasis is given to cognitive, affective and behavioral teaching strategies.

HLTH 4310 - Exercise and Health

3 sem. hrs. Interdisciplinary planning and implementation of exercise programs in school, community and worksite settings; applied exercise physiology, nonclinical exercise assessment; exercise-education strategies to promote adherence in health related exercise programs.

HLTH 4325 - Program Development and Evaluation

3 sem. hrs. Theory and practice in evaluation of health programs in school and community; analysis of test results; evaluation of standardized health tests.

HLTH 4350 - Creative Life Styles for Wellness
3 sem. hrs. A course supporting knowledge, attitudes, skills, and behaviors in the five wellness dimensions physical, social, emotional, intellectual, and environmental. Special emphasis will be placed on personal enrichment.

HLTH 4696 - Directed Individual Study

1-6 sem. hrs. May be repeated for credit when the topic varies. Programs will be designed for individual cases through special permission of the Department Chair and Dean.

Honors

COMM 1315.H01 - Honors Public Speaking

3 sem. hrs.

A study of the art of public speaking and the tools employed by the speaker to build his/her craft. Basic public speaking techniques and terminology will be emphasized. Satisfies the oral communication component of the University core curriculum.

ENGL 3361.H01 - Honors Strategies and Genres of Advanced Writing

3 sem. hrs. Practice in techniques and tactics of the sophisticated writer. Focus on rhetorical strategies that succeed in specific discourse situations, both academic and non-academic.

HONR 1101 - Honors Campus Leadership Seminar

1 sem. hrs. This course is intended to serve as an introduction to the Honors Program, its requirements and the Program's commitment to service, as well as the Honors Student Association. In an effort to prepare students to be campus and community leaders, students learn the organizational structure of the campus and engage in various events to become familiar with the campus and our surrounding community, its traditions and its needs. Students take this course in addition to UNIV 1101 – First-Year Seminar

HONR 1102 - Honors Community Leadership Seminar

1 sem. hrs. This course provides a framework and guidance for leadership and service. Students will make connections with campus and community leaders in order to begin charting their path toward service. Students take this course in addition to UNIV 1102 – First-Year Seminar.
HONR 2101 - Honors Experience Seminar

1 sem. hrs. In the Honors Experience Seminar students begin the exploration process for their Project of Excellence. This includes honing information literacy skills, discovering ways to make connections with potential faculty mentors, and connecting the Project of Excellence to personal career and life goals. In addition, students will investigate possibilities for travel, service and research that will help them achieve academic, personal and professional goals. Students will also create a plan for earning their Honors elective credits.

HONR 3101 - Project of Excellence Seminar I

1 sem. hrs. This seminar culminates in the completion of a Preliminary Proposal for the Project of Excellence with the guidance and approval of the course instructor and the student's faculty mentor. As part of the Preliminary Proposal, the student will complete a timeline that sets a course for project completion in time for graduation. In addition, students will be introduced to TAMUCC's Research Compliance process and will complete any training necessary for his/her project. Students must successfully complete HONR 3101 in order to register for HONR 4101.

HONR 3340 - Academic and Field Research

3 sem. hrs. Examination of the assumptions and questions underlying research methods across disciplines, with special emphasis on how methodologies from different fields (such as science and humanities) can complement each other. The course will address issues such as 1) the distinct qualities of quantitative and qualitative research, 2) current uses of surveys, interviews, and market research, 3) the construction of new knowledge in various disciplines, from problem to publication, 4) the critical use and evaluation of electronic and print resources, archival materials, government documents, and scholarly listserves.

HONR 3390 - Topics in the Humanities

3 sem. hrs. A course that deals with significant contemporary issues in the arts, humanities, and/or education. May be repeated when topics vary.

HONR 3490 - Topics in the Sciences

1-4 sem. hrs. A course that deals with significant contemporary issues in the disciplines of the natural sciences, health sciences, social sciences, and/or business. May be repeated when topics vary.
HONR 3491 - Science and Technology for Decision Makers

4 sem. hrs. A course in the natural sciences concerned with the interdisciplinary nature of science, the formal tools and techniques of critically evaluating scientific research, and the use of qualitative and quantitative data in the application of science and technology.

HONR 4101 - Project of Excellence Seminar II

1 sem. hrs. This seminar culminates in the completion of full proposal for the Project of Excellence. The proposal is completed with the guidance and approval of both the course instructor and the faculty mentor. Students must successfully complete HONR 4101 in order to register for HONR 4102.

HONR 4102 - Project of Excellence Seminar III

1 sem. hrs. A seminar devoted to the balanced execution of projects of excellence.

HONR 4390 - Seminar in the Humanities

3 sem. hrs. Study of specialized topics and themes in arts, humanities, and education. May be repeated when topics vary.

HONR 4396 - Honors Directed Independent Study

3 sem. hrs. Individual supervised study / research. Requires a formal proposal of study to be completed in advance of registration to be approved by a supervising faculty member and the Honors Director and Program Coordinator. Only 3 semester hours of Honors independent study credit may be counted toward the Honors graduation requirement.

HONR 4397 - Honors Internship

3 sem. hrs. Practical experience related to the student's major field. Activity must be connected to an academic research question and a body of knowledge that addresses some aspect of the activity to be undertaken. Internships require approval by the Honors Director and Program Coordinator. At the close of the internship, a written report and self-assessment must be submitted to a supervising faculty member and the Honors Program office. Internship is offered on a pass/fail basis and students must volunteer a minimum of 120 hours and meet the course objectives in order to receive course credit.

HONR 4398 - Honors Applied Experience
3 sem. hrs. Practical experience connected to the student's field of study, usually with a service or leadership component. Applied experience requires approval by the Honors Director and Program Coordinator. Activity must be connected to an academic research question and a body of knowledge that addresses some aspect of the activity to be undertaken, and result in a written product submitted to a supervising faculty member and the Honors Program office. Applied Experience is offered on a pass/fail basis and students must volunteer a minimum of 120 hours and meet the course objectives in order to receive course credit.

HONR 4490 - Seminar in the Sciences

1-4 sem. hrs. Study of specialized topics and themes in the sciences, health sciences, social sciences, and business. May be repeated when topics vary.

PHIL 2303.H01 - Honors Introduction to Logic

3 sem. hrs.

Basic principles and techniques used in understanding, constructing, and evaluating arguments. Topics covered may include formal methods of analyzing arguments, informal fallacies, scientific reasoning, and moral arguments.

PHIL 3340.H01 - Honors Professional Ethics

3 sem. hrs.

A rigorous and comprehensive study of theoretical and applied ethics with an emphasis on the application of ethical theory to clarify, explain, and resolve real-world ethical dilemmas. Satisfies the philosophy component of the University core curriculum.

Industrial Engineering

IEEN 2302 - Engineering Economics

3 sem. hrs. (3:0) Engineering management relies on the knowledge of engineering economics to be able to evaluate projects from a financial perspective. Optimizing financial performance of a project is a key responsibility of the engineer in the decision-making process. Examples of engineering projects would include but not limited to equipment replacement analysis, planning a new product line, and waste management. This course is designed to present engineering students the major concepts and techniques of engineering economic analysis that are needed in the decision-making process. The emphasis of this course is on the analytical analysis of money and its impact on decision making. Prerequisite: MATH 2413-Calculus I. Offered: Fall and Spring.
IEEN 3302 - Operations Research

3 sem. hrs. (3:0)
Introduction to operations research, linear programming, duality, other algorithms for linear programming, the transportation and assignment problems, dynamic programming, integer programming; offered: Fall and Spring.

Prerequisite: MATH 2414 – Calculus II. Corequisites: MATH 3311 – Linear Algebra.

IEEN 3320 - Human Factors

3 sem. hrs. (3:0)
The principles of the life sciences, engineering, and mathematics are applied to the investigation of existing and proposed socio-technical systems. Methods for the reduction of fatigue and human error are taught. Various fields of human factors and the fundamental concepts of the discipline are introduced. This course provides the basics of human perceptual, cognitive, and motor abilities relevant to human factors. This course also offers class project opportunities gain experience using human factors knowledge in actual applied settings. Offered: Fall and Spring.

Prerequisite: ENGR 1312 - Foundations of Engineering II.

Corequisites: MATH 3342 Probability & Statistics

IEEN 3324 - Human Computer Interface

3 sem. hrs. (3:0)
The emphasis of this course is the design of the human-computer interface. The fundamental concepts of human-computer interaction and user centered design thinking are taught, through working in teams on an interaction design project, supported by lectures, readings, and discussions. The variety of evaluation methods and design principles of usable and appropriate computer interfaces are introduced based on psychological, social, and technical analysis. Topics will include usability and affordances, direct manipulation, systematic design methods, user conceptual models and interface metaphors, design languages and genres, human cognitive models, physical ergonomics, information and interactivity structures, and design tools and environments. Offered: Fall and Spring.

Prerequisite: ENGR 1312 - Foundations of Engineering II.

Corequisite: IEEN 3320 Human Factors.

IEEN 3330 - Robotics and Automation
This course covers topics of concepts, principles, and relationships of automated assembly devices, computer aided drafting/design (CADD), computer-aided manufacturing (CAM), industrial robots, numerical control (NC), industrial lasers, programmable logic controllers (PLCs), automated guided vehicles (AGVs), flexible manufacturing systems (FMS), and computer-integrated manufacturing (CIM). Offered: Fall and Spring. Prerequisite: ENGR 2460 Circuit Analysis

IEEN 4310 - Process Engineering

3 sem. hrs. (3:0)
This course covers introduction to software design paradigms, system and software requirements, computer aided software engineering, and software design fundamentals using existing documentation for a proposed system. Relevant topics include in-depth survey of data flow-oriented, object-oriented, data-oriented, and real-time design. Team project involving the implementation of the proposed system using structured programming, information hiding, and strength and coupling measures is required. Each student will be required to make an oral presentation as part of the team project. Offered: Fall. Prerequisite: IEEN 3330 – Robotics and Automation.

IEEN 4312 - Experimental Design and Analysis

3 sem. hrs. (3:0)
Main coverage: Basic principles of experimental design; Randomization; Completely randomized design; Paired design; Randomized blocks, Latin Squares, Greco-Latin Squares and related designs; Factorial design; Blocking in factorial design; 2k factorial design; Extension of 2k factorials; Blocking and confounding in 2k factorials; Partial confounding; Fractional factorial designs; Blocking in fractional factorials; Nested and split-plot designs; Replicated and un-replicated designs; Regression, ANOVA, and follow-up analysis; Sample size determination; Response surface model. Offered: Fall and Spring

Prerequisites: IEEN 3302 Operations Research and IEEN 3320 Human Factors;

IEEN 4322 - Cognitive Ergonomics

3 sem. hrs. (3:0) This course is concerned with mental processes, such as perception, decision making, memory, reasoning, and response execution, as they affect interactions among humans and other elements of a work system. Relevant topics include skilled performance, attention, distraction, human error, work stress, risk perception, and Kansei engineering as these may relate to human-system design, safety and productivity. Assessment methodologies include hierarchical task analysis, cognitive task analysis,
ment workload, human error identification/accident investigation, and situation awareness assessment. Offered: Fall. Prerequisite: IEEN 3320 – Human Factors.

IEEN 4324 - Human Factors and Autonomous Systems

3 sem. hrs. (3:0) This course introduces the survey of human factors and ergonomics with particular reference to human functions in human-machine systems and principles of human factors to demonstrate and apply a broad knowledge of various modern industrial engineering methods and tools associated with designing autonomous systems in manufacturing and other related fields. Applications of engineering design methods to represent, integrate and solve problems, including the ability to recognize problem context and integrate knowledge and skills appropriate sources are provided. Knowledge of basic human capabilities and the ways that these capabilities are taken into account in the design of human-machine systems and work environments. Offered: Fall. Prerequisite: IEEN 3320 – Human Factors.

IEEN 4326 - Airborne Design of Experiments

3 sem. hrs. (3:0) Definitions, concepts, and history, Aviation Human Factors, management, and the organization, Human performance in aviation operations, Human information processing and operational decision-making, Human error and threat management, Threat and Error Management (TEM) in flight operations, air traffic control and cabin operations, Resource management training on the flight deck and in air traffic control, Automation in the workplace, The design of Standard Operating Procedures (SOPs) and checklists. Offered: Fall and Spring. Prerequisite: IEEN 3302 Operations Research.

IEEN 4330 - Digital Systems Simulation

3 sem. hrs. (2:2) Introduction (definitions and types of simulations), Mechanism of discrete event simulation, Random number/variate generation, Input data analysis (input distribution modeling), Simulation modeling using Arena package, Review of probability and statistics, Simulation output analysis, Monte Carlo simulation, Modeling continuous processes, Verification and validation of simulation models, Read/write simulation data from/to external files. Offered: Fall and Spring. Prerequisite: IEEN 3302 – Operations Research.

IEEN 4332 - Distribution Center Design and Operation

IEEN 4334 - Scheduling and Sequencing

3 sem. hrs. (3:0) Introduction and overview, EOQ Models, MRP, job shop scheduling rules & Gantt chart, algorithms for one machine problems, implicit enumerations & dynamic program, branch and bound, heuristics approaches, project Scheduling, parallel Machine Scheduling, relaxation of Assumptions, batch processing, sequence dependence, project presentations. Offered: Fall and Spring. Prerequisite: IEEN 3302 Operations Research.

IEEN 4342 - Construction Management

3 sem. hrs. (3:0) The course focuses on management techniques to solve the unique problems associated with a construction project. Study of Construction Management functions including Project Management, Cost Management, Time Management, Quality Management, Contract Administration, and Safety Management will be covered. Emphasis is put on the application of each function throughout the project phases. Offering: Spring. Prerequisites: IEEN 2302 - Engineering Economics and IEEN 3320 - Human Factors.

IEEN 4396 - Directed Independent Study

1-3 sem. hrs. (1-3) Requires a formal proposal of study to be completed in advance of registration, approval of supervising faculty and department chairperson. Offered Fall, Spring, and Summer. Prerequisites: Varies.

Kinesiology

KINE 1101 - Beginning Racquetball

1 sem. hrs. Instruction and practice in the skills, rules, and strategies of racquetball.

KINE 1102 - Swimming

1 sem. hrs. Instruction and practice in the techniques, skills and safety practices for levels of swimming.
KINE 1103 - Badminton

1 sem. hrs. Instruction and practice of badminton skills, rules and strategy.

KINE 1104 - Gymnastics

1 sem. hrs. Skills, techniques, safety practices, rules and scoring criteria for gymnastics.

KINE 1105 - Sailing

1 sem. hrs. Instruction and practice in skills and safety involved in sailing.

KINE 1106 - Weight Training

1 sem. hrs. The study and practice of physiological principles related to training programs for the development of muscular strength and endurance.

KINE 1107 - Karate

1 sem. hrs. Instruction and practice of contemporary techniques of karate.

KINE 1108 - Strength Conditioning for Women

1 sem. hrs. The study and practice of physiological principles relating to training programs for the development of muscular strength and endurance for women.

KINE 1109 - Rhythmic Aerobics

1 sem. hrs. A study of dance movement as it relates to physical fitness development.

KINE 1110 - Individual/Dual/Lifetime Sports

1 sem. hrs. Instruction, participation, and practice in a variety of individual, dual, and lifetime sports.

KINE 1111 - Beginning Golf

1 sem. hrs. The study of techniques and knowledge pertinent to the game of golf.

KINE 1112 - Personal Self Defense

1 sem. hrs. Instruction and practice of contemporary techniques of self protection.
KINE 1113 - Tennis

1 sem. hrs. Instruction and practice of techniques, skills, and strategy involved in tennis.

KINE 1114 - Volleyball

1 sem. hrs. Instruction and practice of techniques, skills and strategy involved in volleyball.

KINE 1115 - Soccer

1 sem. hrs. Instruction and practice of techniques, skills, and strategies involved in soccer.

KINE 1116 - Ranger Leadership Laboratory

1 sem. hrs. Practical leadership and teamwork training in rappelling, rope bridges, weapons firing, map reading and land navigation, water safety, patrolling, and other ranger skills. Includes a weekend field trip where the techniques learned will be applied in competitive events. Cross listed with MSCI 1172. Prerequisite: approval of Professor of Military Science. May be repeated for credit.

KINE 1117 - Basketball

1 sem. hrs. Instruction and practice of techniques, skills, and instructional strategies involved in basketball.

KINE 1118 - Softball

1 sem. hrs. Instruction and practice of techniques, skills, and instructional strategies involved in softball.

KINE 1119 - Baseball

1 sem. hrs. Instruction and practice of techniques, skills, and instructional strategies involved in baseball.

KINE 1120 - Football

1 sem. hrs. Instruction and practice of techniques, skills, and instructional strategies involved in football.
KINE 1121 - Track and Field

1 sem. hrs. Instruction and practice of techniques, skills, and instructional strategies involved in track and field.

KINE 1122 - Non-traditional Team Sports

1 sem. hrs. Instruction and practice of techniques, skills and instructional strategies involved in non-traditional team sports. Typical topics may include lacrosse, field/floor hockey, ultimate Frisbee, flickerball, cricket and team handball.

KINE 1123 - Beginning Rock Climbing

1 sem. hrs. The study and practice of the technical and educational skills necessary to safely conduct rock climbing and climbing associated activities.

KINE 1124 - Beginning Jazz Dance

1 sem. hrs. An examination of the basic steps (skills), movements, dance combinations and instructional practices that pertain to jazz dance. This course will also include multicultural application, history and choreography of jazz dance.

KINE 1130 - Beginning Fencing

1 sem. hrs. Instruction and practice of the skills, techniques, equipment and safety as it pertains to fencing.

KINE 1131 - Yoga

1 sem. hrs. Instruction and practice of Yoga postures, breathing, meditation and relaxation. May be repeated for credit by non-kinesiology majors. Materials fee required.

KINE 1132 - Fitness Walking

1 sem. hrs. Instruction and practice of fitness walking.

KINE 1133 - Tai Chi

KINE 1134 - Beginning Surfing

1 sem. hrs. This course is designed to provide student with the skills and knowledge necessary to safely enjoy surfing activities. Through structured classroom lectures (including videos) and laboratory activities (beach program), the student will be introduced to the history of surfing, proper use of equipment, skill techniques of surfing, and environmental factors and issues specific to this sport.

KINE 1135 - Army Physical Fitness Training

1 sem. hrs. Instruction and practice of the skills, techniques and fitness activities that are germane to typical Army training.

KINE 1136 - Pilates

1 sem. hrs. lab Instruction and practice in the skills, techniques, and principles of Pilates with emphasis on the Classical Pilates matwork.

KINE 1151 - Scuba and Snorkeling

1 sem. hrs. Knowledge and techniques of snorkeling and scuba diving. Instruction will be directed toward obtaining a basic open water diver certification. TCCNS Equivalent: PHED 1151

KINE 1222 - Basic Equestrian Skills

2 sem. hrs. Instruction and practice of skills and abilities involved in basic horsemanship and equitation.

KINE 1320 - Introduction to Athletic Training

3 sem. hrs. This course provides general knowledge of the athletic training profession, epidemiology of athletic injuries, the pre-participation physical exam, strength and conditioning of athletes, environmental concerns, protective equipment, emergency management of athletic injuries and sports nutrition. Materials fee required.

KINE 2101 - Teacher Development Practicum

1 sem. hrs. practicum This course is designed to expose kinesiology majors with an EC-12 specialization to the teaching profession by working with and assisting cooperating
physical education instructors who teach activity classes for the Department of Kinesiology. This will include, but is not limited to, assisting with planning lessons, teaching skills/games/activities, and evaluation of knowledge and skills.

Prerequisite: KINE 2317.

KINE 2102 - Conditioning Swimming

1 sem. hrs. lab The course addresses the principles and practice of conditioning swimming and other fitness activities in an aquatic environment. Pre-requisite: 800m swim test where student demonstrates competency in the front crawl, back, breast, and butterfly strokes.

KINE 2107 - Intermediate Karate

1 sem. hrs. Instruction and practice in intermediate karate form and exercises. Solo and partner practice. Instruction and practice of contemporary techniques of karate. Prerequisite: KINE 1107 or permission by instructor.

KINE 2113 - Intermediate Tennis

1 sem. hrs. lab Intermediate tennis is designed to provide instruction and practice of techniques, mental skills, and strategy involved in tennis at a level beyond what is taught at the beginning level tennis course (KINE 1113). Pre-requisite: KINE 1113 or instructor approval.

KINE 2134 - Advanced Tai Chi

1 sem. hrs. Instruction and practice in advanced Taijiquan form and exercises. Solo and partner practice. May be repeated for credit by non-kinesiology majors. Prerequisite: KINE 1133 or permission by instructor.

KINE 2135 - Intermediate Surfing

1 sem. hrs. This course is designed to provide students with the skills and knowledge necessary to safely enjoy intermediate surfing activities. Through structured classroom lectures (including videos) and beach laboratories the student will be introduced to: proper use of equipment, surfing history, environmental issues and the 'Goals To Success In Surfing'. Prerequisite: KINE 1134 or instructor-approved demonstration of basic surfing skills.

KINE 2191 - Clinical Experience in Athletic Training I
1 sem. hrs. A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession. Prerequisites: Admission to the athletic training program and concurrent enrollment in KINE 1320.

KINE 2192 - Clinical Experience in Athletic Training II

1 sem. hrs. A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession. Prerequisites: Admission to the athletic training program and concurrent enrollment in KINE 3318.

KINE 2214 - Coaching of Volleyball

2 sem. hrs. Instruction and practice of techniques, skills, and instructional strategies involved in volleyball. Additional information will cover skill development strategies, class/group management, risk management, budget, fund raising and public/family relations.

KINE 2215 - First Aid and Safety

2 sem. hrs. Basic CPR and first aid instruction leading to American Red Cross certification. TCCNS Equivalent: PHED 1206

KINE 2216 - Coaching of Soccer

2 sem. hrs. Instruction and practice of techniques, skills, and instructional strategies involved in soccer. Additional information will cover skill development strategies, class/group management, risk management, budget, fund raising and public/family relations.

KINE 2217 - Coaching of Basketball

2 sem. hrs. Instruction and practice of techniques, skills, and instructional strategies involved in basketball. Additional information will cover skill development strategies, class/group management, risk management, budget, fund raising and public/family relations.

KINE 2218 - Coaching of Softball

2 sem. hrs. Instruction and practice of techniques, skills, and instructional strategies involved in softball. Additional information will cover skill development strategies,
class/group management, risk management, budget, fund raising and public/family relations.

KINE 2219 - Coaching of Baseball

2 sem. hrs. Instruction and practice of techniques, skills, and instructional strategies involved in baseball. Additional information will cover skill development strategies, class/group management, risk management, budget, fund raising and public/family relations.

KINE 2220 - Coaching of Football

2 sem. hrs. Instruction and practice of techniques, skills, and instructional strategies involved in football. Additional information will cover skill development strategies, class/group management, risk management, budget, fund raising and public/family relations.

KINE 2221 - Coaching of Track and Field

2 sem. hrs. Instruction and practice of techniques, skills, and instructional strategies involved in track and field. Additional information will cover skill development strategies, class/group management, risk management, budget, fund raising and public/family relations.

KINE 2225 - Sports Conditioning

2 sem. hrs. This course addresses the principles and practice of sports conditioning from a coaching perspective. Topics will include athletic needs evaluation, exercise programming, and program implementation. Issues regarding resistance exercise, speed, endurance, explosiveness training, and agility will be addressed.

KINE 2227 - Group Fitness Instructor Training Certification

2 sem. hrs. This course is designed to provide theoretical knowledge and practical skills in preparation for a national certification exam in group-fitness instruction. Topics include guidelines for instructing safe, effective, and purposeful exercise, essentials of the instructor-participant relationship, the principles of motivation to encourage adherence in the group fitness setting, effective instructor-to-participant communication techniques, methods for enhancing group leadership, and the group fitness instructor's professional role. A national group fitness instructor certification is offered at the end of the course.

KINE 2255 - Water Safety Instruction
2 sem. hrs. Skills and techniques of aquatic rescues and swimming programs. May be repeated for credit by non-kinesiology majors. Materials fee required.

KINE 2313 - Foundations of Kinesiology

3 sem. hrs. An overview of the field of physical education which includes the history, philosophy, principles, current concepts of physical education and career options. For kinesiology majors this course must be taken prior to any senior level (4000) kinesiology courses. TCCNS Equivalent: PHED 1301

KINE 2314 - Sport Management

3 sem. hrs. The study of operating principles for programs in intercollegiate athletics, professional sports, recreational sports, and community sport associations. This course is recommended prior to courses in the Sport Management Specialization.

KINE 2316 - Health and Fitness

3 sem. hrs. An overview of relevant health and fitness topics including mental and physical health, nutrition, human sexuality, communicable and non-communicable diseases, use and abuse of drugs/alcohol and safety. This course will include

KINE 2317 - Re-inventing Games

3 sem. hrs. This course is designed to introduce a framework for the development of games, sports, and activities through an inclusive and developmentally appropriate process of change, challenge, and choice. A wide array of sports, sports-related games and activities are introduced, deconstructed for their current exclusivity and then reconstructed through a framework which seeks to change the existing exclusivity of the rules, to challenge participating students of all cognitive and physical abilities, and then build in a choice component into the activity. This course is recommended prior to enrolling in KINE 3339 and KINE 3341.

KINE 2325 - Physiological Aspects of Kinesiology

3 sem. hrs. An introduction to the fundamental principles of human physiology and their application to kinesiology.

KINE 2326 - Essentials of Professional Fitness Training

3 sem. hrs. This course is designed to provide theoretical knowledge and practical skills in preparation for a national certification exam in personal training. Topics include
guidelines for instructing safe, effective, and purposeful exercise, essentials of the client-trainer relationship, conducting health and fitness assessments, and designing and implementing appropriate exercise programming.

KINE 2355 - Lifeguard Training

3 sem. hrs. This course provides instruction in first aid, CPR for professional rescuers, Automated External Defibrillator (AED) training, water safety and rescue skills.

KINE 2357 - Sport Officiating

3 sem. hrs. Designed to provide an understanding of the foundations of officiating for sport, and the effective organization, training, and supervision of officials for sport programs.

KINE 2375 - Nutrition for Human Performance

3 sem. hrs. This course is an introduction to the physiological, anatomical, and psychological aspects of nutrition in relation to human performance and optimal health. Special emphasis is placed on sport and fitness enhancement and achievement of peak training levels, through proper nutrient ingestion.

KINE 3112 - Physiology of Exercise Lab

1 sem. hrs. The required laboratory course with KINE 3312. Demonstration and hands-on learning will introduce students to the scientific basis, techniques, and methods used in exercise physiology. Lab activities will complement lecture materials from KINE 3312. KINE 3112 must be taken concurrently with KINE 3312.

KINE 3113 - Advanced Tennis

1 sem. hrs. lab Advanced tennis is designed to provide instruction and practice for students with a high level of tennis ability and experience. Pre-requisite: KINE 2113 or instructor approval.

KINE 3214 - Physical Education Activities

2 sem. hrs. Application of principles of physical activities, games and sports.

KINE 3244 - Rhythmic and Dance Activities
2 sem. hrs. Instruction and practice in creative and structured dance as applied to elementary and secondary school programs.

KINE 3291 - Clinical Experience in Athletic Training III

2 sem. hrs. A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession. Prerequisites: Admission to the athletic training program and concurrent enrollment in KINE 3320.

KINE 3292 - Clinical Experience in Athletic Training IV

2 sem. hrs. A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession. Prerequisites: Admission to the athletic training program and concurrent enrollment in KINE 3324.

KINE 3301 - Outdoor Adventure Programs

3 sem. hrs. An introduction to a variety of outdoor adventure activities and basic outdoor skills. In addition to skill acquisition and assessment, this course covers such topics as: history and philosophy of outdoor adventure programs, risk and legal liability and trip planning.

KINE 3312 - Physiology of Exercise

3 sem. hrs. This course is an application of anatomy and physiology that allows for the understanding of the effects of various forms of exercise and the environment on the body systems and performance. Lab activities will complement lecture materials. Prerequisites: KINE 2325 or BIOL 2401 and KINE 1320 or KINE 2313. KINE 3112 must be taken concurrently with KINE 3312.

KINE 3318 - Prevention and Care of Athletic Injuries

3 sem. hrs. Provides the general knowledge and general application of theory, principles, and skills used in the prevention, care, and rehabilitation of athletic injuries.

KINE 3320 - Introduction to Therapeutic Interventions

3 sem. hrs. Provides the student with the general knowledge of current theory and application of various therapeutic interventions used in the treatment of musculoskeletal
injuries, including thermal therapy, cryotherapy, manual therapy, and therapeutic exercises. Prerequisite: KINE 3318.

KINE 3322 - Evaluation of Upper Extremity Injuries

3 sem. hrs. Provides the student with general knowledge of evaluation techniques of athletic injuries to the upper extremities including range of motion testing, neurologic, and orthopedic evaluations. Prerequisite: KINE 2325 or KINE 3318 or BIOL 2401.

KINE 3324 - Evaluation of Lower Extremity Injuries

3 sem. hrs. Provides the student with general knowledge of evaluation techniques of athletic injuries to the lower extremities including range of motion testing, neurologic, and orthopedic evaluations. Prerequisite: KINE 2325 or KINE 3318 or BIOL 2401.

KINE 3330 - Promotion of Sport

3 sem. hrs. This course is designed to provide the sport manager with an understanding of the main marketing issues within the sport industry. Special emphases are placed on the application and assessment of marketing sport within the private and public sectors. Prerequisite: KINE 2314.

KINE 3335 - Legal Issues in Sport

3 sem. hrs. Provides general knowledge of the judicial system and current legal issues in sport including risk management, eligibility, discrimination, drug testing, and Title IX. Recommended pre-requisite: KINE 2314.

KINE 3337 - Sport and Exercise Psychology

3 sem. hrs. This course provides general knowledge of the psychological factors that are associated with participation and performance in sport, exercise, and other types of physical activity with emphasis on motivational techniques, personality dynamics, and mental health serving as focal points.

KINE 3338 - Motor Development/Motor Learning

3 sem. hrs. A study of the fundamental principles related to human motor development and the scientific principles related to motor learning.

KINE 3339 - Elementary Physical Education Programs
3 sem. hrs. The application of the fundamental principles related to human motor development, physical fitness, locomotor skills, non-locomotor skills, manipulative skills, and rhythmical activities with children at the elementary school level. Recommended pre-requisites: KINE 2317 and KINE 3338. This course is a pre-requisite for EDUC 4605.

KINE 3341 - Secondary Physical Education Programs

3 sem. hrs. The application of the fundamental principles related to human motor development, physical fitness, sports related activities and dance with children at the secondary school level. Recommended pre-requisites: KINE 2317, KINE 3338, and KINE 3339. This course is a pre-requisite for EDUC 4605.

KINE 3365 - Personnel Management in Recreation and Sport Services

3 sem. hrs. This course will provide a strong practical and theoretical foundation in sport and recreation management through the examination and investigation of contemporary human resource management and techniques. It will provide basic information, principles, and in-depth case study analysis and hands-on practical experiences that have application to a wide variety of operations. Recommended pre-requisite: 2314.

KINE 3366 - Managing Leisure Services

3 sem. hrs. Introduction of issues related to managing leisure services in a variety of settings such as universities, municipal recreation, corporate wellness centers, and government and private sectors. Recommended pre-requisite: KINE 2314.

KINE 3367 - Sport Tourism

3 sem. hrs. Lecture The course is designed to provide an introduction to sport events from a tourism strategic planning/marketing perspective. Throughout this course, students will be exposed to sport event production strategies for tourism and their impacts on event stakeholders. Students will examine specific sport tourism events and analyze their strategies for destination branding; sport tourism facility and event financing; host-guest interactions; environmental, political, economic, and socio-cultural impacts. Recommended pre-requisite: KINE 2314.

KINE 4127 - Biomechanics Lab

1 sem. hrs. The required laboratory course with KINE 4327. The demonstration and application of mechanical factors and principles affecting human motion. Qualitative and
quantitative analysis of human motion with emphasis on sport and fitness activities.
KINE 4127 must be taken concurrently with KINE 4327.

KINE 4291 - Clinical Experience in Athletic Training V

2 sem. hrs. A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession. Prerequisites: Admission to the athletic training program and concurrent enrollment in KINE 3322.

KINE 4292 - Clinical Experience in Athletic Training VI

2 sem. hrs. A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession. Prerequisites: Admission to the athletic training program and concurrent enrollment in KINE 4322.

KINE 4293 - Clinical Experience in Athletic Training VII

2 sem. hrs. A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession. Prerequisites: Admission to the athletic training program and concurrent enrollment in KINE 4326.

KINE 4294 - Clinical Experience in Athletic Training VIII

2 sem. hrs. A field based professional experience to provide the student the opportunity to apply knowledge and theory related to the philosophy, principles, and competencies of the athletic training profession. Prerequisites: Admission to the athletic training program and concurrent enrollment in KINE 4324.

KINE 4308 - Facilities Design and Planning^

3 sem. hrs. Introduction to the process of developing a variety of facilities found in public and private sport settings. Recommended pre-requisite: KINE 2314.

KINE 4309 - Finance Management in Sport

3 sem. hrs. Lecture This course is designed to provide knowledge of financial planning and administration. This includes, but not limited to, basic budget terminology, sources of financing for operating and capital expenditures, expenditure policies, auditing and the grant process. Recommended pre-requisite KINE 2314.
KINE 4310 - Programs in Sports and Physical Fitness

3 sem. hrs. A study of the principles of physical fitness and biomechanics of sports with an emphasis upon student performance in a variety of sport activities. Prerequisite: KINE 2313.

KINE 4311 - Measurement and Evaluation

3 sem. hrs. Use and function of the various tests used in kinesiology together with the purpose, scope and techniques of test construction. Development of statistical techniques necessary for manipulation and interpretation of physical performance data. Prerequisites: KINE 1320 or KINE 2313.

KINE 4322 - Rehabilitation of Athletic Injuries

3 sem. hrs. Rehabilitation for athletic injuries including goniometry, muscle testing, therapeutic exercises, and the use of SOAP notes. Prerequisite: KINE 2325 or KINE 3318 or BIOL 2401.

KINE 4324 - Administration of Athletic Training

3 sem. hrs. Provides the general knowledge and application of athletic training administration including facility design, insurance claims, liability issues, and injury and treatment records.

KINE 4325 - Kinetic Anatomy

3 sem. hrs. An analysis of the skeletal, muscular, and neurological structure and functional aspects of human movement with emphasis on sport and fitness activities. Prerequisites: KINE 2325 or BIOL 2401 and KINE 1320 or KINE 2313.

KINE 4326 - Medical Terminology and Conditions in Sport and Exercise

3 sem. hrs. Provides information about team physician and athletic trainer relationships, physical examinations, emergency equipment, medical terminology, athletic injuries, and problems related to the team physician. Prerequisite: KINE 2325 or KINE 3318 or BIOL 2401.

KINE 4327 - Biomechanics

3 sem. hrs. An analysis of the mechanical factors and principles influencing human motion with emphasis on sport and fitness activities. Recommended pre-requisite: KINE
KINE 4325. Prerequisites: KINE 2325 or BIOL 2401, and KINE 1320 or KINE 2313. KINE 4327 must be taken concurrently with KINE 4127.

KINE 4328 - Sport and Exercise Pharmacology

3 sem. hrs. Provides general knowledge of the classifications, legal concerns, therapeutic uses, actions, side effects, and adverse reactions of major drug groups related to sports activities. Prerequisite: KINE 2325 or KINE 3318 or BIOL 2401.

KINE 4329 - Essentials of Strength and Conditioning

3 sem. hrs. This course is designed to provide a comprehensive overview of strength and conditioning. Emphasis is placed on the exercise sciences (including anatomy, exercise physiology, and biomechanics) and nutrition, exercise technique, program design, organization and administration, and testing and evaluation. Additionally, this course is designed to prepare students for either the nationally accredited Certified Strength and Conditioning Specialist (CSCS) or the NSCA Certified Personal Trainer (CPT) exams. Pre-Req: BIOL 2401, BIOL 2402, KINE 3312; KINE 4327.

KINE 4339 - Special Populations in Kinesiology

3 sem. hrs. A course designed to direct kinesiology educators toward meeting the program needs of the exceptional individual in physical education or kinesiology professional setting. Practical teaching application with exceptional individuals is stressed. Prerequisites: KINE 2313.

KINE 4340 - Exercise Testing and Prescription

3 sem. hrs. This course provides classroom and hands on experience addressing all facets of exercise testing and prescription ranging from health appraisal, physical fitness testing, principles of exercise prescription, clinical exercise physiology, and special populations. Prerequisites: KINE 2325 or BIOL 2401, KINE 4312, and KINE 1320 or KINE 2313.

KINE 4363 - Sport Programming

3 sem. hrs. Designed to provide initial foundation of basic sport programming skills, methods, and techniques necessary to deliver sports activities within a variety of settings, agencies and/or organizations. Recommended pre-requisite: KINE 2314.

KINE 4390 - Seminar in Exercise and Sport
1-3 sem. hrs. Contemporary issues in Exercise and Sport; topics vary with the individual. May be repeated for credit when topic varies.

KINE 4693 - Professional Field Experience I

6 sem. hrs. This course is a field-based experience (minimum of 200 hours) to provide the student the opportunity to apply knowledge and theory related to the student's specialization in kinesiology (e.g. Exercise Science, Pre-Allied Health Professional, Sport Management). Students must enroll in both KINE 4693 and KINE 4694 at the same time. To enroll students must have departmental approval as well as an overall and kinesiology GPA of 2.75. The field experience is for seniors only and they should enroll during their last semester. Students are allowed to enroll in other coursework but not to exceed the 18-hour university limit.

KINE 4694 - Professional Field Experience II

6 sem. hrs. This course is in conjunction with Professional Field Experience I. A minimum of 200 hours is required for this portion of the internship for a total of 400 hours. Students must enroll in both KINE 4693 and KINE 4694 at the same time. All of the requisites and limitations of KINE 4693 apply to this course as well.

KINE 4696 - Directed Individual Study

1-6 sem. hrs. Investigative study on selected problems by students with particular needs through special permission of the Department Chair and Dean. May be repeated for credit when topic varies.

Management

MGMT 3312 - Behavior in Organizations*

3 sem. hrs. Interactions of individuals and groups in work environments. Topics include decision making, motivation, leadership, power, conflict, stress, and diversity. Other coverage includes management functions and environmental constraints affecting managerial practice and decisions. Prerequisite: BUSI 0011 and Junior standing or above.

MGMT 3315 - Communicating in Business*
3 sem. hrs. A study of the fundamentals of effective communication in business and administration. Emphasis is placed on the application of modern techniques to business writing and oral reporting. Prerequisites: BUSI 0011, and Junior standing or above.

MGMT 3320 - Concepts of Human Resource Management*

3 sem. hrs. A study of the comprehensive set of managerial activities carried out in organizations to develop and maintain a qualified workforce. Topics include the legal environment, human resource planning, recruitment, selection, employee appraisal, compensation systems, and an introduction to labor relations. Prerequisite: Junior standing or above.

MGMT 3325 - Introduction to Quality Management

3 sem. hrs. The contributions of the masters in quality management are examined. Applications of concepts in manufacturing and service organizations are presented. The class is managed by utilizing these concepts. Prerequisite: Junior standing or above.

MGMT 3330 - Small Business Strategy*

3 sem. hrs. This course will focus on both the entrepreneurial aspects and the ongoing management of a small business enterprise, with a focus on achieving and sustaining competitive advantage as a small organization. This course generally defines a small business as one that has fewer than 100 employees, has a target customer in close proximity to its bricks-and-mortar operations, and where only one or a few individuals had provided the original startup financing. This course will focus on the leadership, decision-making, management, marketing, financial controls and other mission-critical processes that ensure a successful startup and ongoing health of a small business enterprise. Prerequisite: MGMT 3312 and/or Permission of Instructor

MGMT 3335 - Strategic Issues in Family Business

3 sem. hrs. This course examines the new discipline that has developed over the last 20 years and focuses on the unique aspects of family business. Strategy, finance, accounting, organizational behavior, law, operations management and basic small business concepts are integrated throughout this course. Students will have an opportunity to work as consultants to a family firm and assist with the development of a firm strategic, business or transitional plan. Prerequisite: MGMT 3312 and/or Permission of Instructor

MGMT 3355 - Organization Change and Development*
3 sem. hrs. An in-depth study of group and organization-wide interventions designed to improve the group and organization's ability to cope with change and manage continuous improvement. Emphasis is on developing processes to improve group dynamics, organization-wide health and effectiveness, and on a systems approach to diagnosing and solving problems. Prerequisites: MGMT 3312 and Junior standing or above.

MGMT 3360 - Social Entrepreneurship

3 sem. hrs. Social entrepreneurs are gaining international attention motivated by change and to see the world as it can be, not as it is. Students in the course are expected to participate in the creation of solutions to address a social problem. The intention of the course is to combine the goal of serving others while deepening each student's understanding of the world around them. This interdisciplinary course will help students from all majors learn how social entrepreneurship can create a better world by starting with the strength of their major field and applying to the problems of a disadvantaged population. The field of social entrepreneurship is in its infancy, and as such, we are collaborating to share knowledge and gain experience in this emerging field.
Prerequisite: Junior standing or above

MGMT 3390 - Training and Development*

3 sem. hrs. The purpose of this course is to introduce the student to the Human Resource function of training and development. Specifically, the course will focus on assessing the needs of employees and organizations with regard to training and employee development; the design of training programs; methods used to train and develop employees; and program evaluation. Prerequisites: MGMT 3320 or permission of the instructor, and junior standing or above.

MGMT 4305 - Staffing in Organizations*

3 sem. hrs. A study of the concepts, methods, and problems encountered in the development, validation, and utilization of employee recruitment, selection, training, and career development. Legal defensibility, relevant policies and legislation, and organizational effectiveness of staffing and development will be discussed. Prerequisites: ORMS 3310, MGMT 3320, or permission of instructor, and Junior standing or above.

MGMT 4310 - Managing Dysfunctional Workplace Behavior

3 sem. hrs. This course focuses on conceptual content and skills that today's managers can use to improve the workplace environment and management of subordinate performance. More specifically, the course focuses on the causes, consequences and
management of many difficult employee behaviors including aggression, violence, sexual harassment, sabotage, and theft. The material is based upon previous coursework and extends student understanding of important topics including motivation, discipline, leadership, group behavior, and performance management. Prerequisites: MGMT 3312, 3320 and Junior standing or above.

MGMT 4315 - Multinational Management*

3 sem. hrs. A study of management processes and their application across different cultural, economic and legal environments. The course focuses on differences among values, beliefs, perceptions, attitudes and behaviors across national and cultural boundaries that affect the employee work and performance. Prerequisites: MGMT 3312, 3320, or permission of instructor if taken as an elective, and Junior standing or above.

MGMT 4320 - Leadership and Managerial Effectiveness*

3 sem. hrs. A chronological study of leadership models, styles, and practices highlighting the paradigm shift from the industrial age to the information age. Focuses on the characteristics of leaders important to effective leadership outcomes, cross-cultural skills essential for effective leadership in international and culturally diverse settings, self-assessment and the development of a personal leadership vision, and the strategic skills necessary for providing vision and strategic direction of the organization. Prerequisites: MGMT 3312, or permission of instructor if taken as an elective, and Junior standing or above.

MGMT 4330 - Business Ethics*

3 sem. hrs. Historical and contemporary views of business as a social institution; focus is on the nature of ethics and the utilization of codes of ethics. Prerequisite: Junior standing or above.

MGMT 4335 - Compensation and Appraisal Systems*

3 sem. hrs. A study of the issues involved in planning, processing and administering employee compensation programs and performance appraisal systems. Topics include incentive pay, executive compensation, fringe benefits, health and pension plans, performance appraisal methods, use of appraisals in compensation decisions, and legislation and policies regulating compensation and appraisal systems. Prerequisites: ORMS 3310, MGMT 3320, or permission of instructor, and Junior standing or above.

MGMT 4340 - Critical Thinking and Decision Making*
3 sem. hrs. This course integrates theory and practice in order to develop and accumulate problem solving skills--the ability to analyze, think, perform, evaluate, and adapt to the changing needs of organizations. Focuses on complex decision making processes, critical thinking skills and creative problem solving techniques for the learning organization, motivation and coaching of others, development of conflict resolution skills, and the management of stress and well-being. Prerequisites: MGMT 3312, 3320, or permission of instructor if taken as an elective, and Junior standing or above.

MGMT 4385 - Human Resource Planning

3 sem. hrs. A study of the concepts important to human resource planning; both strategic planning and budgetary planning. The course will focus on developing skills necessary to estimate and evaluate the costs of various human resource activities, and on decision-making activities in an HR environment, with special attention to legal costing in regards to the HR function. The course serves as a useful integration course and relates to issues (such as training & development, staffing & development, compensation, appriasal systems, and legal liability) discussed in other relevant courses as the basis for making decisions about the usefulness of various HR activities. Prerequisites: MGMT 3320, ORMS 3310, Junior standing or above.

MGMT 4388 - Administrative Policy and Strategy*

3 sem. hrs. Analytical process and methodology for policy-strategy formulation, approached as a multi-level, integrative process. Analysis focused on integration of skills and competencies acquired through the BBA program. Prerequisite: Successful completion of all other courses in the Business Core Requirements.

MGMT 4390 - Current Topics in Management

1-3 sem. hrs. Selected topics for special study related to management functions, processes or issues. May be repeated for credit when topics vary. Prerequisites: Junior standing or above, and others depending on topic. Contact the Dean's office for information.

MGMT 4396 - Directed Individual Study*

1-3 sem. hrs. Individual supervised study and a final report. Prerequisites: permission of instructor, Junior standing or above, and others depending on selected topic. Inquire at the Dean's office for information.

MGMT 4398 - Internship in Management
3 sem. hrs. Supervised full-time or part-time, off-campus training in business or government organization. Oral and written reports required. Prerequisites: management major, and Junior standing or above. Students must apply to program and be accepted prior to registration. May not be repeated for credit.

**Management Information Systems**

**MISY 2305 - Computer Applications in Business***

3 sem. hrs. Survey of modern business computer hardware, software, and applications. Opportunities to create programs and use existing application software to solve various management information technology-oriented problems. Emphasizes the end-user's perspective, and interactions with management information technology. TCCNS Equivalent: BCIS 1305

**MISY 3310 - Management Information Systems Concepts**^*

3 sem. hrs. Provides an understanding of the importance of computer-based information in the success of the firm. Illustrates ways in which companies utilize computer systems to strategically compete within certain industries. Emphasis is on the role of information systems within each of the functional areas of business. Major concepts include data management, decision support, and management information systems. Prerequisites: BUSI 0011, MISY 2305 and Junior standing or above.

**MISY 3320 - Business Data Communication and Networking I**

3 sem. hrs. Characteristics of contemporary business data communication components, their configurations, and their impact on management information systems design. Topics include designing, managing, securing, and implementing business data communication networks, and their integration into management information systems. Exercises and assignments use various data communication facilities. Prerequisites: Junior standing or above.

**MISY 3330 - Database Management**

3 sem. hrs. Concepts and methodology of data base planning, design, development, and management of the computerized data base of a management information system. The emphasis is on logical data base design and a study of hierarchical, network, and relational implementations. Normalization exercises are completed relative to the logical
design of relational data bases. Exercises and assignments use a relational DBMS package. Prerequisites: Junior standing or above.

MISY 3340 - Systems Analysis and Design

3 sem. hrs. Develops ability to analyze an existing information system within an organization, to identify information requirements, and to specify the functions of a new information system. Includes cost/benefit analysis of proposed information systems. Exercises and assignments use a Computer Aided Software Engineering (CASE) tool. Prerequisites: Junior standing or above.

MISY 3350 - Business Applications Development

3 sem. hrs. This course provides an understanding of the Visual Basic programming environment in the context of business application design and development. This course will place emphasis on performance characteristics and user interface design considerations. Prerequisites: Junior standing or above.

MISY 3360 - ERP Overview

3 sem. hrs. 3:0 A study of the management of information technology as it is practiced in organizations today. Traditional organizations are moving toward a more interconnected or networked business environment. A major focus is understanding the role and use of complex technology in the support of individual, workgroup, enterprise, inter-enterprise and international computing. This course will utilize a business process management approach through the use of enterprise software. Prerequisite: ONLY Juniors or Post-Baccalaureate

MISY 4310 - Business Data Communications and Networking II

3 sem. hrs. Design, implementation, and operation of client-server network systems for organizational Intranets and Internet presence. Exercises and assignments use selected data communications facilities. Prerequisites: MISY 3320 and Junior standing or above.

MISY 4325 - Business Decision Support Systems and Expert Systems

3 sem. hrs. A survey of decision support systems and expert systems used in business. Topics include artificial intelligence (AI), knowledge engineering, knowledge acquisition, expert system shells, modeling, simulation, and selection of appropriate computer package support. Exercises and assignments use various computer packages such as neural network systems and expert system shells. Prerequisites: Junior standing or above.
MISY 4330 - Website Development for Business

3 sem. hrs. This course provides an understanding of the principles and techniques for client-side web development using HTML and CSS. Text editors and the website development software will be used to create and maintain websites. This course includes designing to meet web standards, including accessibility, usability, and workflow for web design. Prerequisites: Junior standing or above.

MISY 4340 - Electronic Commerce Management

3 sem. hrs. A broad overview of electronic commerce topics as they relate to various users. General coverage includes electronic commerce history, opportunities, limitations, and risks. Technical discussions include the internet, intranets, extranets, firewalls, security, protocols, servers, and browsers. Prerequisites: Junior standing or above.

MISY 4341 - Management of Healthcare Information Systems

3 sem. hrs.
This course provides an overview of the knowledge and skills required to manage information for organizations related to healthcare. The course specifically focuses on the practice of acquiring, analyzing and protecting digital and traditional medical information vital to providing quality patient care. Some of the topics that are covered include: evolution of health care information systems (HCIS), components and basic HCIS functions, technology infrastructure for healthcare organizations, basic concepts such as electronic health records (HER), health information exchange (HIE), computerized physician order entry (CPOE), clinical decision support systems (CDSS), hospital incident command systems (HICS) and standards such as HIPPA, HL7, and digital imaging and communications in medicine (DICOM). Other topics include strategic information systems planning for healthcare organizations, systems analysis and project management, information security and privacy issues, and the roles of HCIS professionals in health organizations. Course Prerequisites: MISY 3310 or equivalent with 'C' or better.

MISY 4345 - Information Security and Privacy in Healthcare

3 sem. hrs.
This course provides an overview of the knowledge and skills required to manage information privacy and security for organizations related to healthcare. It focuses on best practices for healthcare information security and privacy with detailed coverage of essential topics such as information governance, roles and occupations, risk assessment and management, incident response, patient rights, healthcare responsibilities,
cyberattacks and cybersecurity. Topics also include relevant laws and regulations and other aspects of information security and privacy, with emphasis on real-life scenarios in clinical practices and business operations in healthcare. Course Prerequisites: MISY 3310 or equivalent with the grade of "C" or better.

MISY 4350 - Business Intelligence and Analytics

3 sem. hrs. Overview of important concepts of business intelligence, and the use of analytics, technologies, applications and processes used by organizations to gain data-driven insights. These insights and predictions can be used to aid decision-making and performance management across functional areas, including marketing, operations, and finance. Students will learn to extract and manipulate data, and create reports, scorecards and dashboards, including mobile apps. ONLY Juniors or Post-Baccalaureate or Seniors for MISY 4350

MISY 4365 - Data Warehousing and Data Mining for Business Intelligence

3 sem. hrs. In the information age, organizations can and do collect massive amounts of data. Yet organizations are often "data rich" but "information and knowledge poor". This course is designed to prepare business professionals who, by using analytical methods and data mining and data visualization tools will be able to harness the potential of data by extracting business intelligence that can be used to improve decisions and operations at various points in the value chain. Prerequisites: MISY 2305, MISY 3330, ORMS 3310, and Junior standing or above.

MISY 4366 - Data Analytics for Healthcare Management

3 sem. hrs.

The goal of this course is to prepare business professionals to extract business intelligence to improve decisions and operations in organizations, especially in the healthcare industry, at various points in the value chain. Data mining methods covered include multiple linear regression, k-nearest neighbor, classification and regression trees, logistic regression, discriminant analysis, artificial neural networks, association rules, cluster analysis and text mining. Areas in healthcare include healthcare market basket analysis, churn analysis for hospitals and insurance companies, health insurance fraud detection, readmission assessment, personalization of treatment regimen, patient risk management and performance-based payment analysis. Students should have a background in database and statistics. The focus will be less on statistical mathematics
and more on the application of data mining methods using software tools. Course
Prerequisites:

MISY 2305 Computer Applications for Business, or its equivalent
MISY 3330 Database Management, or its equivalent
ORMS 3310 Data Analysis and Statistics, or its equivalent
MISY 4341 Healthcare Information Systems Management, or its equivalent

MISY 4375 - IT Project Management

3 sem. hrs. 3:0 This course covers issues related to managing projects in organizations. The course focuses on the management of projects and working as a team. Students are expected to draw on materials from other management information system courses, especially the System Analysis and Design, and Database Management courses.
Prerequisites: MISY 3330 (Database Management)

MISY 4390 - Current Topics in Management Information Systems

1-3 sem. hrs. Selected topics for special study related to management information systems. Prerequisites: Junior standing or above, and others depending on topic. Contact the Dean's office for information.

MISY 4396 - Directed Individual Study

1-3 sem. hrs. Individual supervised study and a final report. Prerequisites: permission of instructor, Junior standing or above, and others depending on selected topic. Inquire at the Dean's office for information.

MISY 4398 - Internship in Management Information Systems

1-3 sem. hrs. Supervised practical experience in business computer systems. Prerequisites: MIS major, Junior standing or above, and others depending on selected internship. Students must be accepted prior to registration. May not be repeated for credit.

Marketing

MKTG 3310 - Principles of Marketing*
3 sem. hrs. The initial course in Marketing. Description and analysis of the flow of goods, services and ideas to consumers and industrial users. Factors outside the firm are also considered as they affect marketing decisions. Prerequisite: BUSI 0011 and Junior standing or above.

**MKTG 3311 - Salesmanship: Concepts and Practices***

3 sem. hrs. An introduction to professional salesmanship as a marketing tool. Emphasis is placed on the theory and application of the professional selling process. Prerequisite: Junior standing or above.

**MKTG 3315 - Advertising and Promotional Strategy***

3 sem. hrs. The student will learn about the development and implementation of a coordinated and integrated advertising and promotions strategy. Emphasis is placed on the interrelationships among advertising, sales management, and sales promotion activities. Prerequisites: MKTG 3310 and Junior standing or above.

**MKTG 3320 - Basic Advertising**

3 sem. hrs. Advertising concepts and a critical analysis of commercial advertising practices. Students apply advertising concepts in projects such as case studies, campaign evaluations, and simulation exercises. Prerequisite: Junior standing or above.

**MKTG 3325 - Entrepreneurial Marketing***

3 sem. hrs. Entrepreneurial marketing provides entrepreneurs and small business owners with the knowledge needed to successfully perform marketing activities (primarily promotion) on a very low budget. Students will learn the utilization of techniques and the analysis of market characteristics that impact the small entrepreneurial organization, its products and services. Additionally, students will learn how to develop specific yet flexible marketing plans and activities, and the effective management of practices, finances, and obligations associated with the marketing of smaller entrepreneurial firms. Factors inside and outside the firm are researched and analyzed as they affect successful small business marketing decisions. Prerequisites: Junior standing or above and/or permission of the instructor for non-business majors.

**MKTG 3330 - Consumer Behavior***

3 sem. hrs. An examination of the psychological and social influences that affect consumer decision making. Emphasizes the development of marketing programs
designed with behavioral considerations in mind. Prerequisites: MKTG 3310 and Junior standing or above.

MKTG 3333 - Digital Marketing*

3 sem. hrs. This course introduces students to the theories, strategies, tools, and techniques of effective online marketing. The course emphasizes the essential concepts, methods, technologies, and decision making criteria for business-to-business and business-to-consumer Internet marketing. The broad concepts of ethics, social responsibilities, sustainability, and globalization are integrated through the course. Topics include online marketing research, business intelligence, Web site design, and Internet marketing strategy. Prerequisites: Junior status or permission of the instructor.

MKTG 3340 - Retail Management

3 sem. hrs. A managerial approach to retailing. Topics such as trade area evaluation, buying, layout, pricing, cost and expense analysis are considered. Prerequisites: MKTG 3310 and Junior standing or above.

MKTG 3345 - Sales Management

3 sem. hrs. An exploration of the problems and practices of sales and sales management. Organizational structure and development of programs to assure a competent and effective sales force are stressed. Prerequisites: MKTG 3310 and Junior standing or above.

MKTG 4310 - Distribution Systems in Marketing

3 sem. hrs. An analysis of the development of integrated distribution systems. Topics include retail and wholesale institutions, channel conflict and cooperation, channel control, franchising and emerging developments in distribution channels. Prerequisites: MKTG 3310 and Junior standing or above.

MKTG 4320 - Marketing Research and Analytics*

3 sem. hrs. The study of research in marketing with emphasis on the collection and interpretation of data and its application to the solution of marketing problems. Prerequisites: ORMS 3310, MKTG 3310, 6 hours of advanced marketing, and Junior standing or above.

MKTG 4340 - International Marketing
3 sem. hrs. A study of the economic, social and cultural environment of international marketing. The course focuses on marketing decision making in this environment. Prerequisites: MKTG 3310 and Junior standing or above, or permission of instructor.

MKTG 4350 - Marketing Strategy*

3 sem. hrs. The study and application of the strategic marketing planning process to realistic business situations. Topics include: strategies for growth and competitive advantage; market segmentation, targeting and positioning; marketing mix strategies and tactics; customer satisfaction and relationship building; and evaluation and control of marketing strategies. Attention to ethical considerations in marketing and a triple bottom line (TBL) evaluation of marketing outcomes. Prerequisites: MKTG 3310, nine additional hours of upper-division marketing, and Senior standing.

MKTG 4360 - Social Media Marketing*

3 sem. hrs. A comprehensive study of Social Marketing strategy and implementation. The course explores the tools, techniques, and strategic logic used in the development and implementation of social media marketing strategy. The course also describes and defines the logic models used for specific plans and programs that affect and are affected by the technology and competitive environments. Prerequisites: MKTG 3310, and Senior standing.

MKTG 4396 - Directed Individual Study

1-3 sem. hrs. Individual supervised study and a final report. Prerequisites: permission of instructor, Junior standing or above, and others depending on selected topic. Inquire at the Dean's office for information.

MKTG 4398 - Internship in Marketing

3 sem. hrs. Supervised full-time or part-time, off-campus training in business or government organization. Oral and written reports required. Prerequisites: marketing major, and Junior standing or above. Students must apply to program and be accepted prior to registration. May not be repeated for credit.

Mathematics

MATH 0099 - Math Non-Course Based Development
Preparation workshop to help students achieve College Readiness in mathematics under the Texas Success Initiative. Topics include five general areas: fundamental mathematics, algebra, geometry, statistics, and problem solving. Not counted toward graduation or semester enrollment load.

MATH 0200 - Brief Developmental Mathematics

1-2 sem. hrs. (1-2:0)
Topics as in MATH 0300. For students who have completed most topics in MATH 0300. Requires permission of MATH department. (Not counted toward graduation) Fall, Spring, Maymester, Summer.

MATH 0300 - Developmental Mathematics

3 sem. hrs. (3:0) Topics include number concepts, computation, elementary algebra, geometry, and mathematical reasoning. Also, linear equations and inequalities, rational expressions, exponents and radicals, quadratics and word problems. May be repeated for credit as needed to complete mastery of all topics. (Not counted toward graduation.) Fall, Spring, Summer.

MATH 0310 - Development Mathematics-Algebra

3 sem. hrs. (2:2) The course is designed for students needing an extensive review of mathematics to prepare them for state & campus standards and/or higher mathematics courses. The course covers number concepts, computation, various algebra topics, geometry, and mathematical reasoning. This course does not count towards credit for graduation.

MATH 0320 - Development Mathematics-Statistics

3 sem. hrs. (2:2) The course is designed for students needing an extensive review of mathematics to prepare them for state & campus standards and/or higher mathematics courses. The course covers number concepts, computation, various algebra topics, geometry, and mathematical reasoning. This course does not count towards credit for graduation.

MATH 0398 - Introduction to Algebra

3 sem. hrs. (3:0) Number concepts, computation, elementary algebra, geometry, and mathematical reasoning. (Not counted toward graduation.) Fall, Spring, Summer.
MATH 0399 - Intermediate Algebra

3 sem. hrs. (3:0) Topics include linear equations and inequalities, rational expressions, exponents and radicals, quadratics and word problems. Prerequisite: MATH 0398 or placement into MATH 0399. Fall, Spring, Summer. Not counted toward graduation.

MATH 1314 - College Algebra

3 sem. hrs. (3:0) Quadratic equations, inequalities, graphs, logarithms and exponentials, theory of polynomial equations, systems of equations. Prerequisite: TSI College Readiness in mathematics or MATH 0300 or placement into MATH 1314. Not for Colleges of Liberal Arts or Nursing and Health Sciences; consult advisor for exceptions and approval. Fall, Spring, Summer. TCCNS Equivalent: MATH 1314 Counts as the mathematics component of the University Core Curriculum.

MATH 1316 - Trigonometry

3 sem. hrs. (3:0) Trigonometric functions, identities, equations involving trigonometric functions, solutions of right and oblique triangles. Prerequisite: MATH 1314 or placement beyond MATH 1314. Fall, Spring. TCCNS Equivalent: MATH 1316

MATH 1324 - Mathematics for Business and Social Sciences

3 sem. hrs. (3:0) Students will learn how the properties and language of mathematics can be used in business and real-world problem solving and understand the techniques and applications of finance problems, basic matrix operation, basic counting principles, and probability analysis in modeling real-world scenarios. TCCNS Equivalent: MATH 1324 Counts as the mathematics component of the University Core Curriculum.

MATH 1325 - Calculus for Business & Social Sciences

3 sem. hrs. (3:0) Students will develop and combine the concepts in and relationships between Mathematics and Business from the fundamentals of calculus and optimization in all Business fields. Students are expected to learn the materials algebraically with technology. Students will combine the concepts of limits, continuation, differentiation and integration techniques to solve problems in business, economics, and social sciences. Prerequisite: MATH 1324. Fall, Spring, Summer. TCCNS Equivalent: MATH 1325 Counts as the mathematics component of the University Core Curriculum.

MATH 1332 - Contemporary Mathematics
This course serves as a terminal course and supplies a brief overview of several topics in mathematics. Topics may include introductory treatments of sets, logic, number systems, number theory, relations, functions, probability and statistics. Appropriate applications are included. This course emphasizes using critical thinking to make decisions based on information. Prerequisite: College Ready in Mathematics. Fall, Spring, Summer. TCCNS Equivalent: MATH 1332 Counts as the mathematics component of the University Core Curriculum.

MATH 1390 - Introduction to Mathematical Topics

1-3 sem. hrs. (3:0) A course to introduce students to mathematical topics in a formal setting. The course may support problem solving, or systematic investigations of topics outside the current mathematical catalog. May not be substituted for regularly scheduled offerings. Prerequisite: Permission of the Department Chair. May be repeated for credit.

MATH 1442 - Statistics for Life*

4 sem. hrs. (3:2) An introduction to statistical concepts and methods used in all disciplines to enhance decision making based on data analysis, including: basic experimental design models, measurement and data collection through sampling; display and summary of information, and assessment of relationship through descriptive techniques; probability concepts leading to estimation and hypothesis testing of means, variance and proportions, regression analysis, one-factor ANOVA and chi-square test of independence; and applications through case studies. The laboratory component of the course offers applications of the theory presented during the classroom sessions. Prerequisite: TSI College Ready in Mathematics or MATH 0300. Fall, Spring, Summer. TCCNS Equivalent: MATH 1442 Counts as the mathematics component of the University Core Curriculum.

MATH 2305 - Discrete Mathematics I

3 sem. hrs. (3:0) An introduction to topics in Discrete Mathematics with an emphasis on applications in Mathematics and Computer Science. Topics include formal logic, graphs, trees and related algorithms, and combinatorics and discrete probability. Prerequisites: MATH 1316, MATH 2312, or placement into MATH 2305. Fall, Spring, Summer. TCCNS Equivalent: MATH 2305

MATH 2312 - Precalculus

3 sem. hrs. (3:0) A more rapid treatment of the material in MATH 1314 and MATH 1316, this course is designed for students who wish a review of the above material, or
who are very well prepared. Functions, graphs, trigonometry, and analytic geometry. Prerequisite: MATH 1314 or placement into MATH 2312. Fall, Spring, Summer. TCCNS Equivalent: MATH 2312

MATH 2413 - Calculus I

4 sem. hrs. (3:2) Limits, continuity, derivatives, applications of the derivative, and an introduction to integrals. Contains a laboratory component. Prerequisite: A grade of C or better in MATH 1316 or MATH 2312, or placement into MATH 2413. Fall, Spring, Summer. TCCNS Equivalent: MATH 2413 Counts as the mathematics component of the University Core Curriculum.

MATH 2414 - Calculus II

4 sem. hrs. (3:2) Techniques of integration, applications of integrals, sequences, series, Taylor polynomials and series. Parametric equations. Contains a laboratory component. Prerequisite: A grade of C or better in MATH 2413. Fall, Spring, Summer. TCCNS Equivalent: MATH 2414

MATH 2415 - Calculus III

4 sem. hrs. (3:2) Vectors and space curves, partial derivatives, multiple integrals, special coordinate systems, line and surface integrals, Green's, Stokes', and the Divergence Theorems. Contains a laboratory component. Prerequisite: A grade of C or better in MATH 2414. Fall, Spring, Summer. TCCNS Equivalent: MATH 2415

MATH 3300 - Geospatial Mathematical Techniques

3 sem. hrs. (3:0) Characteristics of geographic/spatial information; overview of relevant sections of numbers, algebra and geometry, plane and spherical trigonometry, matrices, determinants and vectors, curves and surfaces, integral and differential calculus, partial derivatives, with an emphasis on geospatial applications. Concepts of geospatial coordinate systems and geospatial coordinate transformations; overview of spatial statistics and best-fit solutions with geospatial applications. Students may not receive credit for both MATH 3300 and GISC 3300. Prerequisite: MATH 2413 and MATH 2414

MATH 3301 - Introduction to Complex Analysis

3 sem. hrs. This course introduces functions of a complex variable and their applications. Contents include differentiation and integration; zeros, poles and residues; conformal mappings. Prerequisites: MATH 2415 or (MATH 2414 and MATH 3314). Fall of odd years.
MATH 3310 - Mathematical Analysis for Mechanical Engineering

3 sem. hrs. (3:0) Applications of fundamentals of linear algebra, vector analysis, numerical methods, computer programming and probability and statistics into mechanical engineering. May not count towards the MATH major. Students may not receive credit for both MATH 3310 and MEEN 3310. Prerequisite: MATH 3315.

MATH 3311 - Linear Algebra

3 sem. hrs. (3:0) Fundamentals of linear algebra and matrix theory. Topics include vectors, matrix operations, linear transformations, fundamental properties of vector spaces, systems of linear equations, eigenvalues and eigenvectors. Applications. Prerequisite: A grade of C or better in MATH 2413. Fall, Spring, Summer.

MATH 3312 - College Geometry

3 sem. hrs. (2:2) A careful study of the foundations of Euclidean geometry by synthetic methods with an introduction to non-Euclidean geometries. An introduction to transformational geometry. Prerequisite: MATH 2413 - Calculus I and junior standing; MATH 3311 - Linear Algebra recommended. Fall, Summer.

MATH 3313 - Foundations of Number Theory

3 sem. hrs. (3:0) This course assists a student's transition to advanced mathematics. Fundamentals of logic and proof are reviewed and applied to topics from elementary number theory. Prerequisites: MATH 2305 - Discrete Mathematics I and MATH 2414 - Calculus II.

MATH 3314 - Foundations of Real Numbers

3 sem. hrs. (3:0) This course assists a student's transition to advanced mathematics. Fundamentals of logic and proof are reviewed and applied to development of the real number line. Prerequisites: MATH 2414 and MATH 2305.

MATH 3315 - Differential Equations

3 sem. hrs. (3:0) An introduction to both theoretical and applied aspects of ordinary differential equations. Topics include: first order equations, linear second order equations, elementary numerical methods, and the Laplace transform. Prerequisites: A grade of C or better in MATH 2414. Fall, Spring and Summer.

MATH 3342 - Applied Probability and Statistics*^
A calculus based introduction to probability and statistics. Emphasis will be on development of statistical thinking and working with data. Topics include probability theory, descriptive statistics, common distributions, and statistical inference. Prerequisite: MATH 2413 - Calculus I. Fall, Spring. MATH 3342 - Applied Probability and Statistics* and MATH 3345 - Statistical Modeling and Data Analysis cannot both be counted for credit.

MATH 3345 - Statistical Modeling and Data Analysis

An introduction to probability/statistical modeling and data analysis techniques to investigate data. Topics include: exploratory data analysis, probability models and simulation, sampling distributions, statistical inference. Applications to real world problems. Students will be expected to present and justify results orally and in writing. Prerequisites: MATH 2413 Calculus I and an introductory programming course (COSC 1330 - Programming for Scientists, Engineers, and Mathematicians, COSC 1435 Introduction to Problem Solving with Computers I, or equivalent).

MATH 3385 - Linear Optimization and Decisions

This course introduces the linear programming and optimization problems arising in many applications. Contents include linear programming models with solutions, the simplex method, duality theory and its use for management decision making, dual simplex method and sensitivity analysis. Prerequisite: MATH 3311 and MATH 2413. Fall of even years.

MATH 3390 - Problem Solving in Mathematics

A problem solving course for students who want to participate in math problem solving competitions, train for the actuarial or other professional examinations, work on research aimed at conference presentations, or perform research projects at the junior level that are not at the level of directed independent study material. Prerequisites: A grade of C or better in MATH 2414 and permission of the Department Chair. May not be substituted for regularly scheduled offerings.

MATH 4185 - Senior Mathematics Seminar

This course introduces a weekly mathematics seminar. Students will generate a viable project for the capstone course. Completion of at least 75 hours towards a Mathematics major. Fall.

MATH 4285 - Mathematics Major Capstone
2 sem. hrs. Development of projects as proposed in MATH 4185, as well as mathematics communication skills. Students will present their projects, and take a national level assessment. Prerequisites: MATH 4185. Spring.

MATH 4301 - Introduction to Analysis

3 sem. hrs. (3:0) An advanced treatment of the foundations of calculus stressing rigorous proofs of theorems. Topics include: elements of propositional and predicate logic, topology of the real numbers, sequences, limits, the derivative, and the Riemann integral. Prerequisites: MATH 2415 and MATH 3314. Fall.

MATH 4306 - Modern Algebra

3 sem. hrs. (3:0) Fundamentals of set operations, maps and relations, groups, rings and field theory. Topics include permutation groups, cosets, homomorphisms and isomorphisms, direct product of groups and rings, integral domains field of quotients, fundamental properties of integers, the ring of integers modulo n, and rings of polynomials. Applications. Prerequisites: MATH 3311 and MATH 3313. Spring.

MATH 4312 - Differential Geometry

3 sem. hrs. (3:0) Differential forms on R1, R2, R3, and Rn; Integration and differentiation of differential forms; Stokes' Theorem; manifolds; Gaussian curvature and the Gauss-Bonnet Theorem. Prerequisite: MATH 2415.

MATH 4315 - Partial Differential Equations

3 sem. hrs. (3:0) An introduction to partial differential equations emphasizing the wave, diffusion and potential (Laplace) equations. A focus on understanding the physical meaning and mathematical properties of solutions of partial differential equations. Methods include fundamental solutions and transform methods for problems on the line, and separation of variables using orthogonal series for problems in regions with boundary. Additional topics include higher dimensional problems and special topics like Harmonic functions, the maximum principle, Green's functions etc. Prerequisites: MATH 3315 and MATH 2415. Offered Spring of even years.

MATH 4321 - Applied Regression Analysis

3 sem. hrs. (2:2) Introduction to the formulation of linear models and the estimation of the parameters of such models, with primary emphasis on least squares. Application of multiple regression and curve fitting and the design of experiments for fitting regression
models. Prerequisites: MATH 1342 or MATH 2342 or the equivalent, or MATH 1470. Offered on sufficient demand.

MATH 4328 - Discrete Mathematics II

3 sem. hrs. (3:0) A continued study of topics from Discrete Mathematics I with additional topics from discrete mathematics that have strong application to the field of computer science. Additional topics include: recurrence relations, formal languages, and finite-state machines. Prerequisites: MATH 2305, COSC 2437. Spring.

MATH 4342 - Introduction to Mathematical Statistics

3 sem. hrs. (3:0) A first course in mathematical statistics and is taught from a classical viewpoint. Topics include: Set theory, counting techniques, probability axioms, probability density and distribution functions, common distributions, mathematical expectations, functions of random variables, sampling distributions, estimation, hypothesis testing including the likelihood ratio test and the Neyman Pearson theory, regression and correlation. Prerequisite: MATH 2415 required, MATH 3342 or MATH 3345 recommended. Spring of odd years.

MATH 4385 - Applied Modeling

3 sem. hrs. (3:0) Capstone course for mathematics majors. The construction of mathematical models from areas such as economics, refining, biology and mariculture, etc. Where possible, local phenomena will be modeled with the assistance of outside consultants. Prerequisites: MATH 3315 and MATH 3342 or MATH 3345, and completion of at least 90 hours. Spring.

MATH 4390 - Selected Topics

3 sem. hrs. (3:0) Offered on sufficient demand. Prerequisites vary.

MATH 4690 - Contracted Experience in Mathematics

1-6 sem. hrs. Individual contract agreement involving student, faculty, and cooperating agency to gain practical experience in research or industrial setting. May only count as an Open Elective. Prerequisite: Permission of the department.

MATH 4696 - Directed Independent Study

1-6 sem. hrs. (3:0) See college description. Prerequisite: Permission of the instructor. May not be substituted for regularly scheduled offerings.
Mechanical Engineering

MEEN 3230 - Solid Mechanics Laboratory


MEEN 3310 - Engineering Analysis for Mechanical Engineering

3 sem. hrs. (3:0) Applications of fundamentals of linear algebra, vector analysis, numerical methods, computer programming, and probability and statistics for mechanical engineering. (Cross-listed with MATH 3310 - Mathematical Analysis for Mechanical Engineering) Prerequisite: MATH 3315 - Differential Equations.

MEEN 3330 - Solid Mechanics for Mechanical Engineering

3 sem. hrs. (3:0) Stress analysis of deformable bodies and mechanical elements; stress transformation; combined loading; failure modes; material failure theories; fracture and fatigue; deflections and instabilities; thick cylinders; curved beams; design of structural/mechanical members; design processes for shafts, bearings, springs, fasteners, and mechanical joints. Prerequisites: ENGR 3320 - Strength of Materials. Offered: Fall and Spring

MEEN 3335 - Introduction to Unmanned Aircraft Systems

3 sem. hrs. (3:0) Overview of unmanned aerial systems: history, platforms, operations, command and control, sensor systems, payloads, regulations, policy. Current developments in unmanned aerial systems. Prerequisite: junior-level standing in MEEN, MCET, EEEN, COSC, or GISC, or consent of instructor. Offered: Fall

MEEN 3340 - Solid Modeling and Finite Elements

3 sem. hrs. (2:3) Use of computer aided design and solid modeling tools in engineering design, and analysis, and manufacturing including: solid modeling, stress, flow, and heat transfer analysis using finite element methods. Prerequisite: MEEN 3310 - Engineering Analysis for Mechanical Engineering and ENGR 3320 - Strength of Materials. Offered: Spring
MEEN 3345 - Heat Transfer

3 sem. hrs. (3:0) Steady and unsteady conduction in one- and two-dimensions; forced convection, internal and external flows; heat exchangers; introduction to radiation; elements of thermal system design. Prerequisites: ENGR 3316 - Thermodynamics and ENGR 3315 - Fluid Mechanics. Offered: Fall and Spring.

MEEN 4325 - Energy Conversion

3 sem. hrs. (2:3) Natural resources: fuels, solar, wind, geothermal, wave, and ocean thermal; thermodynamics of power cycles and processes: Rankine, Brayton, gas turbine, IC engines, fuel cell; nuclear power; direct energy conversion: photovoltaic, thermoelectric, thermionic, magnetohydrodynamics; non-reactive processes: wind, wave/tidal, ocean thermal energy, solar thermal; concept of life cycle assessments of carbon footprint. Student teamwork of a class term paper is expected. Prerequisite: ENGR 3316 - Thermodynamics . Offered: As needed.

MEEN 4330 - Introduction to Plasma Engineering and Applications

3 sem. hrs. 2:2

Physical, electrical, chemical properties of plasmas; differences in properties of thermal and non-thermal plasmas, direct and alternating current plasma sources, inductive and capacitive coupled plasma sources, diagnostics and applications of plasmas. Prerequisites: ENGR 3322 - Materials Science , and ENGR 2460 - Circuit Analysis or PHYS 2426 - University Physics II . Offered: As needed.

MEEN 4335 - Introduction to Aircraft Aerodynamics and Performance

3 sem. hrs. 3:0 Forces on aircraft; standard atmosphere; steady-state cruise, climb, and turn performance; performance optimization; introduction to aircraft longitudinal stability. Prerequisites: ENGR 2326 ENGR 2326 - Dynamics and COSC 1330 - Programming for Scientists, Engineers, and Mathematicians. Offered Fall.

MEEN 4336 - Introduction to UAS for Agricultural Applications

3 sem. hrs. (3:0)

Provides the foundations to acquire remote sensing data using Unmanned Aircraft Systems (UAS) and to interpret, process, and apply remotely sensed data for agricultural applications. Principles of remote sensing, digital image processing, and geospatial analysis will be covered. Emphasis will be on the use of UAS remote sensing technology for various disciplines in agricultural sciences including plant breeding, plant physiology,
crop scouting, pest management and entomology. Offered Spring. Prerequisite: MEEN 3335 Introduction to Unmanned Aircraft Systems

MEEN 4345 - Sensors and Systems

3 sem. hrs. 3:0 This course covers sensors and sensing systems where sensing modalities, analysis of sensed data, data transmission and reception are discussed. Filtering and estimation in sensing systems are considered. The course covers sensors at component level to develop subsystems and more complex sensing systems that monitor physical phenomena in laboratory or marine/terrestrial environments. Other topics include multidimensional signal and image processing, object tracking, multisensory data fusion, applications in environmental monitoring, remote sensing and surveillance. Prerequisites: MATH 2414 - Calculus II, PHYS 2426 - University Physics II and ENGR 2460 - Circuit Analysis. Offered: As needed.

MEEN 4350 - Controls, Automation and Robotics

3 sem. hrs. (2:3) Automation in a manufacturing and assembly setting for ocean and marine environments, material handling systems, remote guided vehicles, automated storage and retrieval systems, computer numerical machine tools, robotics. Prerequisite: MATH 3315 - Differential Equations, ENGR 2326 - Dynamics and ENGR 2460 - Circuit Analysis.

MEEN 4351 - Dynamical Systems Analysis and Modeling

3 sem. hrs. (3:0) Modeling and analysis of systems that have a time-based response. Transient as well as steady state solutions for SDOF and MDOF systems and computational solutions including time response, Bode plots, phase plots, and other plots relevant to the system. Linear and non-linear modeling of systems will be studied. Modeling of mechanical systems (vibrations), electrical circuits, and thermal/fluid systems will be covered. Prerequisites: COSC 1330 Programming for Scientists, Engineers, and Mathematicians, ENGR 2460 Circuit Analysis, MEEN 3345 Heat Transfer. Offered Fall and Spring.

MEEN 4355 - Marine Fabrication

3 sem. hrs. (2:3) Advanced topics in manufacturing and fabrication related to ships and offshore platforms and construction. Prerequisite: ENGR 3350 - Manufacturing Processes. Offered: As needed.

MEEN 4360 - Thermal Systems Design
3 sem. hrs. (3:0) Analysis, management and cost, optimal design, and computer simulation of thermal systems and components; Applications in fluid flow and heat transfer, pumps, turbines and heat exchangers. Selected course topics are assigned as projects. Prerequisite: MEEN 3345 - Heat Transfer. Offered: As needed.

MEEN 4365 - Mechanical Systems Design

3 sem. hrs. (3:0) Analysis, management and cost, optimal design, and computer simulation of mechanical systems and components; machine elements, and stress analysis. Selected course topics are assigned as projects. Prerequisites: MEEN 3330 - Solid Mechanics for Mechanical Engineering and ENGR 3350 - Manufacturing Processes.

MEEN 4375 - Fuel Cells

3 sem. hrs. 3:0
Students will acquire an understanding of thermodynamics, transport phenomena and reaction fundamentals that are required to understand the processes and phenomena that pose limits on fuel cell performance. Prerequisites: ENGR 3316 - Thermodynamics, MEEN 3345 - Heat Transfer and CHEM 1411 - General Chemistry I* . Offered: As needed.

MEEN 4380 - Renewable Energy

3 sem. hrs. (2:2) Renewable and alternative energy sources and fuels; modern energy conversion devices, such as offshore wind farms, marine current turbines, fuel cells, photovoltaic cells, and micro-power turbines. Cost and environmental analysis of renewable sources. Installation, design characteristics, operational performance, and maintenance of motors, turbines, pumps and compressors. Introduction to global energy concerns; fossil and nuclear fuels; energy consumption analysis; energy management and conservation techniques. Prerequisite: ENGR 3316 - Thermodynamics, ENGR 2460 - Circuit Analysis and MEEN 4325 - Energy Conversion. Offered: As needed.

MEEN 4385 - Offshore Energy Management

3 sem. hrs. (3:0) Topics related to the design and energy management of ships and offshore platforms will be covered. Such topics may include oil and gas exploration, wind and marine energy systems, and environmental protection. Prerequisite: MEEN 3345 - Heat Transfer. Offered: As needed.

MEEN 4390 - Introduction to Computational Fluid Dynamics
3 sem. hrs. (2:3) Introduction to numerical, computational, modeling and simulation of thermo-fluid systems. Applications related to ships and offshore platforms and structures will be presented. Prerequisite: MEEN 3345 - Heat Transfer. Offered: As needed.

MEEN 4395 - Offshore Water Exploration and Desalination Systems

3 sem. hrs. (2:3) Advanced and future applications of sea floor mapping, under-water acoustics and GIS for fresh water exploration and mining. Renewable energy driven coastal, near-shore, and offshore desalination systems. Prerequisite: ENGR - 2316 - Thermodynamics. Offered: As needed.

MEEN 4396 - Directed Independent Study

1-3 sem. hrs. Requires a formal proposal of study to be completed in advance of registration, approval of supervising faculty and chairperson. Prerequisites: Varies. Offered: As needed.

MEEN 4420 - Engineering Lab Measurements

4 sem. hrs. (2:4) Principles of physical measurements; standards, calibration, error estimation; static and dynamic performance of measuring systems; laboratory experience, experiment planning, report writing. The purpose of this course is for students to gain proficiency in designing, assembling, and operating an experiment; and analyzing and presenting experimental results. This encompasses skills such as an understanding control and data acquisition electronics, operation and limitation of modern sensors, calibration and error analysis, assessing applicability of theory and the impact of secondary experimental variables, and writing and presenting reports and analysis. Prerequisite: ENGR 2460 - Circuit Analysis (or equivalent) and senior standing. Offered Fall and Spring.

Military Science

MSCI 1170 - Introduction to the Army

1 sem. hrs. Lab MSCI 1170/MSL 101 Focuses on introduction to the Army and critical thinking. It introduces Cadets to the Army and the Profession of Arms. Students will examine the Army Profession and what it means to be a professional in the U.S. Army. The overall focus is on developing basic knowledge and comprehension of the Army Leadership Requirements Model while gaining a complete understanding of the
Reserve Officers' Training Corps (ROTC) program, its purpose in the Army, and its advantages for the student. Cadets also learn how resiliency and fitness support their development as an Army leader. Includes a weekly lab facilitated by MS III Cadets and supervised by ROTC Cadre.

MSCI 1171 - Foundations of Agile and Adaptive Leadership

1 sem. hrs. Lab MSCI 1171/MSL 102 Introduces Cadets to the personal challenges and competencies are critical for effective leadership. Cadets learn the personal development of life skills such as critical thinking, time management, goal setting, and communication. Cadets learn the basics of the communications process and the importance for leaders to develop the essential skills to effectively communicate in the Army. Cadets will begin learning the basics of squad level tactics that will be reinforced during a weekly lab facilitated by MS III Cadets and supervised by ROTC Cadre.

MSCI 1370 - Leadership and Personal Development

3 sem. hrs. MSCI 1370/MSL 1301 introduces you to the personal challenges and competencies that are critical for effective leadership. You will learn how the personal development of life skills such as goal setting, time management, physical fitness, and stress management related to leadership, officership, and the Army profession. The focus is on developing basic knowledge and comprehension of Army leadership dimensions, attributes and core leader competencies while gaining a big picture understanding of the ROTC program, its purpose in the Army, and its advantages for the student.

MSCI 1371 - Introduction to Tactical Leadership

3 sem. hrs. MSCI 1371/MSL 1302 introduces leadership fundamentals such as setting direction, problem-solving, listening, presenting briefs, providing feedback, and using effective writing skills. You will explore dimensions of leadership attributes and core leader competencies in the context of practical, hands-on, and interactive exercises.

MSCI 2170 - Innovative Team Leadership Lab

1 sem. hrs. lab The lab component explores the practical applications of the lessons being taught in the classroom. Students will participate as a team member through a variety of group exercises and tactical scenarios. The emphasis is on exploring, and developing skills in decision-making that the student will need in their advanced classes. The lab continues to build on developing knowledge of the leadership attributes and core leader competencies through the understanding of Army rank, structure, and duties as well as
broadening knowledge of land navigation, individual, squad, and platoon tactics. Concurrent enrollment in MSCI 2370.

MSCI 2171 - Foundations of Tactical Leadership Lab

1 sem. hrs. lab The lab component explores the practical applications of the lessons being taught in the classroom. Students will participate as a team member through a variety of group exercises and tactical scenarios. The emphasis is on exploring and developing skills in decision making that the student will need in their advanced classes. The lab continues to build on developing knowledge of the leadership attributes and core leader competencies through the understanding of Army rank, structure, and duties as well as broadening knowledge of land navigation, individual, squad and platoon tactics. Concurrent enrollment in MSCI 2371.

MSCI 2270 - Leadership and Decision Making

2 sem. hrs. (2:1) MSCI 2270/MSL 201 Focuses on leadership and decision making. The outcomes are demonstrated through Critical and Creative Thinking and the ability to apply Troop Leading Procedures (TLP) Innovative Solutions to Problems. The Army Profession is also stressed through leadership forums and a leadership self-assessment. Students are then required to apply their knowledge outside the classroom in a hands-on performance-oriented environment during a weekly lab facilitated by MSL III Cadets and supervised by Cadre.

MSCI 2271 - Army Doctrine and Team Development

2 sem. hrs. (2:1) MSCI 2271/MSL 202 Focuses on Army doctrine and team development. The course begins the journey to understand and demonstrate competencies as they relate to Army doctrine. Army Values, Teamwork, and Warrior Ethos and their relationship to the Law of Land Warfare and philosophy of military service are also stressed. The ability to lead and follow is also covered through Team Building exercises at squad level. Students are then required to apply their knowledge outside the classroom in a hands-on performance-oriented environment during a weekly lab facilitated by MSL III Cadets and supervised by Cadre.

MSCI 3103 - Adaptive Team Leadership Lab

1 sem. hrs. lab The lab component explores the practical applications of the lessons being taught in the classroom. Students will learn to apply leadership strategies and styles as they plan, execute and assess individual and team exercises. The emphasis is on exploring, evaluating, and developing skills in decision-making, and persuading and
motivating team members in the contemporary operating environment (COE). The lab continues to build on developing knowledge of the leadership attributes and core leader competencies though the understanding of Army rank, structure, and duties as well as broadening knowledge of land navigation, individual, and squad tactics. Concurrent enrollment in MSCI 3303.

MSCI 3104 - Applied Team Leadership Lab

1 sem. hrs. lab The lab component explores the practical applications of the lessons being taught in the classroom. Students will learn to apply leadership strategies and styles as they plan, execute and assess individual and team exercises. The emphasis is on exploring, evaluating, and developing skills in decision-making, and persuading and motivating team members in the contemporary operating environment (COE). The lab continues to build on developing knowledge of the leadership attributes and core leader competencies through the understanding of Army rank, structure, and duties as well as broadening knowledge of land navigation, individual, and squad tactics. Concurrent enrollment in MSCI 3304.

MSCI 3301 - American Military History

3 sem. hrs. A comprehensive, but brief account of the U.S. Army from past to present. Integrates the basic knowledge of American military history into the future officer's education. This is an Army standardized, mandatory course that is a part of pre-commissioning training for contracted U.S. Army ROTC cadets. Employs American military history as a tool for studying military professionalism and applying critical-thinking skills and decision-making skills to military problems. Analyzes the definition of Military History, the theory and practice of war, and the American Military System as an intellectual framework for applying critical-thinking skills and problem-solving skill to the study of historical, military problems. Pre-Req: MSCI 1170, MSCI 1171, MSCI 2270, and MSCI 2271 or Department approval.

MSCI 3403 - Training Management and the Warfighting Functions

4 sem. hrs. (4:1) MSCI 3304/MSL 301 Focuses on training management and the warfighting functions. It is an academically challenging course where you will study, practice and apply the fundamental of Training Management and how the Army operates through the Warfighting functions. At the conclusion of this course, the Cadet will be capable of planning, preparing, and executing training for a squad, conducting small unit tactics. Includes a lab per week using peer facilitation overseen by MSL IVs, supervised by ROTC Cadre.
MSCI 3404 - Applied Leadership in Small Unit Operations

4 sem. hrs. (3:1) MSCI 3404/MSL 302 Focuses on applied leadership in small unit operations. It is an academically challenging course where the cadet will study, practice, and apply the fundamentals of direct-level leadership and small unit tactics at the platoon level. At the conclusion of this course, the Cadet will be capable of planning, coordinating, navigating, motivating, and leading a platoon in the execution of a mission. Includes a lab per week using peer facilitation overseen by MSL IVs, supervised by ROTC cadre. Successful completion of this course will help prepare for the Cadet Summer Training Advance Camp to be attended in the summer at Fort Knox, KY.

MSCI 3499 - Leadership Development Assessment Course (LDAC)

4 sem. hrs. Four weeks of instruction and practical application in field training, demonstration of leadership capabilities, and leadership opportunities of problem analysis, decision making, and troop-leading. CR/NC only. Prerequisite: MSCI 3303, 3304 and a ROTC contracted Cadet and approval of the Professor of Military Science.

MSCI 4103 - Adaptive Leadership Lab

1 sem. hrs. lab The lab component explores the practical applications of the lessons being taught in the classroom. Students will learn to apply leadership strategies and styles as they plan, execute and assess individual and team exercises. The emphasis is on coaching, mentoring, evaluating, and developing skills of younger cadets in their decision making, and ability to persuade and motivate team members in the contemporary operating environment (COE). The lab continues to build on developing knowledge of the leadership attributes and core leader competencies through the understanding of Army rank, structure, and duties as well as broadening knowledge of land navigation, individual, and squad tactics. Concurrent enrollment in MSCI 4303.

MSCI 4104 - Leadership in a Complex World Lab

1 sem. hrs. lab The lab component explores the practical applications of the lessons being taught in the classroom. Students will learn to apply leadership strategies and styles as they plan, execute and assess individual and team exercises. The emphasis is on coaching, mentoring, evaluating, and developing skills of younger cadets in their decision making, and ability to persuade and motivate team members in the contemporary operating environment (COE). The lab continues to build on developing knowledge of the leadership attributes and core leader competencies through the understanding of
Army rank, structure, and duties as well as broadening knowledge of land navigation, individual, and squad tactics. Concurrent enrollment in MSCI 4304.

MSCI 4305 - Advanced Problem Solving

3 sem. hrs. Military Science special problems course designed for individual study in modern day military structure and policies. Prerequisite: Approval of Professor of Military Science.

MSCI 4403 - Adaptive Leadership

4 sem. hrs. (3:1) MSCI 4403/MSL 401 Focuses on development of the Army Officer. It is an academically challenging course where the Cadet will develop knowledge, skills, and abilities to plan, resource, and assess training at the small unit level. The Cadet will also learn about Army programs that support counseling subordinates and evaluating performance, values and ethics, career planning, and legal responsibilities. At the conclusion of this course, the Cadet will be familiar with how to plan, prepare, execute, and continuously assess the conduct of training at the company or field grade officer level. Includes a lab per week overseeing MSL III lesson facilitation and supervised by ROTC Cadre.

MSCI 4404 - Company Grade Leadership

4 sem. hrs. (3:1) MSCI 4404/MSL 402 An academically challenging course where the Cadet will develop knowledge, skills, and abilities required of junior officers pertaining to the Army in Unified Land Operations and Company Grade Officer roles and responsibilities. This course includes reading assignments, homework assignments, small group assignments, briefings, case studies, practical exercises, a mid-term exam, and an Oral Practicum as the final exam. The Oral Practicum explores the knowledge of how well the Cadet will be prepared for the 20 Army Warfighting Challenges (AWFC) covered throughout the ROTC Advanced Course. Successful completion of this course will assist in preparing for the BOLC B course and is a mandatory requirement for commissioning. Includes a lab per week overseeing MSL III lesson facilitation and supervised by ROTC Cadre.

MSCI 4696 - Military Science Directed Individual Study

1-6 sem. hrs. Programs will be designed for individual cases through special permission of the Department Chair and Dean. May be repeated for credit when the topic varies. Prerequisite: Approval of Professor of Military Science.
Music

MIND 3311 - Applications of Music Technology

3 sem. hrs. Designed for both music majors and non-majors, this course will focus on hands-on learning in a workshop environment. Students will gain perspective on the people, procedures, data, software and hardware associated with the creation of music. Topics discussed include: computer proficiency, MIDI, computer based music notation, sequencing music evaluation, music and the Internet, and current trends in music technology.

MIND 3312 - Recording Techniques I

3 sem. hrs. Designed for both music majors and non-majors, this course is an examination of the art of audio recording. The curriculum will cover signal flow of the mixing console as it applies to both recording and sound reinforcement; microphones and techniques of application; use of sonic effects; recording devices (Digital, and Hard Disk); synchronization formats; etc.

MIND 3313 - Recording Techniques II

3 sem. hrs. A continuation of MIND 3312 Recording Techniques. The curriculum will cover advanced topics regarding digital console technology, power and ground related issues, studio acoustics and design, digital audio technology, multimedia and web applications, amplifiers, noise reduction, monitoring, surround sound, and mastering procedures.

MIND 3314 - Live Sound Engineering

3 sem. hrs. Designed for both music majors and non-majors, an overview of the basic principles of sound and reinforcement and how audio can be manipulated utilizing current live sound technology. Topics will include signal flow, microphone selection and placement, signal processing, and mixing.

MIND 3315 - Musical Acoustics

3 sem. hrs. Designed for both music majors and non-majors, an overview of acoustics with emphasis in the areas of scientific knowledge that are relevant to music: the physiological properties of sounds; the effect of acoustical environment; the acoustical
behavior of musical instruments; and the various applications of electronics and computers to the production, reproduction, and composition of music.

MIND 3316 - Introduction to MIDI Sound Synthesis and Control

3 sem. hrs. Designed for both music majors and non-majors, this course introduces students to the Musical Instrument Digital Interface (MIDI) sequencing using computer software and keyboard synthesizers. Students learn concepts, basic theory and techniques, and the application of MIDI techniques to the production of music. Hands-on projects are completed using MIDI keyboard synthesizers and sequencer software.

MIND 3320 - Music Business Survey

3 sem. hrs. Designed for both music majors and non-majors, this course is an overview of the practices and procedures of the music industry, including such topics as career possibilities, publishing, labels, marketing, and copyrights. It also includes an overview of career options will include performer, composer, record producer and engineer, artist manager, booking agent, concert promoter, sales, marketing, and entertainment attorney.

MIND 3321 - Music Business II

3 sem. hrs. Designed for both music majors and non-majors, this course is an in depth examination of the practices and procedures of the music industry that pertain to accounting, taxes, copyright, licensing, marketing and contracts. The primary objective of this course is to develop a working knowledge of the music industry and to remain in compliance with the U.S. legal system.

MIND 3322 - Entertainment Law and the Music Industry

3 sem. hrs. Designed for both music majors and non-majors, an overview of the legal practices and ramifications of United States law and its influence on the music industry. Topics will include intellectual property, business structures, contracts, distribution regulations, and copyrights. Legal practices for entertainment mediums will include television, film, live stage performances, recording, and publishing.

MIND 4396 - Directed Individual Study

1-3 sem. hrs. See College description. Offered on application.

MIND 4398 - Applied Experience

3 sem. hrs. See College description. Offered on application.
MUSI 1116 - Aural Training I

1 sem. hrs. A companion course to MUSI 1311, designed to strengthen the understanding of theoretical principles through the development of aural perception and skills; exercises in melodic, harmonic, and rhythmic dictation; and drill in sight singing. TCCNS Equivalent: MUSI 1116

MUSI 1117 - Aural Training II

1 sem. hrs. Continuation of MUSI 1116; a companion course to MUSI 1312. Prerequisite: Passing score on the Music Department Theory Fundamentals Placement Exam OR prior completion of MUSI 1116 and MUSI 1311 with grades of "C" or better. TCCNS Equivalent: MUSI 1117

MUSI 1181 - Class Piano I

1 sem. hrs. Group instruction in piano for music majors, covering piano technique and literature, major and minor scales, transposition, sight reading, and simple harmonization of melodies. In extraordinary circumstances, students may substitute one semester of secondary applied piano for this course. Keyboard majors accepted for degree-level study should substitute four semesters of Secondary Applied Studio. TCCNS Equivalent: MUSI 1181

MUSI 1182 - Class Piano II

1 sem. hrs. Group instruction in piano for music majors, covering piano technique and literature, major and minor scales, transposition, sight reading, and simple harmonization of melodies. In extraordinary circumstances, students may substitute one semester of secondary applied piano for this course. Keyboard majors accepted for degree-level study should substitute four semesters of Secondary Applied Studio. TCCNS Equivalent: MUSI 1182

MUSI 1301 - Fundamentals of Music*

3 sem. hrs. Designed to teach beginning music students the basic tenet of music theory: note reading, rhythm, scales, key signatures, basic intervals and triads, and solfeggio. There are no prerequisites, and this course is open to music majors and non-music majors.

MUSI 1302 - Non-major Class Piano I
3 sem. hrs. Group instruction in the elements of piano playing, designed for the non-major. No previous experience necessary.

MUSI 1303 - Basic Guitar I

3 sem. hrs. Group instruction in the fundamentals of guitar playing, designed for the non-major. The student must furnish an acceptable instrument. No previous experience necessary. TCCNS Equivalent: MUSI 1303

MUSI 1306 - Understanding and Enjoying Music*

3 sem. hrs. A course for the non-music major. Study of selected music literature of contrasting styles and forms with emphasis on listening to music with understanding. TCCNS Equivalent: MUSI 1306 Satisfies the university core curriculum requirement in fine arts.

MUSI 1307 - Elements of Musical Style

3 sem. hrs. A survey of selected western and non-western musical styles, based upon the analysis of the characteristic use of the elements of music. Required for music majors and recommended for non-majors with a significant high school music background. TCCNS Equivalent: MUSI 1307 Satisfies the university core curriculum requirement in fine arts.

MUSI 1310 - History of Rock and Roll*

3 sem. hrs. A general survey of composers, performers, and styles of rock and roll. Emphasis on understanding stylistic elements of music, including rhythm, texture, form, and harmony.

MUSI 1311 - Musicianship I

3 sem. hrs. First principles of chord progression and phrase harmonization. Theory assessment required prior to enrollment. TCCNS Equivalent: MUSI 1311

MUSI 1312 - Musicianship II

3 sem. hrs. Continuation of MUSI 1311, with a study of more advanced chord structures and their placement within the phrase through written exercises, analysis, and correlated keyboard projects. Prerequisite: Passing score on the Music Department Theory Fundamentals Placement Exam OR prior completion of MUSI 1311 and MUSI 1116 with grades of "C" or better. TCCNS Equivalent: MUSI 1312
MUSI 2116 - Aural Training III

1 sem. hrs. Continuation of MUSI 1117; a companion course to MUSI 2311. Designed to further the understanding of advanced theoretical principles and techniques through related aural exercises, dictation, and sight singing. Prerequisite: Prior completion of MUSI 1117 and MUSI 1312 with grades of "C" or better. TCCNS Equivalent: MUSI 2116

MUSI 2117 - Aural Training IV

1 sem. hrs. Continuation of MUSI 2116; a companion course to MUSI 2311. Prerequisite: Prior completion of MUSI 2116 and MUSI 2311 with grades of "C" or better. TCCNS Equivalent: MUSI 2117

MUSI 2181 - Class Piano III

1 sem. hrs. Group instruction in piano for music majors, covering piano technique and literature, major and minor scales, transposition, sight reading, and simple harmonization of melodies. In extraordinary circumstances, students may substitute one semester of secondary applied piano for this course. Keyboard majors accepted for degree-level study should substitute four semesters of Secondary Applied Studio. TCCNS Equivalent: MUSI 2181

MUSI 2182 - Class Piano IV

1 sem. hrs. Group instruction in piano for music majors, covering piano technique and literature, major and minor scales, transposition, sight reading, and simple harmonization of melodies. In extraordinary circumstances, students may substitute one semester of secondary applied piano for this course. Keyboard majors accepted for degree-level study should substitute four semesters of Secondary Applied Studio. TCCNS Equivalent: MUSI 2182

MUSI 2302 - Non-major Class Piano II

3 sem. hrs. Extension of skill development begun in MUSI 1302 Non-Major Class Piano I. Prerequisite: successful completion of MUSI 1302 or permission of instructor.

MUSI 2303 - Basic Guitar II

3 sem. hrs. Extension of skill development begun in MUSI 1303 - BASIC GUITAR I. The student must furnish an acceptable instrument. Prerequisite: successful completion of MUSI 1303 or prior permission of instructor.
MUSI 2311 - Musicianship III

3 sem. hrs. Continuation of MUSI 1312. A broad summary of classical and chromatic harmony, explored through written exercises, analysis, and correlated keyboard drill. Prerequisite: Prior completion of MUSI 1312 and MUSI 1117 with grades of "C" or better. TCCNS Equivalent: MUSI 2311

MUSI 2312 - Musicianship IV

3 sem. hrs. Continuation of MUSI 2311. An exploration of 20th-century techniques through written exercises, analysis, and correlated keyboard drill. Prerequisite: Prior completion of MUSI 2311 and MUSI 2116 with grades of "C" or better. TCCNS Equivalent: MUSI 2312

MUSI 3085 - Junior Recital

0 sem. hrs. Required for all students presenting a Junior Recital in partial fulfillment of the requirements for the Bachelor of Music in Performance Degree. Specific policies governing the presentation and evaluation of such recitals are given in the document, Preparing and Presenting Degree Recitals, available from the Music Department Chair. Requires concurrent enrollment in an appropriate Principal Studio course. Graded CR/NC.

MUSI 3162 - Diction for Singers I

1 sem. hrs. Learning to use the International Phonetic Alphabet (IPA) with sufficient fluency to effectively teach and learn proper pronunciation of song texts in English and French.

MUSI 3165 - Diction for Singers II

1 sem. hrs. Learning to use the International Phonetic Alphabet (IPA) with sufficient fluency to effectively teach and learn proper pronunciation of song texts in Italian and German.

MUSI 3166 - Woodwind Techniques I

1 sem. hrs. Basic techniques of playing and teaching the oboe, bassoon, and saxophone. Includes a survey of pedagogical materials and basic performance literature. For music majors only.

MUSI 3167 - Woodwind Techniques II
1 sem. hrs. Basic techniques of playing and teaching the flute and clarinet. Includes a survey of pedagogical materials and basic performance literature. For music majors only.

MUSI 3168 - Brass Techniques I

1 sem. hrs. Basic techniques of playing and teaching the trumpet and French horn. Includes a survey of pedagogical materials and basic performance literature. For music majors only.

MUSI 3169 - Brass Techniques II

1 sem. hrs. Basic techniques of playing and teaching the trombone, euphonium, and tuba. Includes a survey of pedagogical materials and basic performance literature. For music majors only.

MUSI 3170 - Voice Techniques for Instrumentalists

1 sem. hrs. Group instruction and practical experience in the fundamentals of voice production and song interpretation for the instrumental music educator. Includes a survey of pedagogical materials and basic performance literature. For music majors only.

MUSI 3188 - Percussion Techniques

1 sem. hrs. Basic techniques of playing and teaching the instruments of the percussion family. Includes a survey of pedagogical materials and basic performance literature. For music majors only.

MUSI 3189 - String Techniques

1 sem. hrs. Basic techniques of playing and teaching the violin, viola, 'cello, and string bass. Includes a survey of pedagogical materials and basic performance literature. For music majors only.

MUSI 3252 - Foundations of Music Programs

2 sem. hrs. A survey of the historical, social, and philosophical bases of music education in the United States, psychological theories of learning and musical responsiveness, and studies of how these foundations have been applied in various types of music curricula. Prerequisite: Prior completion of MUSI 2311 and MUSI 2116 with grades of "C" or better.

MUSI 3253 - Basic Conducting
2 sem. hrs. A skills acquisition course designed to give students competence in basic baton techniques and musical control of an ensemble. Includes score study and musical terminology. Prerequisite: Prior completion of MUSI 2311 and MUSI 2116 with grades of "C" or better.

MUSI 3310 - History of Jazz

3 sem. hrs. A study of jazz styles, influences, trends, innovators, and literature. Readings include interviews and articles that discuss origins of jazz, definitions of jazz, and race politics of jazz. No previous experience is necessary.

MUSI 3311 - Popular and Jazz Harmony I

3 sem. hrs. Popular and Jazz Harmony is a class designed to develop comprehensive skills in harmony, rhythm, and melody as applied to popular music and jazz idioms. Course work is designed to develop practical knowledge in music grammar, vocabulary and structure currently utilized in a variety of professional settings as well as improve aural skills. Curriculum is organized to assist professional musicians as well as music industry professionals.

MUSI 3334 - Music Cultures of the World

3 sem. hrs. The course introduces the student to ethnomusicology and the cross-cultural study of music and society. It emphasizes the role of music in human life, and explores music and performance from around the world. The student will learn about classical, folk and popular styles found on all seven continents. This course is appropriate for any student of any musical background.

MUSI 3345 - Composition

1-3 sem. hrs. Creative writing with a view toward developing an individual style of musical composition. Variable credit, 1, 2, or 3 hrs. One private lesson per week. Prior permission of the instructor is required. Prerequisite: Prior completion of MUSI 2312 and MUSI 2117 with grades of "C" or better. May be repeated for credit. Music Studio course fee schedule is applicable to this course.

MUSI 3346 - Form and Analysis of Tonal Music

3 sem. hrs. Analysis of the melodic and harmonic design of tonal music, including the aural and visual analysis of scores for piano, voice, chamber ensembles, and orchestra. Prerequisite: Prior completion of MUSI 2312 and MUSI 2117 with grades of "C" or better.
MUSI 3354 - Advanced Conducting

3 sem. hrs. A continuation of MUSI 3252. Advanced experiences with score preparation and effective ensemble rehearsal and management techniques. Prerequisite: Prior completion of MUSI 3252 with a grade of "C" or better.

MUSI 3370 - Class Voice

3 sem. hrs. Group instruction and practical experience in the fundamentals of voice production, music reading, and song interpretation. Dramatic stage movement and singing will be explored using Classical and Broadway song literature. This course is designed for the non-major. No previous experience is necessary.

MUSI 4085 - Senior Recital

0 sem. hrs. Required for all students presenting a Senior Recital in partial fulfillment of the requirements for any music degree. Specific policies governing the presentation and evaluation of such recitals are given in the document, Preparing and Presenting Degree Recitals, available from the Music Program Coordinator. Requires concurrent enrollment in an appropriate Principal Studio course. Graded CR/NC.

MUSI 4334 - History of Western Music I

3 sem. hrs. An in-depth study of the evolution of Western musical style from antiquity through the 18th-century. Prerequisite: Prior completion of MUSI 1307, MUSI 2312, and MUSI 2117 with grades of "C" or better.

MUSI 4335 - History of Western Music II

3 sem. hrs. Continuation of MUSI 4334, an in-depth study of the evolution of Western musical style from the age of Beethoven to the present. Prerequisite: Prior completion of MUSI 4334 with a grade of "C" or better.

MUSI 4340 - Studies in Repertoire

3 sem. hrs. Systematic examination of the history and literature of a specific performance medium.

MUSI 4346 - Orchestration and Arranging

3 sem. hrs. The compass, timbre, and techniques of arranging and/or orchestration for instruments and/or voices. Practical experience in arranging for orchestra, band, and other
instrumental and vocal combinations. Prerequisite: Prior completion of MUSI 2312 and MUSI 2117 with grades of "C" or better.

MUSI 4355 - Music for Young Children

3 sem. hrs. Study of musical development in children in grades K-6. Study of and practical experience with pedagogical approaches and materials appropriate for that age group. Prerequisite: Prior completion of MUSI 3252 with a grade of "C" or better.

MUSI 4357 - Choral Literature and Techniques

3 sem. hrs. Advanced study of the literature, pedagogy, and management techniques required for successful vocal ensembles in secondary schools. Prerequisite: Prior completion of MUSI 3253 with a grade of "C" or better.

MUSI 4358 - Instrumental Literature and Techniques

3 sem. hrs. Advanced study of the literature, pedagogy, and management techniques required for successful instrumental ensembles in secondary schools. Includes a segment pertaining to the development of marching band shows. Prerequisite: Prior completion of MUSI 3253 with a grade of "C" or better.

MUSI 4360 - Studies in Pedagogy

3 sem. hrs. Methods, materials and psychology of presenting musical materials to students at various ages. Evaluation of teaching materials and techniques. Classes are organized by specific performance areas.

MUSI 4385 - Senior Capstone

3 sem. hrs. The Senior Capstone is intended to provide students seeking the Bachelor of Arts in Music with an opportunity to demonstrate their musical scholarship through scholarly analysis and writing within a field of music of their choosing. May include a performance component, as in a lecture recital, but musical performance may comprise no more than 40% of the capstone project.

MUSI 4390 - Topics in Music

1-3 sem. hrs. May be repeated for credit when topics vary.

MUSI 4396 - Directed Individual Study
1-3 sem. hrs. See College description. Offered on application.

MUSI 4398 - Applied Experience
3 sem. hrs. See College description. Offered on application.

Music (Applied)

MUAP 11xx - Principal Studio
1 sem. hrs. The first two semesters of private studio for all students pursuing any of the three music degrees. Normally unavailable to students not majoring in music. One hour of private instruction and a one-hour studio/recital class each week.

MUAP 11xx - Secondary Studio
1 sem. hrs. This level of study is designed for music majors seeking instruction in performance areas secondary to their major applied field. Study at this level is open to students whose majors are outside the field of music only under very limited circumstances, and with the prior permission of the Music Department Chair. One half-hour lesson each week. Requires permission of the department chair.

MUAP 21xx - Principal Studio
1 sem. hrs. The appropriate studio level for sophomore students enrolled in the Bachelor of Arts or Bachelor of Music with Teacher Certification degree programs. Normally unavailable to students not majoring in music. One hour of private instruction and a one-hour studio/recital class each week.

MUAP 21xx - Secondary Studio
1 sem. hrs. This level of study is designed for music majors seeking instruction in performance areas secondary to their major applied field. Study at this level is open to students whose majors are outside the field of music only under very limited circumstances, and with the prior permission of the Music Department Chair. One half-hour lesson each week. Requires permission of the department chair.
MUAP 23xx - Principal Studio

3 sem. hrs. Sequence of studio courses limited to sophomore students enrolled in the Bachelor of Music in Performance degree program. One hour of private instruction and a one-hour studio/recital class each week.

MUAP 31xx - Secondary Studio

1 sem. hrs. This level of study is designed for music majors seeking instruction in performance areas secondary to their major applied field. Study at this level is open to students whose majors are outside the field of music only under very limited circumstances, and with the prior permission of the Music Department Chair. One half-hour lesson each week. Requires permission of the department chair.

MUAP 32xx - Principal Studio

2 sem. hrs. The appropriate studio level for junior students enrolled in the Bachelor of Arts or Bachelor of Music with Teacher Certification degree programs. Normally unavailable to students not majoring in music. One hour of private instruction and a one-hour studio/recital class each week.

MUAP 33xx - Principal Studio

3 sem. hrs. Sequence of studio courses limited to junior students enrolled in the Bachelor of Music in Performance degree program. One hour of private instruction and a one-hour studio/recital class each week.

MUAP 41xx - Secondary Studio

1 sem. hrs. This level of study is designed for music majors seeking instruction in performance areas secondary to their major applied field. Study at this level is open to students whose majors are outside the field of music only under very limited circumstances, and with the prior permission of the Music Department Chair. One half-hour lesson each week. Requires permission of the department chair.

MUAP 42xx - Principal Studio

2 sem. hrs. The appropriate studio level for senior students enrolled in the Bachelor of Arts or Bachelor of Music with Teacher Certification degree programs. Normally unavailable to students not majoring in music. One hour of private instruction and a one-hour studio/recital class each week.
MUAP 43xx - Principal Studio

3 sem. hrs. Sequence of studio courses limited to senior students enrolled in the Bachelor of Music in Performance degree program. One hour of private instruction and a one-hour studio/recital class each week.

Music (Ensemble)

MUEN 1122 - Concert Band

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester. For rotation of music courses see departmental office.

MUEN 1123 - Symphonic Winds

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester.

MUEN 1124 - Concert Orchestra

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester.
MUEN 1127 - Pep Band

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester.

MUEN 1128 - Stage Band

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester.

MUEN 1131 - Piano Accompanying

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester.

MUEN 1132 - Classical Guitar Ensemble

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester.

MUEN 1133 - Percussion Ensemble
Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester.

MUEN 1135 - Brass Ensemble

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester.

MUEN 1136 - Woodwind Choir

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester.

MUEN 1137 - Clarinet/Sax Ensemble

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester.

MUEN 1138 - Jazz Guitar Ensemble
Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester.

MUEN 1139 - Flute Ensemble

MUEN 1140 - String Ensemble

MUEN 1143 - Chorale

MUEN 1151 - University Singers
Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester.

MUEN 1153 - Chamber Choir

MUEN 1157 - Opera Workshop

MUEN 1158 - Opera Main Stage Productions

MUEN 1159 - Mariachi Ensemble
This course is designed to assist the student in developing an increased proficiency in the art of Mariachi Performance. In accomplishing this goal, this course will allow each student to develop: 1.) performance skills on the instruments of the mariachi (including violin, trumpet, guitar, guitarron, vihuela, and harp), and 2.) knowledge of the repertoire and history of mariachi literature. Performance of an instrument in the mariachi also requires singing when the repertoire calls for it. The objective is to study the literature of Mexican Folk music; to engage in the technical study of mastering performance on the instruments of the mariachi; to represent TAMUCC in the immediate and global community through musical excellence.

MUEN 3122 - Concert Band

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester. This is a stack course with MUEN 1122

MUEN 3123 - Symphonic Winds

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester. The is a stacked course with MUEN 1123

MUEN 3124 - Orchestra

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing
grade in a major ensemble every semester except the student teaching semester. This is a stacked course with 1124

MUEN 3127 - Pep Band

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester. This is a stacked course with MUEN 1127.

MUEN 3128 - Stage Band

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester. This is a stacked course with MUEN 1128

MUEN 3132 - Classical Guitar Ensemble

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester. This is a stacked course with MUEN 1132

MUEN 3133 - Percussion Ensemble

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some
degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester. This is a stacked course with MUEN 1133

MUEN 3135 - Brass Ensemble

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester. This is a stacked course with MUEN 1135

MUEN 3139 - Flute Ensemble

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester. This is a stacked course with MUEN 1139

MUEN 3140 - String Ensemble

1 sem. hrs. Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester. This is a stacked course with MUEN 1140

MUEN 3143 - Chorale
Membership in music ensembles is open to all University students. Ensembles meet for periods of rehearsal ranging from two to five hours each week. All ensemble courses carry one semester hour of credit, and all may be repeated for credit. Some degree programs limit the amount of such credit that may be applied to the degree. In some instances, an audition with the ensemble director may be required for admission to the course. Every full-time music major must enroll, participate, and receive a passing grade in a major ensemble every semester except the student teaching semester. This is a stacked course with MUEN 1143

MUEN 3151 - University Singers

MUEN 3153 - Chamber Choir

MUEN 3157 - Opera Workshop
Mexican American Studies

MXAS 3301 - Introduction to Mexican American Studies

3 sem. hrs. An introduction to the area of Chicano Studies including the cultural, historical, and linguistic approaches. This basic course includes the study of major authors, significant historical events, and important linguistic considerations.

MXAS 3307 - Mexican American Folklore

3 sem. hrs. Studies folklore through selected examples of traditional Mexican and Mexican American culture. Possible topics include: folk songs, folk healing, folk art, foods, testimonials, tales, proverbs, riddles, or other cultural element characteristics of the Mexican American experience.

MXAS 3311 - Mexican American Literature

3 sem. hrs. An analysis of Chicano literature. Special emphasis will be given to the new consciousness of the Chicano in the most current literature of the various genres.

MXAS 4390 - Topics in Mexican American Studies

3 sem. hrs. May be repeated when topics vary.

Nursing

NURS 3150 - Professional Nursing Issues I*

(1:0) Concentrates on legal and ethical issues affecting the nurse as an individual and a professional, and health care delivery to clients, groups and aggregates. Consideration is given to self-discovery, personal assertiveness, role conflict, negotiation and collective bargaining. Students are encouraged to apply critical thinking strategies during classroom discussions and presentations. Prerequisites: NURS 3318, 3342, 3435, 3614

NURS 3318 - Nurse as therapeutic Communicator*

3 sem. hrs. (3:0) Emphasis is on caring communication as an essential dimension of professional nursing. Theories are presented to explain the dynamic relationship between
human behavior, health, and illness, and the impact of interpersonal relationship skills to effect positive changes in individuals and their families. Nurse communication in the role of educator will be introduced as part of the teaching/learning course content.

NURS 3342 - Use of Pharmacology Principles*

3 sem. hrs. (3:0) Focuses on the basic drug classifications, concepts and principles of pharmacology, with special consideration for the nursing role in developing a comprehensive approach to the clinical application of drug therapy through the use of the nursing process. Nursing implications relative to the utilization of drug therapy are examined. Dosage calculations are evaluated for competency. (Is a pre-requisite for admission into the nursing program.) Prerequisites: BIOL 2401 and BIOL 2402. Corequisite: NURS 4322.

NURS 3435 - Health Assessment - RN/BSN*

4 sem. hrs. (3:3) Focuses on health assessment skills and application of the nursing process in selected pathophysiological disorders through analysis and synthesis of information obtained from subjective and objective data collection methodologies. Specified frameworks are utilized for data categorization and processing. The data are used to make judgments about health status or determine care needs for a given individual. Students are assigned to a weekly two-hour lab to practice under supervision and demonstrate health assessment skills.

NURS 3548 - Nursing Care of Children and their Families*

5 sem. hrs. (3:6) Applying a family-centered approach, this course focuses on health promotion, acute and chronic health conditions, and rehabilitative needs of children. Emphasis is placed on developmental, physiological, psycho-social, cultural, and spiritual care of the child within the family unit. Using the nursing process, strategies are formulated for promoting and maintaining optimal functioning of the child-family unit and for enhancing the strengths of the family unit. Clinical activities emphasize the
application of theory to practice in a variety of acute care settings. Prerequisites: NURS 3318, 3342, 3435, and 3614.

NURS 3550 - Nursing Care of Parents/newborns*

5 sem. hrs. (3:6) A study of the theoretical and empirical basis for nursing care of childbearing families using both nursing and developmental theories. Biopsychosocial factors such as legal/ethical and cultural considerations related to pregnancy, birth and newborn periods are included. A historical overview of obstetrical advances and parent-child nursing will be presented. Practice in providing nursing care to families during each phase of the childbearing cycle will occur in selected local hospitals and clinics. The nursing process is used with emphasis on the theoretical and empirical basis of practice. Prerequisites: NURS 3318, 3614, 3342, 3435

NURS 3614 - Fundamentals of Nursing Care*

6 sem. hrs. (3:9) Fundamentals of Nursing Care is developed for the incoming nursing student and introduces them to nursing practice and philosophies that underpin clinical practice. Fundamental nursing skills are an integral part of the nursing experience and include, but are not limited to, patient safety, with a focus on techniques related to environmental concerns, positioning and transporting, asepsis and sterile technique, medication administration, and selected intrusive therapies. The critical thinking process, art of caring, and nursing theories upon which clinical practice is based will be integrated throughout the course to provide and manage safe, holistic care practices. The campus laboratory and clinical settings will afford practical experiences that include simulation and direct patient care interventions. These experiences facilitate learner application and integration of the principles and skills taught in the theory portion of this class. Students are expected to demonstrate beginning competency in application of the nursing process. Prerequisite NURS 4322; Co-requisite: 3435, 3318.

NURS 3628 - Nursing Care of Adults I*

6 sem. hrs. (3:9) Introduces the student to the use of the nursing process in the care of adults with chronic or non-complex illness. Uses a systems approach to discuss the effects of illness on individual and family, and to examine the disruption of growth and development patterns across the lifespan from young adult to senior years. The course includes clinical laboratory to allow the student the opportunity to apply theoretical concepts to clinical practice in diverse adult populations. Prerequisites: NURS 3318, 3435, 3614, 3342

NURS 4150 - Professional Nursing Issues II*
Concentrates on economic and political issues affecting the nurse as an individual and a professional, and health care delivery to clients, groups and aggregates. Consideration is given to self-discovery, personal assertiveness, role conflict, negotiation and collective bargaining. Students are encouraged to apply critical thinking strategies during classroom discussions and presentations. Prerequisites/Corequisites NURS 3628, 4564, 3548, 3550

NURS 4155 - Professional Nursing Planning and Licensure Preparation

1 sem. hrs. The course emphasizes reflection, integration, and synthesis of curricular concepts. Students engage in comprehensive review of major nursing content for licensure, preparation for entry into practice, and plans for life-long learning.

NURS 4172 - Biobehavioral Nursing Interventions II: Population Health and Chronic Health Issues Across the Lifespan

1 sem. hrs. Through psychomotor skill development and simulation this course advances health assessment, psychosocial, psychomotor, critical thinking, and therapeutic communication skills essential to promote, protect, maintain and restore the health of populations and provide holistic, evidence-based nursing care to individuals with chronic conditions across the lifespan and across health care settings with an emphasis on primary care.

NURS 4173 - Biobehavioral Nursing Interventions III: Family and Child Health and Complex Health Issues Across the Lifespan

1 sem. hrs. Through psychomotor skill development and simulation this course advances health assessment, psychosocial, psychomotor, critical thinking, and therapeutic communication skills essential to caring for the childbearing family as well as infants, children, and adolescents with chronic/unique conditions across health care settings with an emphasis on primary care.

NURS 4231 - Pathophysiology/Pharmacology I

2 sem. hrs. The course integrates anatomy, chemistry, microbiology, genetics/genomics, and psychoneuroimmunoendocrinology to explore physiologic and neurobehavioral alterations that occur in response to internal and external changes across the lifespan. Pharmacological concepts and interventions are explored as one strategy to promote health. Course content aligns with Biobehavioral Nursing Concepts II & III.

NURS 4232 - Pathophysiology/Pharmacology II
2 sem. hrs. The course integrates anatomy, chemistry, microbiology, genetics/genomics, and psychoneuroimmunoendocrinology to explore physiologic and neurobehavioral alterations that occur in response to internal and external changes across the lifespan. Pharmacological concepts and interventions are explored as one strategy to promote health. Course content aligns with Biobehavioral Nursing Concepts II & III.

NURS 4233 - Pathophysiology/Pharmacology III

2 sem. hrs. The course integrates anatomy, chemistry, microbiology, genetics/genomics, and psychoneuroimmunoendocrinology to explore physiologic and neurobehavioral alterations that occur in response to internal and external changes across the lifespan. Pharmacological concepts and interventions are explored as one strategy to promote health. Course content aligns with Biobehavioral Nursing Concepts III & IV.

NURS 4234 - Pathophysiology/Pharmacology IV

2 sem. hrs. The course integrates anatomy, chemistry, microbiology, genetics/genomics, and psychoneuroimmunoendocrinology to explore physiologic and neurobehavioral alterations that occur in response to internal and external changes across the lifespan. Pharmacological concepts and interventions are explored as one strategy to promote health. Course content aligns with Biobehavioral Nursing Concepts III & IV.

NURS 4250 - Professional Nursing Issues*

2 sem. hrs. (2:0) Concentrates on legal, ethical, economic and political issues affecting the nurse as an individual and a professional, and health care delivery to clients, groups and aggregates. Consideration is given to self-discovery, personal assertiveness, role conflict, negotiation and collective bargaining. Students are encouraged to apply critical thinking strategies during classroom discussions and presentations.

NURS 4251 - Professional Nursing Issues I

2 sem. hrs. The first of four courses co-taught with an Art Professor, introduces and enhances student aesthetic knowing and expression. Students consider aspects of personal, ethical, empirical and aesthetic knowing as foundational to providing optimal healthcare across the lifespan. Foci include skills supporting expressions of aesthetics that highlight contemporary nursing issues such as ethical care, national health priorities, professional practice, and models of care.

NURS 4252 - Professional Nursing Issues II
2 sem. hrs. The second of four courses co-taught with an Art Professor, explores the integration of aesthetic knowing and expression within contemporary professional nursing. Students examine advocacy for patients, families and populations within 21st century healthcare while reflecting on topics such as self-care, work-life balance, healthy work environments, allostatics, and effective communication.

**NURS 4254 - Professional Nursing Issues IV**

2 sem. hrs. The final aesthetic knowing and expression course co-taught with an Art Professor considers allostatics in the creation of healing environments in dynamic sociopolitical, cultural, economic and technologic arenas. Students will be challenged to think about effective, efficient and entrepreneurial care consistent with the "Quadruple Aim".

**NURS 4260 - Wellness and Health Promotion Across the Lifespan**

2 sem. hrs. Introduction of core knowledge, concepts, and values fundamental to health promotion and nursing across the lifespan with diverse populations. Students explore the social determinants of health, levels of prevention, cultural competence, care management, identity formation, health outcomes and leadership using an integrated framework of health care delivery.

**NURS 4281 - Biobehavioral Care of Chronic Conditions Clinical**

2 sem. hrs. Students design and provide holistic, evidence-based nursing care to individuals with chronic conditions across the lifespan and health care settings using an integrated framework of health care delivery with an emphasis on primary care settings. Students collaborate with members of the health care team to plan, implement and evaluate care provided to individuals and populations with chronic conditions.

**NURS 4282 - Biobehavioral Health of Complex Conditions Clinical**

2 sem. hrs. Students design and provide comprehensive holistic, evidence-based nursing care to individuals with complex health problems across the lifespan and health care settings using an integrated framework of health care delivery with an emphasis on primary care. Students collaborate with members of the health care team to plan, implement and evaluate the care provided to individuals with complex health problems.

**NURS 4283 - Biobehavioral Health of the Family and Child Clinical**

2 sem. hrs. Students design and provide holistic, evidence-based nursing care to the childbearing family as well as infants, children, and adolescents with chronic/unique
conditions across health care settings using an integrated framework of health care delivery with an emphasis on primary care. Normal and deviations from normal pregnancy are explored in relation to labor, delivery, and post-partum care, care of the neonate, and assisting families with transitions to parenthood. Students collaborate with members of the health care team to plan, implement and evaluate care provided to the childbearing family, infants, children, and adolescents.

NURS 4284 - Biobehavioral Population Health Clinical

2 sem. hrs. Students design and provide holistic, evidence-based health promotion, risk reduction, and disease management in selected community settings using an integrated framework of health care delivery. Students collaborate with members of the health care team to plan, implement and evaluate care to promote health, reduce risk and manage care.

NURS 4318 - Nurse as Research Consumer -RN/BSN*

3 sem. hrs. (3:0) A study of theory and research as a base for nursing practice. Critical analysis of published research studies with regard to implications for clinical practice. The course is planned for collaborative peer examination of the research process through critique of nursing studies. Pre/Co-requisite: MATH 1342, 1442, or 2342. The web-based version of this course (NURS 4318W01).

NURS 4318 - Nurse as Research Consumer*

3 sem. hrs. (3:0) Study of theory and research as a base for nursing practice. Critically analyzes published research studies with regard to implications for clinical practice. The course is planned for collaborative peer examination of the research process through critique of nursing studies. Prerequisite: MATH 1442, 1342, or 2342. The web-based version of this course (NURS 4318W01).

NURS 4320 - Principles and Concepts of Patient Education - RN/BSN*

3 sem. hrs. (3:0) Provides opportunities for students to apply principles of teaching and learning with clients, families and identified groups. Special emphasis is placed on patient teaching within a rapidly changing health care environment. Students will examine learning readiness and intervene with groups and families from diverse backgrounds and educational preparation.

NURS 4322 - Health Alterations - RN/BSN*
3 sem. hrs. (3:0) Relates manifestations of disease, risk factors for disease, and the principles of pathology underlying illness and injury to therapeutic nursing interventions and outcomes. Prerequisites: BIOL 2401 and BIOL 2402. Maybe taken in place of BIMS 3401 Pathophysiology.

**NURS 4322 - Health Alterations***

3 sem. hrs. (3:0) Relates manifestations of disease, risk factors for disease, and the principles of pathology underlying illness and injury to therapeutic nursing interventions and outcomes. (Is a prerequisite for admission into the nursing program.) Prerequisites: BIOL 2401 and BIOL 2402. May be taken in place of BIMS 3401 Pathophysiology.

**NURS 4324 - Nurse as Caregiver - RN/BSN***

3 sem. hrs. (3:0) Emphasis is on socialization into professional nursing. Theories are presented to explain the relationship between human behavior, health and illness and the impact of interpersonal relationship skills to effect positive changes in individuals. Application of caring theories as a basis for decision-making in nursing practice with clients and families is the focus of clinical activities.

**NURS 4353 - Professional Nursing Issues III**

3 sem. hrs. In the third of four aesthetic enriched courses, co-taught with an Art Professor, students gain aesthetic expression and knowledge related to interdisciplinary teamwork, team science collaboration, and innovative partnerships to advance solutions that address global, national, regional and local health challenges.

**NURS 4361 - Biobehavioral Nursing Concepts I: Health Assessment and Foundations of Nursing Across the Lifespan**

3 sem. hrs. Health Assessment and Foundations of Nursing Across the Lifespan (3 SCH): This course introduces students to concepts, behaviors, principles, and theories that provide the foundation for nursing practice. Student recognition of normal and abnormal health patterns using an integrated framework of health care delivery is emphasized.

**NURS 4362 - Biobehavioral Nursing Concepts II: Population Health and Chronic Health Issues Across the Lifespan**

3 sem. hrs. Population Health and Chronic Health Issues Across the Lifespan (3 SCH): Students integrate nursing and public health science to promote, protect, maintain and restore the health of populations using an integrated framework of health care delivery. Evidence-based interventions which are implemented with individuals/families,
communities, and systems are explored, as are the unique health needs of vulnerable populations and measures to eliminate health disparities in a multicultural and global environment.

NURS 4363 - Biobehavioral Nursing Concepts III: Family and Child Health and Complex Health Issues Across the Lifespan

3 sem. hrs. Students learn about nursing care for the childbearing family and the importance of developmentally-appropriate family-centered nursing care for infants, children, and adolescents with acute and chronic health issues using an integrated framework of health care delivery.

NURS 4364 - Synthesis of Nursing Knowledge, Evidence and Practice

3 sem. hrs. In this course, students focus on implementing and evaluating an evidence-based practice project in conjunction with a clinical partner within primary care using an integrated framework of health care delivery. Students collaborate with leaders in practice settings to address a challenge using quality improvement initiatives.

NURS 4365 - Care of the Individual within a Family -RN/BSN*

3 sem. hrs. (2:3) Utilizes a health patterns framework with systematic nursing inquiry to examine the impact of illness on families. In addition, primary, secondary, and tertiary prevention activities are emphasized as they relate to individuals, families, and aggregates. Data from individual and family assessment is used to judge and design interventions and evaluate client(s) outcomes.

NURS 4370 - Nurse Coordinating Care*

3 sem. hrs. (2:3) This class provides a theoretical and experiential approach to identifying the coordinating role of the professional nurse within health care and its delivery. Current theories of management, leadership, and change are examined and related to nursing practice. Critical thinking is required in case analysis and student assessments of their own thinking, ideas and use of intellect.

NURS 4371 - Biobehavioral Nursing Interventions I: Health Assessment and Foundations of Nursing Across the Lifespan

3 sem. hrs. Health Assessment and Foundations of Nursing Across the Lifespan (3 SCH): This course focuses on developing health assessment, psychosocial, psychomotor, critical thinking, and therapeutic communication skills that are essential for nursing practice across the lifespan as well as the health and illness continuum.
NURS 4380 - Nursing Honors

3 sem. hrs. Provides superior nursing students who have demonstrated ability to function independently an opportunity to design and implement a creative learning experience in an area of interest. Prerequisites: Must be in last semester of senior year and meet eligibility requirements for nursing honors.

NURS 4390 - Dimensions in Nursing

1-3 sem. hrs. Focuses on literature study and in-depth knowledge of selected topics relevant to the nurse as a professional provider of care or coordinator of care. Variable content is directed by faculty specialties.

NURS 4396 - Directed Independent Study

1-3 sem. hrs. The College offers courses in directed independent study. The student must register for a specific number of credit hours according to a course plan approved by the Instructor, Undergraduate Chair, and the Dean in advance of registration.

NURS 4396 - Directed Independent Study RN/BSN

1-3 sem. hrs. The College offers courses in directed independent study. The student must register for a specific number of credit hours according to a course plan approved by the instructor, Undergraduate Chair, and the Dean in advance of registration.

NURS 4470 - Professional Transitions*

4 sem. hrs. (2:6) This capstone course focuses on the role of the developing professional nurse's ability to use evidence-based practice and quality standards to deliver safe holistic care to culturally diverse and complex clients and families. Emphasis is on the transition of the student nurse into a professional role which includes the ability to apply concepts related to leadership, interprofessional teamwork, informatics, and patient-centered care. Strategies for successful completion of the graduate licensure exam will be included.

NURS 4471 - Leadership/management - RN/BSN*

4 sem. hrs. (4:0) Uses a systems framework and critical thinking strategies to study the coordinating role of the professional nurse within health care delivery. Current theories of management, leadership and change are examined and related to nursing practice. Focuses on synthesis of this knowledge to develop innovative and creative approaches to
nursing practice. Applies theoretical and empirical concepts through experiences gained in local health care institutions. Prerequisites: NURS 4318, 4324

NURS 4560 - Nursing Care of Community - RN/BSN*

5 sem. hrs. (3:6) Explores community health nursing, focusing on historical development, philosophy, health care systems, epidemiology, and individuals, families, and specific aggregate groups. Applies theoretical and empirical knowledge in using the nursing process in community settings to promote, maintain and restore health. Focuses on transcultural nursing concepts, rural and home health care delivery. Progressively more independent behaviors are expected of students in community health practice. Diverse roles of the community and public health nurse are examined and a community assessment is completed using research and data processing skills. Prerequisites: NURS 4318, 4324.

NURS 4564 - Nursing Care of Psychiatric Clients*

5 sem. hrs. (3:6) Focus is on the nurse as a provider of care to individuals, families and groups experiencing psychiatric-mental health problems. Theoretical foundations for the practice of psychiatric-mental health nursing will be studied. Application of nursing process to promote, maintain or restore mental health of individuals, families and groups. During the clinical experience, students will demonstrate theory-based practice and collaboration with interdisciplinary team participants. Pre-Corequisite: NURS 3550, 3628

NURS 4628 - Nursing Care of Adults II*

6 sem. hrs. (3:9) Presents to the senior student critical thinking and problem-solving strategies for care of adults with acute or complex illness and/or injury. The effects of acute illness are examined in relation to the individual's developmental stage, culture, and gender. Building on Nursing Care of Adults I, a systems approach is used to analyze and intervene in alterations to the health of the individual and family. The course includes clinical laboratory to allow the student the opportunity to integrate theoretical concepts and clinical practice in diverse populations. Pre-Corequisites: NURS 3550, 3548 and 3628

NURS 4660 - Nursing Care of Community Health Clients*

6 sem. hrs. (3:9) Explores Community Health Nursing, focusing on historical development, philosophy, health care systems, epidemiology, and specific target groups. Primary, secondary and tertiary prevention activities are emphasized as they relate to individuals, families, and aggregates. Applies theoretical and empirical knowledge in
using the nursing process in community settings to promote, maintain and restore health. Focuses on transcultural nursing concepts, rural and home health care delivery. Progressively more independent behaviors are expected of students in community health practice. Diverse roles of the community and public health nurse are examined and a community assessment is completed using research and data processing skills.
Prerequisites: NURS. 3614, 3318, 3435

NURS 4670 - Nurse Coordinating Care

6 sem. hrs. (3.9) Uses a systems framework and critical thinking strategies to study the coordinating role of the professional nurse within health care delivery. Current theories of management, leadership and change are examined and related to nursing practice. Focuses on synthesis of this knowledge to develop innovative and creative approaches to nursing practice. Applies theoretical and empirical concepts through supervised experiences gained in local health care institutions. Students will participate in several activities that demonstrate their understanding of leadership principles applied to nursing in their classroom and clinical course work. Prerequisites: NURS 4564, Pre-Corequisites: NURS 4318, 4628.

NURS 4686 - Interprofessional Collaborative Practice Clinical

6 sem. hrs. Students design and provide comprehensive holistic, evidence-based nursing care to individuals, families, and populations with acute, chronic, complex conditions across the lifespan and health care settings with an emphasis on the role of the registered nurse in primary care settings using an integrated framework of health care delivery.

Operations Management

OPSY 4314 - Operations Management*

3 sem. hrs. The design, operation, and control of the transformation process in both service and production operations. Includes analysis and application of various decisions regarding site selection, process and facilities design, capacity planning, scheduling techniques, materials management, and cost and quality control. Prerequisites: ECON 2301, ECON 2302, ORMS 3310 and Junior standing or above.

OPSY 4345 - Materials Management and Purchasing
3 sem. hrs. Management of ordering, storage and distribution of the materials and services purchased by the organization. Emphasis on skill and knowledge required in the practice of purchasing, inventory management and cost reduction in materials. Prerequisite: OPSY 4314 and Junior standing or above.

OPSY 4390 - Current Topics in Operations Management

3 sem. hrs. Selected topics for special study related to operational functions, processes, or issues. May be repeated for credit when topics vary. Prerequisites: Junior standing or above, and others depending on topic. Contact the Dean's office for information.

OPSY 4396 - Directed Individual Study

3 sem. hrs. Individual supervised study and a final report. Prerequisites: permission of instructor, Junior standing or above, and others depending on selected topic. Inquire at the Dean's office for information.

Operations Research/Management Science

ORMS 3310 - Data Analysis and Statistics*

3 sem. hrs. A study of descriptive statistics, probability distributions, the normal distribution, confidence intervals and hypothesis testing, regression analysis and chi-square. Prerequisites: BUSI 0011, MATH 1314 and MISY 2305 or equivalents.

Philosophy

PHIL 1301 - Introduction to Philosophy

3 sem. hrs. An examination of major philosophical issues such as the existence of God, freedom and determinism, moral rights and obligations, and the nature and limits of human knowledge. TCCNS Equivalent: PHIL 1301 Meets the University Core Curriculum requirement for the Language, Philosophy, and Culture foundational component area.

PHIL 2303 - Introduction to Logic and Critical Thinking
3 sem. hrs. Basic principles and techniques used in understanding, constructing, and evaluating arguments. Topics covered may include formal methods of analyzing arguments, informal fallacies, scientific reasoning, and moral arguments. TCCNS Equivalent: PHIL 2303 Meets the University Core Curriculum requirement for the Mathematics foundational component area.

PHIL 2306 - Introduction to Ethics

3 sem. hrs. 1.5:1.5
This course includes a study of ethical theories and principles, and application of those theories and principles to ethical issues. I

TCCNS Equivalent: PHIL 2306 It may be used to satisfy the University Core Curriculum requirement in the Language, Philosophy and Culture foundation component area.

PHIL 3306 - History of Eastern Philosophy I

3 sem. hrs. An historical and critical examination of traditional Indian philosophical and religious systems (such as various versions of Hinduism, Jainism, and Buddhism) and their relevance for contemporary people and societies.

PHIL 3307 - History of Eastern Philosophy II

3 sem. hrs. A historical and critical examination of some of the philosophical and religious systems developed in China, Tibet, and Japan (such as various schools of Mahayana Buddhism, Taoism, Confucianism, and Zen Buddhism).

PHIL 3327 - American Philosophy

3 sem. hrs. An introduction to American philosophy and the influential movement known as Pragmatism. The course focuses on the works of C.S. Peirce, William James, John Dewey, and George Santayana. Issues addressed include skepticism, the rejection of foundationalism, the role of belief in inquiry, verification and meaning, and the nature of truth.

PHIL 3342 - Philosophy of Love and Sex
3 sem. hrs. This course is a study of the ethics of human relationships. Topics include friendship, romance, marriage, sexual orientation, adultery, promiscuity, sexual consent, sexual harassment, rape, pornography, and prostitution.

PHIL 3343 - Philosophy of Law

3 sem. hrs. lecture An introduction to philosophical issues concerning the law, such as the nature of law, relations between law and morality, theories of legal responsibility, and the role of law in society.

PHIL 3344 - Social and Political Philosophy

3 sem. hrs. lecture A survey of classical and contemporary material in social and political philosophy, covering topics such as individual liberty and government intervention, the role of government, and social justice.

PHIL 3345 - The Meaning of Life

3 sem. hrs. An exploration of a variety of views concerning the meaning of life. Three kinds of responses to the question of life's meaning will be examined: theistic responses; non-theistic responses focusing on the creation of personal meaning within a natural universe; and responses that challenge the intelligibility of the question regarding the meaning of life.

PHIL 3346 - Elementary Formal Logic

3 sem. hrs. A course on technical methods and foundational issues in Philosophy, Computer Science, and Mathematics. Topics include the Propositional Calculus, First-Order Predicate Calculus, meta-theoretic results (such as consistency, soundness, completeness, and decidability), and Zermelo-Fraenkel Set Theory.

PHIL 3347 - Philosophy and Science Fiction

3 sem. hrs. An exploration of issues in contemporary philosophy such as the nature of life, personhood and self, knowledge and skepticism, time travel, and obligations to the non-human world. The course combines the reading of purely philosophical works with an examination of contemporary works of science fiction (including novels, short stories, and films).

PHIL 3348 - Ethics, War, and Terrorism
3 sem. hrs. Why is it wrong to kill? Is killing an innocent person ever justified? Under what conditions can we justify war? How should we respond to terrorist threats? The course explores ethical theories in application to these and similar issues.

PHIL 4303 - Minds and Machines

3 sem. hrs. A study of the relationship of the mental to the physical as it pertains to the foundations of psychology, artificial intelligence, and robotics.

PHIL 4304 - Metaphysics

3 sem. hrs. An examination of issues in contemporary metaphysics, such as freedom of the will and determinism, the nature of causation, the mind-body problem, and the existence of abstract and concrete entities.

PHIL 4305 - Truth, Knowledge, and Justification

3 sem. hrs. In this course, we will discuss the following questions among others: What is the nature of truth? Should truth be understood as correspondence with reality? What is it to know something? Is knowledge of the external world possible at all? Can I conclusively rule out the possibility that I might be dreaming right now, or that I might be just a brain in a vat? Are there any privileged beliefs that can be said to constitute the foundation for all of our knowledge? Are the standards for rationality and justification absolute or rather relative to cultural norms? Can there be rational disagreement between equally intelligent people who share the same body of evidence? Online Classification: Face-to-Face No Web.

PHIL 4321 - Ancient Philosophy

3 sem. hrs. A survey of the ancient Western philosophical tradition, including the Presocratics, Plato, Aristotle, and the Hellenistic Philosophers.

PHIL 4322 - Modern Philosophy

3 sem. hrs. A study of some of the major philosophical developments of the 17th-20th centuries, focusing on topics such as the relation between mind and body, religious belief and the problem of evil, rationalism and empiricism, and the limits of human knowledge.

PHIL 4323 - Contemporary Philosophy
3 sem. hrs. lecture A course on important trends in contemporary philosophy beginning with the Fregean linguistic turn, and examining the major works of philosophers such as Frege, Russell, Wittgenstein, Quine, Davidson, Dummett, Putnam, Kripke, and Lewis.

PHIL 4330 - Philosophy and History of Science and Technology

3 sem. hrs. An exploration of important issues concerning the natural and formal sciences from the standpoint of historical disputes and technological advances. Issues include the nature of science and of scientific progress, the justification of scientific theories, the possibility of objective knowledge of the world, the distinction between science and pseudo-science, and the relationship between faith and science.

PHIL 4331 - Issues in Philosophy of Religion

3 sem. hrs. Standard philosophical methods will be used to explore issues such as the existence and nature of God, the problem of evil, and the relationship between morality and religion.

PHIL 4332 - Moral Issues in Contemporary Medicine

3 sem. hrs. An examination of moral issues that arise in medicine, focusing on topics such as euthanasia, genetic interventions, medical research involving vulnerable subjects, and the distribution of medical resources.

PHIL 4333 - Environmental Ethics

3 sem. hrs.
An examination of our ethical obligations with respect to animals, plants, and environmental systems, and of the foundations of environmental law and policy. Can be cross listed with ESCI 4490, BIOL 4590 or BIMS 4590.

PHIL 4335 - Moral Philosophy

3 sem. hrs. lecture A study of moral theories, and of moral issues such as whether morality is subjective, whether there are moral facts, and the justification of practices such as capital punishment and abortion.

PHIL 4336 - Advanced Seminar in Philosophy
3 sem. hrs. In-depth exploration of philosophical topics, designed for philosophy majors, with emphasis on student research and presentations.

PHIL 4337 - Philosophy of Language

3 sem. hrs. lecture A philosophical investigation into the nature of language. Topics include meaning, truth, theories of mediated reference, theories of direct reference, and speech acts.

PHIL 4390 - Topics in Philosophy

3 sem. hrs. Study of important philosophical themes and figures. May be repeated for credit when topics vary. Topics may include, for example, Minds and Machines, Eastern Philosophy, Ancient Philosophy, Environmental Ethics, American Philosophy, and Moral Issues in Contemporary Medicine.

PHIL 4396 - Directed Individual Study

1-3 sem. hrs. See College description. Offered on application.

Physics

PHYS 1401 - General Physics I

4 sem. hrs. (3:3) Introduction to Newtonian physics. Topics include Aristotelian physics and its overthrow, Newton's laws of motion and gravitation, and the motion of particles, rigid bodies and fluids. The idea of the universe as a law-governed system will be developed. Laboratory activities provide introduction to empirical methods in science. Prerequisites: Both MATH 1314 - College Algebra and MATH 1316 - Trigonometry or MATH 2413 - Calculus I (or higher). Corequisite: SMTE 0095 - Physics Laboratory Safety Seminar - Required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. TCCNS Equivalent: PHYS 1401 This course counts toward the natural science component of University Core Curriculum. Offered every Fall, Spring, Summer.

PHYS 1402 - General Physics II
4 sem. hrs. (3:3) Introduction to oscillatory and wave phenomena, electricity and magnetism. The classical theory of fields will be used to study electric and magnetic phenomena, including light, and their role in modern technology. Laboratory activities provide introduction to empirical methods in science. Prerequisite: PHYS 1401 or PHYS 2425. Corequisite: SMTE 0095 - Physics Laboratory Safety Seminar - Required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. TCCNS Equivalent: PHYS 1402 This course counts toward the natural science component of University Core Curriculum.Offered Fall, Spring, Summer.

PHYS 2425 - University Physics I

4 sem. hrs. (3:3) A calculus based introduction to Newtonian physics. Topics include Aristotelian physics and its overthrow, Newton's laws of motion and gravitation, and the motion of particles, rigid bodies, and fluids. The idea of the universe as a law-governed system will be developed. Laboratory activities provide introduction to empirical methods in science. Prerequisite: MATH 2413 or placement beyond MATH 2413. Corequisite: SMTE 0095 - Physics Laboratory Safety Seminar - Required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. TCCNS Equivalent: PHYS 2425 This course counts toward the natural science component of University Core Curriculum.Offered every Fall, Spring, Summer.

PHYS 2426 - University Physics II

4 sem. hrs. (3:3) Calculus based introduction to oscillatory and wave phenomena, electricity and magnetism. The classical theory of fields will be used to study electric and magnetic phenomena, including light, and their role in modern technology. Prerequisites: PHYS 2425 and MATH 2414 (or placement beyond MATH 2414). Corequisite: SMTE 0095 - Physics Laboratory Safety Seminar - Required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. TCCNS Equivalent: PHYS 2426 This course counts toward the natural science component of University Core Curriculum.Offered every Fall, Spring, Summer.

PHYS 3331 - Mechanics I^*

3 sem. hrs. (3:0) Fundamentals of classical mechanics. Topics include particle dynamics in one, two and three dimensions: conservation laws; dynamics of a system of particles; motion of rigid bodies; central force problems; accelerating coordinate systems; Newton's theory of gravitation; Lagrange's and Hamilton's formulations of classical mechanics.
This course is offered through the Texas Physics Consortium (TPC). See their website (http://www.tarleton.edu/tpc/) for details. Prerequisite: PHYS 2426. Corequisite: MATH 3315.

Offered every Fall.

PHYS 3332 - Electromagnetism

3 sem. hrs. (3:0) Electrostatics; Laplace's equation; the theory of dielectrics; magnetostatic fields; electromagnetic induction; magnetic fields of currents; Maxwell's equations.

This course is offered through the Texas Physics Consortium (TPC). See their website (http://www.tarleton.edu/tpc/) for details. Prerequisite: PHYS 2426 - University Physics II Corequisites: MATH 3315 - Differential Equations OR MATH 2415 - Calculus III.

Offered every Fall.

PHYS 3333 - Thermodynamics

3 sem. hrs. (3:0) Concept of temperature, equations of state; the first and the second law of thermodynamics; entropy; change of phase; the thermodynamics functions.

This course is offered through the Texas Physics Consortium (TPC). See their website (http://www.tarleton.edu/tpc/) for details. Prerequisite: PHYS 2426 - University Physics II Corequisite: MATH 2415 - Calculus III

Offered every Fall.

PHYS 3334 - Modern Physics I

3 sem. hrs. (3:0) A course in special relativity and elementary quantum mechanics. Topics include relativistic description of space-time, relativistic energy and momentum, the uncertainty principle, Schrödinger's equation, observables and operators, bound states, potential barriers, and the quantum description of the hydrogen atom.

This course is offered through the Texas Physics Consortium (TPC). See their website (http://www.tarleton.edu/tpc/) for details. Prerequisite: PHYS 2426. Corequisite: MATH 3315.

Offered every Fall, Spring.

PHYS 3490 - Selected Topics
1-4 sem. hrs. Subject materials will be chosen from Electromagnetic Field Theory, Thermodynamics, Mathematical Methods of Physics, Waves and Optics, Advanced Modern Physics, Quantum Theory, Computational Physics, Geophysics, Environmental Physics and Medical Physics. May be repeated for credit if topics selected are different.

This course will be used for upper-level physics electives offered from other Texas Physics Consortium (TPC) schools. See their website (http://www.tarleton.edu/tpc/) for details. Prerequisites vary. Instructor's permission required.

Offered every Fall, Spring.

PHYS 4161 - Physics Research Project

1 sem. hrs. (1:0) The first half of a two semester sequence. The student will work with a faculty member to develop and conduct a senior research project including a search of the relevant literature and presentation of the proposed research idea.

This course is offered through the Texas Physics Consortium (TPC). See their website (http://www.tarleton.edu/tpc/) for details. Prerequisite: PHYS 3334 - Modern Physics I

Offered every Fall.

PHYS 4162 - Physics Research Seminar

1 sem. hrs. (1:0) The second half of a two semester sequence. The student will work with a faculty member to conduct a senior research project including giving an oral presentation of the final results and writing up the results in a form suitable for publication.

This course is offered through the Texas Physics Consortium (TPC). See their website (http://www.tarleton.edu/tpc/) for details. Prerequisite: PHYS 4161 - Physics Research Project

Offered every Spring.

PHYS 4330 - Mathematical Methods for Physicists

3 sem. hrs. (3:0) Mathematical techniques from the following areas: infinite series; integral transforming; applications of complex variables; vectors, matrices, and tensors; special functions; partial differential equations; Green's functions; perturbation theory; integral equations; calculus of variations; and groups and group representatives.
This course offered through the Texas Physics Consortium (TPC). See their website (http://www.tarleton.edu/tpc/) for details. Corequisite: MATH 3315 - Differential Equations.

Offered every Spring.

**PHYS 4335 - Quantum Physics^**

3 sem. hrs. (3:0) The Schroedinger equation; one dimensional systems; the Heisenberg uncertainty principle; magnetic moments and angular momentum; two and three dimensional systems; approximation methods; spin.

This course is offered through the Texas Physics Consortium (TPC). See their website (http://www.tarleton.edu/tpc/) for details. Prerequisite: PHYS 3334 - Modern Physics I^ Corequisite: MATH 3315 - Differential Equations OR MATH 2415 - Calculus III.

Offered every Fall.

**PHYS 4337 - Nuclear Physics^**

3 sem. hrs. (3:0) The study of nuclear phenomena and properties including mass, stability, magnetic moment, radioactive decay processes and angular momentum. The use of nuclear techniques as applied to other scientific fields including electronics and medicine.

This course is offered through the Texas Physics Consortium (TPC). See their website (http://www.tarleton.edu/tpc/) for details. Prerequisite: PHYS 3334 - Modern Physics I^ Corequisite: PHYS 4335 - Quantum Physics^ Additional Corequisite: MATH 3315 - Differential Equations OR MATH 2415 - Calculus III.

Offered every Spring.

**PHYS 4340 - Advanced Physics Lab^**

3 sem. hrs. (2:3) A laboratory course focusing on experimental design, advanced data analysis and reduction, and experimental laboratory techniques and instrumentation. Experiments will be drawn from a variety of physics areas.

This course is offered through the Texas Physics Consortium (TPC). See their website (http://www.tarleton.edu/tpc/) for details. Corequisite: PHYS 3334 - Modern Physics I^ Corequisite: SMTE 0095 - Physics Laboratory Safety Seminar - Required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course.
Offered every Spring.

PHYS 4496 - Directed Independent Study

1-4 sem. hrs. Requires a formal proposal of study to be completed in advance of registration and to be approved by the supervising faculty, the Chairperson, and the Dean of the College. Offered upon sufficient demand.

Political Science

POLS 2304 - Introduction to Political Science

3 sem. hrs. Introductory survey of the discipline of political science focusing on the scope and methods of the field, and the substantive topics in the discipline including the theoretical foundations of politics, political interaction, political institutions and how political systems function. TCCNS Equivalent: GOVT 2304 Introduction to Political Science Online Classification: Face-to-Face 1-24%

POLS 2305 - U.S. Government and Politics*^*

3 sem. hrs. A basic survey of American government, including fundamental political institutions, with special attention to the United States and Texas Constitutions. TCCNS Equivalent: GOVT 2305 Meets the University core requirement and the Texas state statutory requirement for U.S. and Texas constitutions

POLS 2306 - State and Local Government*^*

3 sem. hrs. The politics, government, and administration of American states, counties, cities, and special districts, with special emphasis on Texas. TCCNS Equivalent: GOVT 2306 Meets the University core requirement and the Texas state statutory requirement for U.S. and Texas constitutions

POLS 2311 - Mexican American and Latinx Politics

3 sem. hrs. The study of Mexican American and Latinx politics within the American political experience. Topics include historical, cultural, socioeconomic, and constitutional issues that pertain to the study of Mexican Americans and other Latinx populations in the United States. Other topics such as political participation, governmental institutions, electoral politics, political representation, demographic trends, and other contemporary
public policy debates will also be addressed. TCCNS Equivalent: GOVT 2311 Mexican American and Latinx Politics Face-to-Face 1-24%.

POLS 3303 - Contemporary Political Analysis

3 sem. hrs. Analysis of current problems in national and international politics. Emphasis is on methods of analysis, particularly the use of computers. Includes a segment on career opportunities for political science majors.

POLS 3311 - Women and Politics

3 sem. hrs. The course will examine public policies affecting women, political participation, women in public office, and political attitudes of women.

POLS 3312 - Campaigns and Elections

3 sem. hrs. A survey of the literature on campaigns and elections including theories of voter choice; effects of mass media and campaign finance regulations on the conduct and outcome of elections; effects of elections on policy; emphasis on U.S. national elections.

POLS 3313 - The Legislative Process

3 sem. hrs. Survey and description of the legislative process in the United States Congress with relevant comparisons to practices within the several states and foreign nations. Emphasis upon the law-making process explained in terms of structure, participants, groups, associations and power relationships.

POLS 3314 - Public Opinion

3 sem. hrs. An analysis of the kinds and distributions of opinions and attitudes in the mass public and the effects of those opinions on activities of policy makers, with special attention to problems of linking public opinion to public policy.

POLS 3315 - Political Parties

3 sem. hrs. Organization, history, and activities of political parties and functions they serve in national, state, and local politics in the United States and elsewhere.

POLS 3316 - The American Presidency
3 sem. hrs. A study of the federal executive branch with an emphasis upon the American Presidency with its relationships to other American political institutions and processes. Suggested background POLS 2305.

POLS 3317 - Judicial Politics

3 sem. hrs. This course examines the political factors that influence judicial selection, decision-making and the policy-making role of courts. Furthermore, attention is directed at the impact of court decisions and the structure of the judiciary.

POLS 3318 - Interest Groups

3 sem. hrs. lecture Role of interest groups in politics: types of groups and resources; internal dynamics; group strategies/tactics (including PACs); forms of indirect and direct lobbying; influence of groups in the political arena.

POLS 3319 - Religion and Politics

3 sem. hrs. The course will examine the intersection of religion and politics historically and during contemporary times with an emphasis on beliefs, behaviors, institutions, and policies.

POLS 3321 - Comparative Politics

3 sem. hrs. Concepts, theories and analytical frameworks for comparing different types of political systems around the world. Emphasis is placed on learning about different political systems and using the comparative method to evaluate and develop a richer understanding of politics, political culture, political behavior, and political institutions.

POLS 3331 - International Relations

3 sem. hrs. Examination of the structure and function of the international system focusing on the power relationships among states, international organizations, and the critical issues animating contemporary international relations.

POLS 3341 - Introduction to Public Administration

3 sem. hrs. Study of organization and management theories and practices of public administration affecting federal and subnational governments. Bureaucratic structures and procedures will be examined for their effects on policy, program development and evaluation.
POLS 3342 - Introduction to Public Policy

3 sem. hrs. A survey of the policy process in the United States. The course will examine factors affecting the development, implementation and impact of public policies as well as a discussion of policy alternatives and controversies.

POLS 3343 - Bureaucracy

3 sem. hrs. lecture Examines the concept of the political role of the bureaucracy and the impact of other government institutions on bureaucratic structures, functions and behavior. The role of bureaucracy in public policy making and the influence of politics on implementation is analyzed.

POLS 3351 - U.S. Constitution and Federalism

3 sem. hrs. The course will examine the development of the U.S. Constitution since 1789 through legal decisions and interpretations. The development, evolution, and interpretations of federalism are also addressed. (Note: This course will complete the Texas Teacher Certification requirement in government for those who already have three semester hours in U.S. Government and need three additional semester hours that include the government and constitution of Texas.)

POLS 3361 - Western Political Theory

3 sem. hrs. The fundamental concepts and problems of political theory, as viewed by the major classical philosophers and contemporary theorists, including justice, power, authority, obligation, freedom, equality.

POLS 3365 - Political Theory and Ideologies

3 sem. hrs. Major 19th and 20th-Century political theorists and ideological movements. Includes a review of capitalism, socialism, fascism, and liberalism.

POLS 4303 - Seminar in Political Science

3 sem. hrs. Capstone course for political science majors, examines significant developments and issue in American politics as they are addressed in the professional literature of political science. Offers the opportunity of an intensive study of as selected topic. Emphasis on supervised research on selected topic. Prerequisite: POLS 3303.

POLS 4311 - Urban Politics
3 sem. hrs. The institutions, political processes and policy issues of urban areas of the United States.

POLS 4312 - Government Budgeting and Finance

3 sem. hrs. Study of the politics and processes of governmental budgeting at local, state, and federal levels with emphasis on the interrelatedness of governmental units through budgeting.

POLS 4314 - Media and Politics

3 sem. hrs. Impact of mass media coverage on American political institutions, the election process, and public opinion in general and the appropriate role of media and news in a society.

POLS 4320 - The Politics of the European Union

3 sem. hrs. Examination of the institutional, economic and political forces that led to the creation and development of the European Union. Emphasis on the impact the European Union has had on world affairs.

POLS 4321 - Comparative Politics of Developing Nations

3 sem. hrs. lecture Analysis of contemporary issues within and amongst developing nations. Examines various institutions, political processes, and public policy debates in some or all of the following regions: Africa, Latin America, the Middle East, or Asia.

POLS 4322 - Transitions to Democracy

3 sem. hrs. Analysis of transitions to democracy from authoritarian rule. Various stages of the transition process and theories of democratization are assessed. Emphasis will be placed on "third wave" transitions to democracy.

POLS 4325 - Politics in Latin America

3 sem. hrs. Latin American governments and politics as related to such topical problems and processes as land reform and expropriation.

POLS 4327 - The Politics of War

3 sem. hrs. This course will examine the politics of war from ancient times to the present. Included in this survey are great generals and military strategists, from Sun Tzu to
Napoleon to generals of the American Civil War. Students will study concepts of international law, the law of nations, and the laws of war. The course further examines military strategy and tactics of the 20th century.

POLS 4361 - American Political Thought

3 sem. hrs. A survey of the major developments in American political thought from the Colonial period to the present, followed by an analysis of important recent theoretical developments in American political thought.

POLS 4390 - Topics in Political Science

3 sem. hrs. May be repeated for credit when topic varies.

POLS 4396 - Directed Individual Study

1-3 sem. hrs. See College description. Offered on application.

Portuguese

PORT 2315 - Portuguese for Spanish Speakers

3 sem. hrs. This course is designed specifically for students with no previous knowledge of Portuguese, but who already speak Spanish. It provides Spanish-speaking students with an opportunity to develop Portuguese language skills, assisted by their knowledge of the Spanish language. The course will also emphasize several aspects of the Portuguese-speaking countries, such as food, music, and history.

Psychology

PSYC 2301 - General Psychology*

3 sem. hrs. An introduction to the fundamental concepts and theories in psychology. Topics include biological processes, development, learning, personality, abnormal behavior, therapy, and social interactions. TCCNS Equivalent: PSYC 2301 This course satisfies the University core requirement in social science.

PSYC 2314 - Lifespan Developmental Psychology*
3 sem. hrs. The study of normal physical, cognitive, social, and emotional development from infancy to late adulthood. Pre-req: PSYC 2301. TCCNS Equivalent: PSYC 2314

PSYC 2319 - Social Psychology*

3 sem. hrs. The scientific study of how a person's thoughts and behavior are influenced by others. Topics will include social cognition, attitudes, persuasion, interpersonal relationships, and group behavior. (Credit may not be given for both this course and SOCI 2326.) Cross listed with SOCI 2319. Pre-req: PSYC 2301. TCCNS Equivalent: PSYC 2319/SOCI 2326

PSYC 2390 - Topics in Psychology

3 sem. hrs. This is a lower-level special topics course. Various topics, which will change from semester to semester, are presented by Psychology department faculty. They cover topics of special interest which will not be made a regular on-going part of the curriculum. May be repeated for credit. Pre/Co-requisite: PSYC 2301. Online Classification: Face-to-Face 1-24%

PSYC 3325 - Close Relationships

3 sem. hrs. This course is designed as an overview to the field of close relationships. The major theories of close relationships will be emphasized, including examinations of evolutionary, attachment, interdependence, and cognitive approaches. Additional topics include attraction, relationship development and maintenance, infidelity, and relationship violence. Pre-req: PSYC 2301.

PSYC 3335 - Forensic Psychology

3 sem. hrs. This course examines the relationship between the practice of psychology and the functioning of the legal system. The course surveys many aspects of clinical forensic psychology, including assessment, treatment, and consultation services. Pre-req: PSYC 2301.

PSYC 3342 - Cognitive Psychology*

3 sem. hrs. A survey of current research and theory in the field of human cognition, emphasizing the information processing model. Topics include attention, memory, language, and problem solving. Pre-req: PSYC 2301. Online classification: Face-to-Face 1-24%.

PSYC 3343 - Learning and Behavior*
3 sem. hrs. The study of the fundamental principles of learning through a consideration of theories and constructs, such as associations, reinforcement, punishment, generalization, discrimination, and modeling. Pre-req: PSYC 2301. Online classification: Face-to-Face 1-24%.

PSYC 3346 - Psychology of Language

3 sem. hrs. The purpose of the course is to introduce students to a multidisciplinary study of language. This course will provide an introduction to psychological, sociolinguistic, and social-interactive theories of language use, acquisition/development, knowledge, context, perception, disorders, and related cognitive and social processes. Pre-req: PSYC 2301. Online classification: Face-to-Face 1-24%.

PSYC 3350 - Evolutionary Psychology

3 sem. hrs. Evolutionary psychologists argue that much of human behavior is the output of neural and psychological adaptations that evolved to solve recurrent problems in human ancestral environments. Some challenges addressed in this course involve survival, mating, familial relationships, and living in social groups. Pre-req: PSYC 2301.

PSYC 3360 - Health Psychology*

3 sem. hrs. This course will provide an overview of the field of health psychology, examining how psychological theories and research are applied to enhance health and well-being and to prevent and treat illness. Pre-req: PSYC 2301.

PSYC 3361 - Psychology of Personality*

3 sem. hrs. An introduction to major theories of personality. Personality processes and development are discussed from psychoanalytic, behavioral, humanistic, and other perspectives. Pre-req: PSYC 2301.

PSYC 3363 - Abnormal Psychology*

3 sem. hrs. An introduction to the study of abnormal behavior. Studies the etiology and characteristics of the major behavioral disorders, including current research findings and treatment practices. Competency in personality psychology, such as that obtained by completing PSYC 3361, is assumed for this course. Pre-req: PSYC 2301.

PSYC 3370 - Psychology of Religion
3 sem. hrs. This course examines religious experience and behavior from a psychological perspective. Topics include historical and theoretical perspectives, development of religious beliefs across the lifespan, religious conversion, social and group experiences, and the varieties of religious belief. Pre-req: PSYC 2301.

PSYC 3374 - Human Sexuality*

3 sem. hrs. The study of human sexual behavior from a biological and psychosocial perspective. Emphasizes current research methods and findings. Pre-req: PSYC 2301.

PSYC 3375 - Introduction to Clinical Psychology

3 sem. hrs. A survey of diagnostic and therapeutic strategies employed by clinical psychologists. The scientist-practitioner model is emphasized through the critical analysis of theories and empirical research that provide the foundation for determining effective treatments of mental disorders. Pre-req: PSYC 2301.

PSYC 3411 - Experimental Psychology*

4 sem. hrs. An introduction to the methods of scientific experimentation in psychology. Skills to critically analyze journal articles, design experiments, collect and analyze data, and write reports in APA style will be developed. Students are required to enroll in a laboratory section of this course. The laboratory component of this course offers applications of the principles discussed in the large lecture. Prerequisites: PSYC 2301 and MATH 1442 or its equivalent.

PSYC 4309 - History and Systems of Psychology*^ 

3 sem. hrs. A study of the development of modern psychology through an examination of major philosophic, scientific, and social-political antecedents. Contemporary positions are discussed within the context of broader theoretical frameworks. Prerequisite: PSYC 2301. Online Classification: Face-to-Face 1-24%.

PSYC 4310 - Psychology Capstone Seminar*

3 sem. hrs. All TAMU-CC Psychology students take a Capstone course in order to graduate. The Psychology Capstone Seminar, the final and required class that completes the Psychology curriculum, provides an opportunity for senior Psychology majors to demonstrate comprehensive learning in Psychology through intensive, integrative work on a specific topic in Psychology at an advanced level. The goal is to provide an enriching and culminating experience at the end of each student's undergraduate education. Core components of the Capstone courses include reading and discussing
peer-reviewed and primary source work, completing a final project, and presentations of ongoing and final projects. Prerequisites: PSYC 2301 and PSYC 3411 (Experimental Psychology). Online Classification: Face-to-Face 1-24%

PSYC 4332 - Cross-cultural Psychology*

3 sem. hrs. This course is designed to provide students with both a theoretical and a practical understanding of the effects of culture on human thinking, values, and behavior. As such, it is focused on the effects of culture on the nature and behavior of individuals, their adaptations to institutions and environments, and their relations with others within and outside their culture. Knowledge presented in the class is drawn from both qualitative and quantitative research. Pre-req: PSYC 2301.

PSYC 4344 - Drug Use and Abuse

3 sem. hrs. Study of the physiological, psychological, and social effects of drug use and abuse. Following a review of basic neuroanatomy and pharmacology, the actions and known effects of specific drugs of use and abuse will be examined. Treatments and prevention issues related to substance abuse will also be discussed. Pre-req: PSYC 2301.

PSYC 4352 - Physiological Psychology*

3 sem. hrs. This course is an introduction to the physiological mechanisms that underline behavior with emphasis on the nervous, the endocrine and sensory systems. Prerequisites: PSYC 2301 - General Psychology*. Online Classification: Face-to-Face 1-24% and Fully Online.

PSYC 4354 - Sensation and Perception*

3 sem. hrs. Basic sensory processes as they relate to the sensory experience and to the construction of our conception of physical reality. Pre-req: PSYC 2301. Online Classification: Face-to-Face 1-24% & Fully Online.

PSYC 4367 - Gender Issues in Psychology

3 sem. hrs. This course is designed to introduce the undergraduate student to the theoretical and empirical issues related to the psychology of gender. Both traditional and contemporary theories that focus on the unique aspects in the psychological development of women as well as men will be examined. Prerequisite: PSYC 2301.

PSYC 4372 - Psychological Testing
3 sem. hrs. Statistical and research basis for test construction. Instruction in use of group and individual tests in intelligence, achievement, interest and personality. Understanding of individual measures in these areas. Prerequisites: PSYC 2301 and MATH 1442 or its equivalent.

PSYC 4377 - Industrial/Organizational Psychology

3 sem. hrs. This course will provide an Introduction to Industrial and Organizational Psychology, a scientific discipline that studies human behavior in the workplace. Topics will include the history of Industrial/Organizational psychology, job analysis, psychological assessments, personnel decisions, training and development, organizational change, teamwork, motivation, leadership and work stress and health. Prerequisite: PSYC 2301. Face-to-Face 1-24%.

PSYC 4390 - Topics in Psychology

3 sem. hrs. May be repeated for credit when topics vary. Pre-req: PSYC 2301.

PSYC 4395 - Undergraduate Research

3 sem. hrs. A research project in psychology designed in consultation with a faculty director. The study is to be conducted by the student under the supervision and direction of the faculty member and may culminate in a formal report written in APA journal style. Pre-req: PSYC 2301. Offered by application.

PSYC 4396 - Directed Individual Study*

1-3 sem. hrs. See College description. Pre-req: PSYC 2301. Offered by application.

PSYC 4398 - Applied Experience*

3 sem. hrs. See College description. Pre-req: PSYC 2301. Offered by application.

Reading Education

READ 0399 - Basic Reading and Comprehension

3 sem. hrs. This is a reading course for students who need assistance in developing college level reading skills. Emphasis will be on improving reading comprehension, critical reasoning skills, recognition of the organization of ideas in written material, study
skills and vocabulary development. The Higher Education Assessment (THEA) reading skills will be covered. Required for THEA liable undergraduate students. (Not counted toward graduation.) Course fee required.

READ 3310 - Principles and Practices of Early Reading Instruction

3 sem. hrs. This course explores theories of early language and literacy development of children. Course content addresses language development and literacy concepts essential for pre-reading areas, such as phonemic awareness, oral language development, listening comprehension development, and alphabetic knowledge. The course explores ways educators can enhance language and literacy concepts utilizing art, music, and drama. READ 3310 emphasizes development of emergent literacy skills that lead to literacy skills taught in READ 3320.

READ 3320 - Principles and Practices of Reading Instruction

3 sem. hrs. The purpose of this course is to provide the preservice teacher with a solid foundation for effective literacy instruction. This course will review research-based teaching strategies, instructional materials for phonics, vocabulary, fluency, and comprehension will as methods and assessments for efficacious literacy instruction. The primary focus of course content will be on core (tier 1) classroom instruction with discussions of differentiated instruction and frameworks for responsive intervention also addressed. The targeted grade levels for this course are third through sixth grade.

READ 3321 - Principles and Practices of Reading Instruction, Grades 4 – 8

3 sem. hrs. This course will emphasize materials, methods, and beliefs for teaching reading in grades 4-8. Components of the course will include but not be limited to the five pillars of reading instruction identified by the National Reading Panel (2000): phonemic awareness, phonics, fluency, vocabulary, and comprehension.

READ 3351 - Diagnosis and Correction of Reading Problems

3 sem. hrs. Diagnosis and correction of reading problems are examined in detail. Emphasis is upon the precise administration, scoring, and interpretation of various diagnostic instruments used to detect reading problems. The correction processes for identified problems are also examined. Components of the course will include but not be limited to the five pillars of reading instruction identified by the National Reading Panel (2000): phonemic awareness, phonics, fluency, vocabulary, and comprehension. Prerequisite: READ 3310 & READ 3320, or READ 3353

READ 3352 - Content Area Reading for Elementary Students
3 sem. hrs. This course focuses on recent issues, materials, methods, and strategies considered essential for effective reading instruction in the elementary school content areas. Components of the course will include comprehension strategies, vocabulary development, reading-writing connections, and word study. The course will also include but not be limited to the five pillars of reading instruction identified by the National Reading Panel (2000): phonemic awareness, phonics, fluency, vocabulary, and comprehension. Prerequisite: READ 3310 and READ 3320.

READ 3353 - Content Area Reading for Secondary Students

3 sem. hrs. The skills required of secondary students to deal with subject matter in the various content areas are presented. In addition, developmental and corrective processes that incorporate the identification and remediation of dyslexia and other reading disorders are presented.

READ 3355 - Teaching Reading in the Secondary School

3 sem. hrs. This course focuses on planning, developing, selecting, and organizing reading materials for secondary reading instruction. Prerequisite: READ 3353.

READ 3356 - Technology and Literacy

3 sem. hrs. Various software packages that have been developed for providing initial and tutorial instruction in the language arts are presented. In addition, instructional techniques for using these packages are covered. Prerequisites: READ 3320 and READ 3321.

READ 3380 - Children's and Adolescents' Literature

3 sem. hrs. Provides students with an understanding of children's and adolescent literature. Included in the class is the reading and study of literature and how to promote reading of literature in the schools. Extensive reading is required.

READ 4352 - Advanced Practices in Reading/ Language Arts

3 sem. hrs. The emphasis is on instructional approaches supported by current theory and research and supervised implementation in a school setting. Attention is given to word study, comprehension, critical reading and reasoning, and reading-writing connections. Components of the course will include but not be limited to the five pillars of reading instruction identified by the National Reading Panel (2000): phonemic awareness, phonics, fluency, vocabulary, and comprehension. Prerequisites: READ 3320, READ 3351, and READ 4380. This course must be taken concurrently with READ 4394.
READ 4394 - Field Experiences in Reading

3 sem. hrs. The culminating experience for those students working toward a specialization in reading. Students are provided supervised experience in field-based activities, in addition to on-campus activities. Prerequisites: READ 3310, READ 3320, READ 3351, READ 3352, and READ 3380.

READ 4696 - Directed Individual Study

1-6 sem. hrs. Programs will be designed for individual cases through special permission of the Department Chair and Dean. May be repeated for credit when the topic varies.

Science, Mathematics and Technology Education

SMTE 0091 - Biological Laboratory Safety Seminar

0 sem. hrs. This non-credit course is designed as an on-line offering that must be passed by students each semester and at a grade of 100%. Students will be responsible for taking safety courses with different course numbers of SMTE, as each lab must meet different safety requirements as specified by the A&M System, depending on the types of hazardous materials used in each lab. Students will not be charged a fee for taking these courses.

SMTE 0092 - Biomedical Laboratory Safety Seminar

0 sem. hrs. This non-credit course is designed as an on-line offering that must be passed by students each semester and at a grade of 100%. Students will be responsible for taking safety courses with different course numbers of SMTE, as each lab must meet different safety requirements as specified by the A&M System, depending on the types of hazardous materials used in each lab. Students will not be charged a fee for taking these courses.

SMTE 0093 - Chemistry Laboratory Safety Seminar

0 sem. hrs. This non-credit course is designed as an on-line offering that must be passed by students each semester and at a grade of 100%. Students will be responsible for taking safety courses with different course numbers of SMTE, as each lab must meet different safety requirements as specified by the A&M System, depending on the types of hazardous materials used in each lab. Students will not be charged a fee for taking these courses.
SMTE 0094 - Geology Laboratory Safety Seminar

0 sem. hrs. This non-credit course is designed as an on-line offering that must be passed by students each semester and at a grade of 100%. Students will be responsible for taking safety courses with different course numbers of SMTE, as each lab must meet different safety requirements as specified by the A&M System, depending on the types of hazardous materials used in each lab. Students will not be charged a fee for taking these courses.

SMTE 0095 - Physics Laboratory Safety Seminar

0 sem. hrs. This non-credit course is designed as an on-line offering that must be passed by students each semester and at a grade of 100%. Students will be responsible for taking safety courses with different course numbers of SMTE, as each lab must meet different safety requirements as specified by the A&M System, depending on the types of hazardous materials used in each lab. Students will not be charged a fee for taking these courses.

SMTE 0096 - Environmental Science Laboratory Safety Seminar

0 sem. hrs. This non-credit course is designed as an on-line offering that must be passed by students each semester and at a grade of 100%. Students will be responsible for taking safety courses with different course numbers of SMTE, as each lab must meet different safety requirements as specified by the A&M System, depending on the types of hazardous materials used in each lab. Students will not be charged a fee for taking these courses.

SMTE 0097 - Art Student Safety Seminar

0 sem. hrs. This non-credit course is designed as an on-line offering that must be passed by students each semester and at a grade of 100%. Students will be responsible for taking safety courses with different course numbers of SMTE, as each lab must meet different safety requirements as specified by the A&M System, depending on the types of hazardous materials used in each lab. Students will not be charged a fee for taking these courses.

SMTE 0098 - Theatre Student Safety Seminar

0 sem. hrs. This non-credit course is designed as an on-line offering that must be passed by students each semester and at a grade of 100%. Students will be responsible for taking safety courses with different course numbers of SMTE, as each lab must meet different safety requirements as specified by the A&M System, depending on the types of
hazardous materials used in each lab. Students will not be charged a fee for taking these courses.

SMTE 1350 - Fundamentals of Mathematics I*^  
3 sem. hrs. (3:0) The conceptual framework for understanding and applying properties, models, and operations related to various number systems in problem solving settings. Prerequisite: MATH 1314. Fall, Spring, Summer. TCCNS Equivalent: MATH 1350

SMTE 1351 - Fundamentals of Mathematics II*^  
3 sem. hrs. (3:0) The conceptual framework for understanding and applying properties, models, and operations related to various data systems in problem solving settings. Prerequisite: SMTE 1350 and TSIA-Math/ACT/SAT score required for teacher certification. See math.tamucc.edu/placement.html for scores. Fall, Spring, Summer. TCCNS Equivalent: MATH 1351

SMTE 3315 - Foundational Approaches to the Physical Sciences  
3 sem. hrs. (2:2) Physical science topics such as simple machines, atoms, molecules, electricity and magnetism, sound, and light. Laboratory involvement will emphasize techniques of problem solving, data gathering, and data application. The course is taught following an inquiry based format and is recommended for future K-8 level science educators. Corequisite: SMTE 0096 - Environmental Science Laboratory Safety Seminar - Required every semester for lab-based courses. The Safety Seminar must be completed before the Census Date of the semester to participate in the lab portion of this course. Offered fall, spring and summer semesters every year.

SMTE 3316 - Foundational Approaches to the Life Sciences^  
3 sem. hrs. (2:2) Emphasis on biological concepts including cells, plants, invertebrate and vertebrate structural systems. Laboratory investigations focus on techniques of problem solving, data gathering, and data applications. The course is taught following an inquiry based format and is recommended for future K-8 level science educators. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered fall, spring and summer semesters every year.

SMTE 3352 - Fundamentals of Mathematics III*^  
3 sem. hrs. (3:0) The conceptual framework for understanding and applying properties, models, and operations related to various geometric systems in problem solving settings.
Prerequisite: SMTE 1351 and TSIA-Math/ACT/SAT score required for teacher certification. See math.tamucc.edu/placement.html for scores. Fall, Spring, Summer.

SMTE 4217 - Secondary Approaches to the Life Sciences

2 sem. hrs. (2:0) Study of secondary science teaching and learning from the standpoints of theory and practice, curriculum objectives, materials and evaluation. The course will emphasize contemporary issues by focusing on biological content ranging across the sub-disciplines of molecular biology, physiology, evolution and environmental science while teaching in a relevant and engaging context that includes web searches, laboratory activities, and student-centered inquiry activities Offered fall semester every year.

SMTE 4270 - Science Education Topics I^ 

2 sem. hrs. (2:0) Presentation of the conceptual framework for understanding and applying science content in life sciences including biology, ecology and evolution using the national standards for science education and Texas Essential Knowledge and Skills (TEKS). The course is taught using scientifically researched literature and content knowledge in an inquiry based format and is recommended for future 4-8 and 7-12 level science educators. Offered spring semester every year.

SMTE 4273 - Historical Development of the Sciences

2 sem. hrs. (2:0) Study of human endeavors leading to the present body of scientific knowledge placed in a historical and philosophical context. Portions of the materials will be presented in a format conducive to adaptation for middle school and high school. Prerequisites: BIOL 1407 - Biology II, CHEM 1412 - General Chemistry II, EDUC 3311 - School and Society^ or approval of instructor. Offered on sufficient demand.

SMTE 4320 - Secondary Science Laboratory Techniques

3 sem. hrs. (2:3) This course is designed to assist the 4-8 and 7-12 future science teacher in developing content knowledge, skills and mastery of designated laboratory and research techniques through scientific experimentation in areas such as chemistry, biology and physics. State and national laboratory safety mandates will also be addressed. Prerequisites: BIOL 1407 - Biology II, CHEM 1412 - General Chemistry II, EDUC 3311 - School and Society^ or approval of instructor. Corequisite: Safety training given in SMTE 0091 - Biological Laboratory Safety Seminar is required for continued participation in this course. Offered fall semester every year.

SMTE 4370 - Mathematics Education Topics I
3 sem. hrs. (3:0) Presentations of contemporary issues in mathematics education. Topics include history of mathematics education, state and national standards for mathematics education, cognitive development, the importance of culture, language and gender in learning mathematics, authentic assessment, and interdisciplinary curriculum.

SMTE 4382 - Basic Mathematics From An Advanced Viewpoint

3 sem. hrs. (3:0) Capstone course for students pursuing grades 4-8 certification in mathematics. Presents basic mathematical concepts in the context of advanced mathematics courses. The course includes historical development of significant ideas in mathematics and science, interpretations of mathematical topics at multiple levels, and the use of technology to generate and convey understanding of mathematical ideas. Prerequisites: MATH 2305, MATH 3312, and completion of at least 90 hours. Spring.

SMTE 4490 - Selected Topics

1-4 sem. hrs. Subject materials variable. May be repeated for credit when topics are significantly different. Faculty approval required. May be offered any semester: students should consult the online course schedule.

SMTE 4496 - Directed Independent Study

1-4 sem. hrs. Requires a formal proposal of study to be completed in advance of registration and to be approved by the supervising faculty, the Chairperson, and the Dean of the College. Offered any semester upon request by a student and consent of the instructor.

Sociology

SOCl 1301 - Introduction to Sociology*

3 sem. hrs. An introduction to the basic concepts, methods, and theories used in Sociology. Topics illustrate the systematic understanding of social interaction, social organization, and social institutions. Reciprocal relationships between individuals and society are examined. Topics may include – but are not limited to – socialization, culture, social stratification, race and ethnicity, sex and gender, deviance, family, work, and social change. TCCNS Equivalent: SOCI 1301 This course satisfies the University core requirement in social science. Online Classification: Face-to-Face 1-24% and Fully Online.
SOCI 2301 - Social Problems

3 sem. hrs. A survey and exploration of the causes and consequences of major social problems in the U.S. society, including contemporary issues of poverty, unemployment, income inequality, health care, crime, climate change, and other issues of social class, racial, ethnic, and gender inequality. TCCNS Equivalent: SOCI 1306

SOCI 2319 - Social Psychology

3 sem. hrs. The scientific study of how a person's thoughts and behavior are influenced by others. Topics will include social cognition, attitudes, persuasion, interpersonal relationships, and group behavior. (Credit may not be given for both this course and PSYC 2326.) Cross listed with PSYC 2319. TCCNS Equivalent: SOCI 2326/PSYC 2319

SOCI 3301 - Cultural Anthropology

3 sem. hrs. Study of the social life of human groups from their earliest appearance to the present. Analyses of cultures include language, kinship, art, religion, economics, and political behavior. Cross-cultural comparisons allow development of generalizations about social patterns, social structure, and cultural practices found in human societies. (Credit may not be given for both this course and ANTH 3301.)

SOCI 3310 - Sociology through Film

3 sem. hrs. lecture The examination of film as a culture artifact to illustrate sociological concepts, theories, and perspectives. Specific attention will be given to narratives of film as they illustrate culture, aging, social class, gender, race/ethnicity, identity, and other sociological concepts.

SOCI 3312 - Racial and Ethnic Relations

3 sem. hrs. The study of cultural, religious, ethnic and racial groups, and the treatment accorded them in society. Prejudice, discrimination and the outcomes of discrimination in relation to both dominant and subordinate groups are considered.

SOCI 3315 - Population

3 sem. hrs. A study of population growth, distribution and change, and the reasons for these patterns. Also an examination of population-related problems and policies. (Offered Spring only.)

SOCI 3320 - Sociology of Gender
3 sem. hrs. An examination of the roots, nature and social construction of gender roles including socialization of men and women, gender role relationships from the perspectives of sociology. Issues of family, education, work and the economy, religion, politics and law, feminist organizations, feminist theory, and men's and women's movements will be considered.

SOCI 3321 - Mexican American Women

3 sem. hrs. A study of the Chicanas and the trends in society and Mexican-American culture affecting their lives and behaviors.

SOCI 3340 - Sociology of the Family

3 sem. hrs. The study of the family, relationships among its members, and the relationship of family to other social institutions.

SOCI 3349 - Sociology of Deviant Behavior

3 sem. hrs. A systematic and critical study of the nature, patterns, and processes of violations of significant social norms by members of society. Specific attention is given to violations such as drug abuse, violence in and outside the family, and white-collar offenses.

SOCI 3350 - Sociology of Education

3 sem. hrs. Employing a sociological lens to examine formal education in the United States and other countries, students will explore various schools of thought and controversies surrounding education in modern societies. They will examine important issues related to formal education, such as the expansion of schooling, equality of educational opportunity, unequal achievement of groups of students, the reproduction of inequality in education, schools’ roles in the transmission of culture, and the social organization of schools.

SOCI 3370 - Native Americans in North America

3 sem. hrs. An ethnographic and historical analysis of Native American cultures in what is now called North America from prehistoric times to the present. (Credit may not be given for both this course and ANTH 3370.)

SOCI 4301 - Social Theory
3 sem. hrs. Combines an analysis of the major ideas and theories in sociology and their relationship to social research with an understanding of social processes and structures. Prerequisite: SOCI 1301 or permission of instructor. (Required for Majors.) Offered Fall semesters only.

SOCI 4310 - Sociology of Work and Occupations

3 sem. hrs. The study of work as a social phenomenon, including the social organization of work, occupations, and professions in society. The labor force, work culture, workers mobility, career lines, and leisure in contrast to work are considered.

SOCI 4312 - Social Class and Inequality

3 sem. hrs. The study of social inequality in society, with emphasis on the social class structure of the United States, its origins, development, and consequences for individuals, groups, and society. Prerequisite: SOCI 1301 and SOCI 3312 or permission of instructor.

SOCI 4315 - Complex Organizations

3 sem. hrs. The development of a theoretical and applied understanding of those social institutions where most of us will be employed. Topics include organizational effectiveness, decision making, designs, politics, cultures, as well as gender and racial inequality.

SOCI 4320 - Sociology of Sports

3 sem. hrs. This course critically examines the relationships between organized sports and the rest of society. It will undertake a sociological analysis of how organized sports affect, and are affected by, major social institutions such as the economy, racial and gender relations, mass media, and religion, to mention but a few.

SOCI 4325 - Medical Sociology

3 sem. hrs. Examination of the social contexts of physical and mental health, illness and medical care. Topics include the social, environmental, and occupational factors in health and disease; socialization of health care providers; doctor-patient relationships; the structure and processes of health care organizations; and health care and social change.

SOCI 4326 - Food and Society

3 sem. hrs. lecture The study of the social and cultural dimensions of the human food system, from production to consumption. The course proposes that food systems and food
consumption patterns are products of the interplay of social forces of innovation and change with counter forces of continuity and stability. The main areas covered include the origins of human subsistence, the development of the modern food system, food and the family, eating out, diet and health, diet and body image, food risks, the meanings of meat, and vegetarianism.

SOCI 4331 - Juvenile Delinquency

3 sem. hrs. Examination of the extent and pattern of juvenile crime today. History and theory of delinquency and society's response to it. (Credit may not be given for both this course and CRIJ 4331.) Cross listed with CRIJ 4331.

SOCI 4335 - Criminology

3 sem. hrs. An examination of the major sociological explanations for crime, criminal behavior, and the social responses to crime. (Credit may not be given for both this course and CRIJ 4335.) Cross listed with CRIJ 4335.

SOCI 4385 - Senior Seminar in Sociology

3 sem. hrs. This is a capstone course required of all students graduating with a major in sociology. The course is designed to enable faculty to assess each student's expertise in applying sociological concepts and practices. Students demonstrate this expertise through the completion of a final project that combines a minimum of classroom hours with substantial research activity. The course is team taught by the entire sociology faculty. Students are allowed considerable flexibility in selecting either survey research or evaluation research for their project. (Offered Spring Only.)

SOCI 4390 - Topics in Sociology

3 sem. hrs. A consideration of various topics on social behavior and social structure. May be repeated when topics vary.

SOCI 4396 - Directed Individual Study

1-3 sem. hrs. See College description. Offered on application.

SOCI 4398 - Applied Experience

3 sem. hrs. See College description. Offered on application.

SOCI 4445 - Social Research Methods
4 sem. hrs. A survey of the basic research techniques and methods used in sociology including content analysis, field research, sampling, surveys, polls, and computerized data analysis. Prerequisite: SOCI 1301 or permission of instructor. (Offered Fall Only.)

Social Work

SOCW 3301 - Introduction to Social Work

3 sem. hrs. An introductory survey of the field of social work including the nature, function, and types of social work practice. This course is designed to acquaint the student with the history, terminology, scope, and values of the profession of social work. Prerequisite: PSYC 2301 or SOCI 1301 or permission of instructor.

SOCW 3310 - Approaches to Social Welfare

3 sem. hrs. Origin, development, and present status of social service programs with particular emphasis on the relationship of program resources, human needs, and the methods through which services are provided.

SOCW 3320 - Social Services in the Community

3 sem. hrs. An introduction to the organizations and agencies involved in social service delivery. Exploration of the range and characteristics of the human service delivery system with particular emphasis on the social work profession. Prerequisite: SOCW 3310 or permission of instructor.

SOCW 3350 - Social Work Practice

3 sem. hrs. Social Work practice from a generalist perspective of social work intervention. Data collection, assessment, intervention, planning/implementation, and evaluation are covered. Prerequisite: SOCW 3301 or permission of instructor.

SOCW 4396 - Directed Individual Study

1-3 sem. hrs. See College description. Offered on application. Prerequisite: consent of instructor.

SOCW 4398 - Applied Experience
3 sem. hrs. One semester course of field work in a selected agency. (See college
description. Offered on application.) Prerequisite: consent of instructor.

Spanish

SPAN 1100 - Introduction to Service Learning

1 sem. hrs. This is a one-credit course in which students in Spanish 1311 or 1312 may
enroll and participate. This service learning course aims to promote collaborative learning
between college students learning Spanish and people in the community. Available upon
application. Repeatable up to 2 hours. Online Classification: Face-to-Face 1-24%

SPAN 1311 - Spanish I

3 sem. hrs. Introduction to listening, speaking, reading and writing skills within a Spanish
cultural framework. For students without previous knowledge of the language. (Language
laboratory required. One hour per week.) *A lab fee is required for these courses.
TCCNS Equivalent: SPAN 1311

SPAN 1312 - Spanish II

3 sem. hrs. Continued practice in listening, speaking, reading and writing skills within a
Spanish cultural framework. (Language laboratory required. One hour per week.) A lab
fee is required for these courses. Spanish 1311 or equivalent required. TCCNS
Equivalent: SPAN 1312

SPAN 2311 - Spanish III

3 sem. hrs. Study of more complex Spanish sentence structure to further listening,
speaking, reading and writing skills at an intermediate level within a Spanish cultural
framework. Prerequisite: SPAN 1312, equivalent through credit by examination, or
placement by departmental examination. TCCNS Equivalent: SPAN 2311

SPAN 2312 - Continuing Spanish

3 sem. hrs. Continued development and review of all language skills at an intermediate
level within a Spanish framework with an emphasis in the linguistic and cultural
perspective. Prerequisite: SPAN 2311, equivalent through credit by examination, or
placement by departmental examination. TCCNS Equivalent: SPAN 2312
SPAN 2313 - Spanish for Heritage Speakers

3 sem. hrs. An introductory course designed for bilingual students who wish to enhance their linguistic skills (speaking, listening, reading and writing). This course will focus on the cultural and historical aspects related to the heritage Spanish speaker. TCCNS Equivalent: SPAN 2313

SPAN 2315 - Language and Culture for Heritage Learners

3 sem. hrs. This course is designed to guide Spanish heritage language learners, as well as advanced learners of Spanish, in the development of their oral proficiency, written communication, and grammatical accuracy while exploring different cultural aspects from the Spanish-speaking world. It is highly recommended for students who have taken SPAN 2313 and/or who are transitioning into upper-division Spanish courses. This course may be used to satisfy the university core curriculum requirement in Language, Philosophy, and Culture. Prerequisite: SPAN 2313, equivalent, or faculty approval. TCCNS Equivalent: SPAN 2315 Online Classification: Face-to-Face 1-24%

SPAN 3302 - Spanish Composition

3 sem. hrs. A course designed to develop analytical perspectives in literary criticism and to strengthen reading and writing skills in Spanish through intensive reading of Spanish, Spanish American, and Chicano fiction. Prerequisite: SPAN 2312, equivalent, or faculty approval.

SPAN 3303 - Spanish Conversation

3 sem. hrs. A course designed to strengthen the student's oral proficiency in the language through selected readings, videos and oral presentations. Prerequisite: SPAN 2312, equivalent, or faculty approval.

SPAN 3304 - Spanish Civilization

3 sem. hrs. This course has been designed to provide a general overview of the cultural, linguistic, and historical experience of the Spanish people within its larger European context. Conducted in Spanish unless otherwise stated.

This course may be used to satisfy the university core curriculum requirement in Language, Philosophy, and Culture. Prerequisite: SPAN 2312, equivalent, or faculty approval.

Online classification: Face-to-Face 1-24%.
SPAN 3305 - Latin American Civilization

3 sem. hrs. This course is designed to provide a general overview of the cultural, linguistic, and historical experience of Latin American people before and after Columbus. Conducted in Spanish unless otherwise stated.

This course may be used to satisfy the university core curriculum in Language, Philosophy, and Culture. Prerequisite: SPAN 2312, equivalent, or faculty approval.

Online Classification: Face-to-Face 1-24%.

SPAN 3307 - Spanish Literature I

3 sem. hrs. A critical approach to the study of early Spanish literature from the Middle Ages through the Eighteenth Century. Literary selections include masterpieces that establish and reflect Spain's literary tradition within its larger European context. This course may be used to satisfy the university core curriculum requirement in literature. Conducted in Spanish.

SPAN 3308 - Spanish Literature II

3 sem. hrs. A continuation of a critical approach to the study of Spanish literature from the Nineteenth Century through the present. Representative works of Spanish Romanticism, Realism, Naturalism, and contemporary literature are studied within their larger European context. This course may be used to satisfy the university core curriculum requirement in literature. Conducted in Spanish.

SPAN 3309 - Spanish American Literature I

3 sem. hrs. A critical approach to the study of early Spanish American literature from the Pre-Columbian Period through the Nineteenth Century. Selected readings in all literary genres, major themes, writers, and early literary movements will be studied within their larger Latin American context. This course may be used to satisfy the university core curriculum requirement in literature. Conducted in Spanish.

SPAN 3310 - Spanish American Literature II

3 sem. hrs. A continuation of a critical approach to the study of Spanish American literature from the Twentieth Century through the present. Representative works of Latin American writers and literary movements: Modernism, Realism, Avant-Garde, Regionalism, Magic-Realism are studied within their larger Latin American context. This
course may be used to satisfy the university core curriculum requirement in literature. Conducted in Spanish.

SPAN 3311 - Spanish Phonetics

3 sem. hrs. A course designed to study the production and discrimination of the Spanish sound system with a general overview of the geographical and social distribution of phonemic and allophonic variants.

SPAN 3312 - Spanish Grammar

3 sem. hrs. The course will serve to expand vocabulary, further develop writing skills; understand, apply, and use Spanish grammatical structures, and communicate more accurately in written and oral Spanish within a Hispanic cultural context.

SPAN 3313 - Introduction to Translation

3 sem. hrs. This course is an introduction to the theory, methods and practice of English to Spanish and Spanish to English translation of general texts from different fields. Challenges related to culture and language, as well as professional ethics will be examined.

SPAN 3315 - Civilizations of the Spanish-Speaking World

3 sem. hrs. This course has been designed to provide a general overview of the historical, sociocultural and political experience of peoples from the Spanish-Speaking world, both from Spain and Spanish America. Prerequisite: SPAN 2312, equivalent, or faculty approval.

SPAN 3316 - Spanish for the Professions

3 sem. hrs. The course stresses Health, Business and Legal terminology in Spanish to enhance communication skills and cultural knowledge that will help to serve the South Texas Spanish speaking population as well as to conduct interactions with Spanish speakers and/or businesses through the United States and the world. Prerequisite: SPAN 2312, equivalent, or faculty approval.

SPAN 3317 - Introduction to Hispanic Linguistics

3 sem. hrs. This course introduces the study of language, the main subfields of Hispanic linguistics, and their application to other sciences. Advanced proficiency in Spanish required.
SPAN 3320 - Introduction to Spanish Literature

3 sem. hrs. A critical approach to the study of Spanish literature from the Middle Ages through the present. Representative works of Spanish literature are studied within their larger European context. It is highly recommended that students take any of the following before taking this course: SPAN 2313, 2315, 3302, 3303 have advanced proficiency or faculty permit. Conducted in Spanish, unless otherwise stated.

This course may be used to satisfy the University Core Curriculum requirement in Language, Philosophy, and Culture.

Online classification: Face-to-Face 1-24%

SPAN 3325 - Introduction to Latin American Literature

3 sem. hrs. A critical approach to the study of Latin American literature from the Pre-Columbian Period through the present. Selected readings in all literary genres, major themes, writers, and literary movements will be studied with a wide Latin American context. It is highly recommended that students take any of the following before taking this course: SPAN 2313, 2315, 3302, 3303, have advanced proficiency or faculty permit. Conducted in Spanish, unless otherwise stated. This course may be used to satisfy the University Core Curriculum requirement in Language, Philosophy, and Culture. Online classification: Face-to-Face 1-24%

SPAN 4100 - Service Learning

1 sem. hrs. This is a one-credit course designed specifically for students who are preparing themselves to serve the community using their Spanish language skills. Students in this course will familiarize themselves with the methodology of a particular field (heritage language teaching, translation, interpreting, etc) to be able to interact and serve Spanish-speaking individuals in the community. Available upon application. Repeatable up to 3 hours. Online classification: Face-to-Face 1-24%

SPAN 4301 - Spanish Civil War and Literature


SPAN 4302 - Mexican Narrative
3 sem. hrs. Examination of representative novels and short stories reflecting the emergence of a post-revolutionary society in Mexico. Conducted in Spanish.

SPAN 4303 - Spanish in the Southwest

3 sem. hrs. Cultural and linguistic dimensions of Spanish dialects of the Southwestern United States, with special attention to Texas Spanish and its sociolinguistic perspectives in the bilingual community at large. Prerequisites: SPAN 2312 or equivalent.

SPAN 4304 - Miguel de Cervantes' Don Quijote

3 sem. hrs. An advanced course designed to provide an introduction to Miguel de Cervantes' Don Quijote.

SPAN 4305 - Latin American Novel

3 sem. hrs. This course explores major novels from Latin America from the 20th century to the present. It examines the different problems, discourses, voices, contexts, and geographies that define this genre in Latin America.

SPAN 4306 - Modern Spanish Literature

3 sem. hrs. A course that focuses on modern Spanish literature. It is highly recommended that students take any of the following before taking this course: SPAN 2313, 2315, 3302, 3303, have advanced proficiency or faculty permit. Conducted in Spanish, unless otherwise stated. Online classification: Face-to-Face 1-24%

SPAN 4313 - Spanish Interpretation

3 sem. hrs. This course presents an introduction to methodologies, requirements, terminology, and practice of interpretation, with emphasis on simultaneous, consecutive, and sight interpretation.

SPAN 4320 - Spanish in the Americas

3 sem. hrs. A study of the Spanish that was brought to the Americas, its development, propagation and contact with native-American languages, including the sociocultural factors that have contributed to the linguistic variation in contemporary Spanish-speaking societies.

SPAN 4322 - Medical, Scientific and Technical Translation
3 sem. hrs. An advanced course in translation concentrating on medical, scientific and technical translation. The course is designed to extend student's knowledge of translation theory and consolidate their skills in specialized translation. Prerequisite: SPAN 3313. This course is part of the Translation Certificate. Student must obtain a grade of C or better to continue with the Translation Certificate.

SPAN 4327 - Methods in Foreign Language Instruction

3 sem. hrs. This course is designed to study the current methods in foreign languages, their application in maximizing language proficiency, and the role of the students' culture and language during the learning process.

SPAN 4390 - Topics in Spanish

3 sem. hrs. Study of specialized topics in language or literature. These courses may also be designed to develop terminology and overall Spanish proficiency regarding specific professions: Business, Medical, Criminal Justice, Sociology, etc. May be repeated when topics vary.

SPAN 4396 - Directed Individual Study

1-3 sem. hrs. See College description. Offered on application.

SPAN 4398 - Applied Experience

3 sem. hrs.
A practical work experience related to the Spanish area and related careers. It is intended to provide an opportunity for a student to gain first-hand experience in an unfamiliar field. Consequently, Applied Experience credit may not be granted for a student's regular work assignment or for previous work experience. Registration is by application. The application must include a clearly written description of the duties and responsibilities involved in the Applied Experience project, and be signed by the student, the on-site supervisor, and the faculty supervisor. Completed applications must be received in the Dean's Office by the last class day of the semester preceding intended registration. This course is graded "credit" or "no credit." No more than three semester hours of Applied Experience credit may be counted toward the baccalaureate degree. Undergraduate Applied Experience course will include no less than one hundred hours and no more than 150 hours of work experience per semester.

Online classification: Face-to-Face 1-24%

SPAN 4421 - Business, Commercial, and Legal Translation
4 sem. hrs. An advanced course in translation concentrating on business, commercial and legal texts. The course is designed to extend student's knowledge of translation theory and consolidate their skills in specialized translation. Prerequisite: SPAN 3313. The course will include a service-learning component. This course is part of the Translation Certificate. Student must obtain a grade of C or better to continue with the Translation Certificate.

Special Education

SPED 2397 - Special Education Field Experience

3 sem. hrs. This course requires students to participate in schools and programs that serve individuals with disabilities on and off campus. Students will be actively involved in the learning situation.

SPED 3325 - Strategic Instruction for Students with High-Incidence Disabilities

3 sem. hrs. This course provides an introduction and demonstration of specific skills necessary for teaching students with high-incidence disabilities.

SPED 3330 - Individualized Education Programs for Students with Disabilities

3 sem. hrs. This course emphasizes the design and implementation of individualized educational programs (IEP) for students with disabilities.

SPED 3335 - Applied Learning Theory

3 sem. hrs. This course is designed to develop and extend the student's knowledge of the principles of applied learning theory as it relates to students with extensive and pervasive support needs.

SPED 3340 - Individuals with Severe Disabilities^*^

3 sem. hrs. This course is an introductory study of the adaptations, approaches, and supports necessary to meet the educational needs of students who have communication, intellectual, motor, sensory, medical impairments, and/or other extensive and pervasive support needs. There are no prerequisite courses required to enroll in this course.

SPED 4310 - Students with Exceptionalities*
3 sem. hrs. This course is designed to familiarize the student with the various conditions of individuals with disabilities.

SPED 4315 - Motor Development for Students with Exceptional Needs

3 sem. hrs. A comparative overview of the physical development and motor-activity needs of students with disabilities.

SPED 4320 - Community-based Instruction for the Students with Exceptionalities

3 sem. hrs. Strategies and procedures for teaching community-based instruction to individuals with disabilities, including independent living and socialization skills, are discussed.

SPED 4345 - Behavioral Supports and Interventions for Students with Disabilities*

3 sem. hrs. This introductory course will focus on positive behavioral supports and behavior intervention techniques. Course content includes information on: definitions, characteristics, prevalence, causes, assessment, prevention of behavioral difficulties, functional behavior assessment, applied behavior analysis, education service delivery, advocacy, and other current issues in the field.

SPED 4696 - Directed Individual Study

1-6 sem. hrs. Programs will be designed for individual cases through special permission of the Department Chair and Dean. May be repeated for credit when the topic varies.

Theatre

THEA 1100 - Theatre Production Lab I

1 sem. hrs. Opportunity to participate in theatre productions in the areas of costume construction and stage makeup. Students are required to work on crews for the University Theatre productions. The course may be repeated for credit. Co-requisites: THEA 1371 Costume Construction and SMTE 0098 Theatre Student Safety Seminar. TCCNS Equivalent: DRAM 1120

THEA 1101 - Theatre Production Lab II
1 sem. hrs. Opportunity to participate in theatre productions in the areas of set construction, lighting, sound, and stagecraft. Students are required to work on crews for the University Theatre productions. The course may be repeated for credit. Co-requisites: THEA 2370 Theatre Stagecraft and SMTE 0098 Theatre Student Safety Seminar. TCCNS Equivalent: DRAM 1121

THEA 1310 - The Art of the Theatre*

3 sem. hrs. Introduction to the theatre as an art form. Includes exploration of the creative process from the perspective of the playwright, director, actor, and designer. TCCNS Equivalent: DRAM 1310 Meets Fine Arts requirements for the University Core Curriculum Program.

THEA 1341 - Stage Makeup

3 sem. hrs. A practical exploration of basic stage makeup techniques. The student will also investigate the relationships of character to makeup and begin to understand the work needed to design makeup for a production. Co-requisite: SMTE 0098 Theatre Student Safety Seminar. TCCNS Equivalent: DRAM 1341

THEA 1342 - Voice and Diction

3 sem. hrs. Basic voice training, including techniques for vocal production, manipulation, and control. Practical application of the vocal apparatus will be emphasized, including techniques of enunciation, projection, articulation, and the use of the International Phonetic Alphabet. (Credit may not be given for both this course and COMM 1342.) TCCNS Equivalent: SPCH 1342

THEA 1351 - Acting I

3 sem. hrs. The development of basic skills and techniques of acting, including sensory awareness, ensemble performing, character analysis, and script analysis. Emphasis on the mechanics of voice, body, emotion, and analysis as tools for the actor. TCCNS Equivalent: DRAM 1351

THEA 1352 - Acting II

3 sem. hrs. A continuation of Acting I with emphasis on characterization and working with extended realism. The student will study the theories of Constantin Stanislavski. Prerequisite: THEA 1351. TCCNS Equivalent: DRAM 1352

THEA 1371 - Costume Construction

THEA 2100 - Theatre Production Lab III

1 sem. hrs. One semester hour of credit may be received per semester for work done in the practical lab consisting of actual work on productions. One hour a week for one semester and additional laboratory hours as required. Co-requisite: SMTE 0098 Theatre Student Safety Seminar. TCCNS Equivalent: DRAM 2120

THEA 2101 - Theatre Production Lab IV

1 sem. hrs. One semester hour of credit may be received per semester for work done in the practical lab consisting of actual work on productions. One hour a week for one semester and additional laboratory hours as required. Co-requisite: SMTE 0098 Theatre Student Safety Seminar. TCCNS Equivalent: DRAM 2121

THEA 2370 - Theatre Stagecraft

3 sem. hrs. Students will study the principles of stagecraft, and be provided hands on experiences in set construction, painting, lighting, sound and other techniques. Students will also utilize the computer to facilitate designs and projects for this course. Co-requisites: THEA 1101 Theatre Production Lab II and SMTE 0098 Theatre Student Safety Seminar. TCCNS Equivalent: DRAM 1330

THEA 3100 - Theatre Production Lab V

1 sem. hrs. One semester hour of credit may be received per semester for work done in the practical lab consisting of actual work on productions. One hour a week for one semester and additional laboratory hours as required. Co-requisite: SMTE 0098 Theatre Student Safety Seminar.

THEA 3101 - Theatre Production Lab VI

1 sem. hrs. One semester hour of credit may be received per semester for work done in the practical lab consisting of actual work on productions. One hour a week for one semester and additional laboratory hours as required. Co-requisite: SMTE 0098 Theatre Student Safety Seminar.

THEA 3165 - The Design and Technical Portfolio.
1 sem. hrs. A basic course in the development of the student portfolio for the areas of design and technology with emphasis in the theatrical job market or graduate school. Co-requisite: SMTE 0098 Theatre Student Safety Seminar.

THEA 3300 - Movement for Actors

3 sem. hrs. Explores the movement skills necessary for the actor with emphasis on individual physical training and improvisation. Prerequisites: THEA 1351, THEA 1352.

THEA 3302 - Creative Dramatics

3 sem. hrs. Theories and practices incorporating the techniques of creative drama in the elementary, middle, and high school classroom. Especially recommended for elementary education, recreation, and the social sciences.

THEA 3303 - Theatre in the Public Schools

3 sem. hrs. Theories and practices of incorporating theatre activities in the public schools. Especially recommended to students of elementary and secondary education, recreation and the social sciences.

THEA 3310 - Contemporary Theatre

3 sem. hrs. An overview of the nature and function of theatre in our contemporary society with discussion of representative plays and playwrights, theatrical styles, and avant-garde theatre. Students will explore multicultural, political, and experimental themes, attend theatrical productions, and meet with actors, designers, and directors to discuss contemporary practices.

THEA 3311 - Script Analysis

3 sem. hrs. Students will learn the principles, techniques, and processes of dramatic structure found in written scripts as seen through the perception of the stage director, actor, and designer. A written intensive analysis of each script studied during the semester will be required. Focus will be on the theories of Aristotle and Eugene Scribe's "Well Made Play Formula". Prerequisites: THEA 1352, THEA 2370.

THEA 3312 - Stage Combat I

3 sem. hrs. (1:2) Stage combat is a unique form of acting and movement; integral to the training of the professional actor and an extremely marketable skill. This course is an introduction to the stage fight discipline. It is important as actors that we develop a keen
sense of duality in performance; a seemingly impromptu, theatrically engaging moment of violence built upon a foundation of safe, consistent physical dialogue. In this way, we can enhance the physical lives of all the characters we play; especially those engaged in acts of violence. This course explores many fundamental acting techniques in a new light including responsibility to a partner, listening and responding, projection, articulation, spatial awareness and above all intent. May be repeated for credit.

THEA 3335 - UIL Debate and Speech

3 sem. hrs. This course will prepare students to coach High School speech events as extra-curricular and co-curricular activities. The class will focus primarily on Texas University Interscholastic Leagues (UIL competitions) but will also cover events sponsored by the Texas Forensics Association (TFA) and the National Forensics League (NFL). Areas covered will include oral interpretation, extemporaneous speaking, and debate.

THEA 3340 - Audition Preparation

3 sem. hrs. Provides the student with the information and skills needed for auditioning in both professional and educational theatre. Prerequisites: THEA 1351, THEA 1352.

THEA 3350 - Production Management

3 sem. hrs. This course is a survey of stage management and theatre administration. Topics to be studied include stage management, production management, professional unions, publicity/marketing, box office and house management. Prerequisites: THEA 1371, THEA 2370, THEA 3311.

THEA 3370 - History of the Theatre I

3 sem. hrs. Historical investigation of the nature and function of theatre from primitive rituals through the Renaissance periods with discussions of representative plays/playwrights, theatrical styles and stage design. Prerequisite: THEA 3311.

THEA 3371 - History of the Theatre II

3 sem. hrs. Historical investigation of theatre from the Restoration era to the present. Focus on the nature and function as well as the critical analysis of theatre and design, various movements, and influential people. Prerequisite: THEA 3311.

THEA 3373 - Principles of Design
3 sem. hrs. Builds upon the student's practical lab experience and understanding of theatrical design begun in costume construction and theatre stagecraft. Students will explore the creative process of theatre production as it pertains to lighting, set, sound, props, and costume design projects. Prerequisite: THEA 1371 Costume Construction, THEA 2370 Theatre Stagecraft. Co-requisite: SMTE 0098 Theatre Student Safety Seminar.

THEA 3375 - Acting III: Period Styles

3 sem. hrs. Specific training for actors in period plays. Emphasis on training the actor for the Classical, Renaissance, Shakespearean, and Modern Periods. Prerequisites: THEA 1351, THEA 1352.

THEA 3380 - History of Theatrical Styles

3 sem. hrs. A survey and research-oriented course which studies the major impact of the visual, artistic, historical, and social period movements. The course will focus on the approach that the actor, designer, director, and playwright take in developing the understanding of the environment of a play's location and time period. Prerequisite: Approval of Instructor.

THEA 3381 - Drawing and Rendering for the Stage

3 sem. hrs. Examination of the uses of the various materials used and the development of the techniques employed in the creation and presentation of theatrical renderings and models. Prerequisite: Approval of Instructor. Co-requisite: SMTE 0098 Theatre Student Safety Seminar.

THEA 3382 - Drafting and Computer-Aided Design for the Stage


THEA 3385 - Musical Theatre

3 sem. hrs. The focus of the course is on musical theatre history, exploring trends in the genre, audition techniques, characterization, staging and choreography.

THEA 3386 - Playwriting
3 sem. hrs. Playwriting is a fundamentals course in writing for the stage. The course will cover playwriting for monologues, 10 Minute Plays, and One Act Plays. Completion of Script Analysis is strongly suggested but not required. May be repeated for credit.

THEA 4100 - Senior Seminar

1 sem. hrs. A seminar class for the graduating senior. The student will be given the opportunity to address individual weaknesses and strengths in preparation for graduate school or entering the job market.

THEA 4200 - Senior Capstone

2 sem. hrs. The course is designed to provide the graduating senior an opportunity to complete a final project in the acting/directing or design/tech focus areas. The student's project will be juried by the entire faculty and include a research and production component.

THEA 4312 - Stage Combat II

3 sem. hrs. (1:2) Stage combat is a continuation of the skills of acting and movement; integral to the training of the professional actor and an extremely marketable skill. This course is an advanced weaponry course in the stage fight discipline. It is important as actors that we develop a keen sense of duality in performance; a seemingly impromptu, theatrically engaging moment of violence built upon a foundation of safe, consistent physical dialogue. In this way, we can enhance the physical lives of all the characters we play; especially those engaged in acts of violence. May be repeated for credit. Prerequisite: THEA 3312 Stage Combat I

THEA 4313 - Theatre Technologies

3 sem. hrs. Designed to provide a forum for intensive study of a particular aspect of modern theatrical technologies. Various topics may be selected based on current industry trends, student needs and available resources. Prerequisites: THEA 2370 Theatre Stagecraft, THEA 3381 Drawing and Rendering for the Stage and THEA 3382 Drafting and Computer-Aided Design for the Stage. Co-requisite: SMTE 0098 Theatre Student Safety Seminar.

THEA 4314 - Collaborative Approaches to Design

3 sem. hrs. An advanced design course where the student will examine the process of design from the standpoint of the relationship created within the design team. Through class projects, the student will participate in a design process which fosters
communication of ideas, written analysis and collaboration in pursuit of a unified design in all aspects of production. Prerequisite: THEA 3373 Principles of Design. Co-requisite: SMTE 0098 Theatre Student Safety Seminar.

THEA 4323 - Oral Interpretation of Children's Literature

3 sem. hrs. A study, primarily through the medium of performance, of various types and forms of literature for children. Strongly oriented toward teaching literature in the elementary school classroom. (Credit may not be given for both this course and COMM 4323 or ENGL 4370.)

THEA 4333 - Technical Direction

3 sem. hrs. An advanced technical class geared for the student who wishes to receive training and employment as a technical director. Prerequisite: Approval of Instructor.

THEA 4360 - Stage Direction I

3 sem. hrs. The study and practical application of directing principals for the beginning director. Elements of script analysis, blocking, movement, character development, tempo, and design will be investigated as part of the directing process. The student will direct a ten-minute play for public performance. Prerequisite: THEA 1352, THEA 3311.

THEA 4361 - Stage Direction II

3 sem. hrs. An advanced study in directing with actual experience in organization, interpretation, casting, and producing the one-act play. The student will direct a one-act play for public performance. Prerequisite: THEA 4360.

THEA 4365 - Costume Design

3 sem. hrs. A study of the theory and practice of costume design utilizing the human form as a design element for the stage. Encompasses theatre form, style, and drafting and drawing techniques. Students are required to work on University Theatre productions as part of this course. Co-requisite: SMTE 0098 Theatre Student Safety Seminar.

THEA 4366 - Scene Painting

3 sem. hrs. The examination and practice of the various materials and techniques of professional scenic painting, including material mixing, faux techniques, and textural applications.
THEA 4370 - Set Design

3 sem. hrs. A study of the theory and practice of set design. Students will learn the fundamentals of theatre design and will apply this knowledge to projects. Projects will encompass theatre form, style, and concept utilization. Students are required to work on University Theatre productions as a part of this course. Co-requisite: SMTE 0098 Theatre Student Safety Seminar.

THEA 4371 - Acting for the Camera

3 sem. hrs. Emphasizes the practice of various acting styles for television, video, and film. The student will receive practical experience in commercial styles, public service announcements, television and video style acting, and film scene study. (Credit may not be given for both this course and COMM 4371.)

THEA 4372 - Theatre Practicum

3 sem. hrs. Advanced practice and participation in set construction, lighting implementation, and stagecraft. Students will build upon skills in the areas of theatre production and design for production in the University Theatre. Class meets twice weekly with additional crew/lab work requirements as well. Students are required to work on University Theatre productions as a part of this course. May be repeated twice for credit. Co-requisite: SMTE 0098 Theatre Student Safety Seminar.

THEA 4373 - Improvisation Skills Level I

3 sem. hrs. Improvisation Skills Level I is a fundamentals of improvisation course that teaches the guidelines for successful improvisation skills. The course emphasizes the basics of successful improvisation as it pertains to Theatre, Communication, and the student who wants to improve their communication skills. May be repeated for credit.

THEA 4374 - Improvisation Skills Level II

3 sem. hrs. Improvisation Skills Level II is a continuation of Improvisation course level I that instructs the student in the guidelines for advanced improvisation skills. The course teaches the skills necessary for advanced individual and group improvisation. Emphasis is on ensemble performance. May be repeated for credit. Prerequisite: THEA 4373 Improvisation Skills Level I

THEA 4375 - Lighting Design
THEA 4380 - Advanced Stage Makeup

3 sem. hrs. A study of the theory and practice of designing makeup for the stage. Students will learn about aesthetics, application, and techniques of stage makeup. Students will do makeup designs as projects in the class. Students are required to work on University Theatre productions as part of this course. Co-requisite: SMTE 0098 Theatre Student Safety Seminar.

THEA 4384 - Theatre Production

1-3 sem. hrs. An applied production experience in which students perform in a play, work back stage or on a stage crew, or learn to design a play or musical from conception to final production. Students enrolling in the course but not cast in the shows will work backstage (technical production) or in another production capacity. Enrollment is by application only, and must be approved by the instructor in advance of registration. As part of the application process the number of credit hours will be determined by the instructor. May be repeated for credit.

THEA 4390 - Topics in Theatre

1-3 sem. hrs. Study of specialized topics and themes in the areas of acting, directing, and theatre history. May be repeated when topics vary.

THEA 4396 - Directed Individual Study

1-3 sem. hrs. See College description. By application. Prerequisite: Approval of Instructor.

THEA 4398 - Applied Experience

3 sem. hrs. See College description. By application. Prerequisite: Approval of Instructor.

University Studies
UNIV 1100 - Career and Academic Planning

1 sem. hrs. Career and Academic Planning assists students in confirming career and educational choices based on strengths-based career assessments, research on career interests, and clarification of majors and degree options. Through in-class activities, discussions, and presentations, students will explore the variety of educational opportunities available to them at the university to support their career and academic interests. In addition, students will be introduced to decision-making and goal-setting strategies to identify and set achievable academic and career goals.

UNIV 1101 - First-Year Seminar I*

1 sem. hrs. Students are introduced to college level work and responsibilities, and provided with appropriate support and resources to successfully navigate their first semester. Required of full-time first-year students; to be taken as a component of a student's first learning community.

UNIV 1102 - First-Year Seminar II*

1 sem. hrs. Continuation of UNIV 1101. Students participate in academic discourse and prepare for their future coursework and careers. Required of full-time first-year students; to be taken as a component of a student's second learning community.

UNIV 4350 - University Studies Capstone

3 sem. hrs. This course emphasizes writing, research, professionalization, and workforce preparation. Students will be responsible for developing a reflective writing portfolio that showcases their academic specialization and preparation within the University Studies program. The course will also cover the practical skills of obtaining employment, including writing resumes, effectively interviewing, and effectively searching for available jobs.

Women and Gender Studies

WGST 3301 - Introduction to Women and Gender Studies
3 sem. hrs. An introduction to the study of women and gender across disciplines and cultures. Designed to engage students in some of the most important methodological and theoretical debates regarding women's experiences and the construction of knowledge about women historically and today. Literary, anthropological, sociological, historical, scientific, and managerial perspectives may be included.

WGST 4380 - Senior Seminar in Women and Gender Studies

3 sem. hrs. This seminar explores the relationship between theory and application in the field of women and gender studies. This includes the study of feminist theories and methodologies with special attention to the application of these to current debates and social issues. In addition, students must complete a research paper or applied experience project that is relevant for their major field of study.

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Emeriti Faculty

Regents Professors

The Texas A&M University System Board of Regents

Board of Regents

Administration

Administration

Appendices

- A: Glossary
- B: Lower-Division Transfer Courses: Common Courses.
- C: Drug and Alcohol Abuse Prevention Program
- D: Hazing
### A: Glossary

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<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Admission</td>
<td>The process of being brought into the University. A student is not considered for admission until all specified forms and fees have been received.</td>
</tr>
<tr>
<td>Census Date</td>
<td>The day, each term, on which official calculations are determined. For semesters it is the 12th class day, and for summer terms the 4th class day. Registration and Adds may not occur after this date.</td>
</tr>
<tr>
<td>Class Days</td>
<td>The days, Monday through Friday, during which the University is in session; not the days on which an individual class meets.</td>
</tr>
<tr>
<td>Degree Student</td>
<td>One admitted to a degree program.</td>
</tr>
<tr>
<td>Drop</td>
<td>The process of terminating enrollment in one or more classes while remaining enrolled for at least one class for the same semester. A fee is charged for dropping a class after the term has started.</td>
</tr>
<tr>
<td>Full Time</td>
<td>A degree-seeking undergraduate attempting 12 or more semester hours in a semester. A degree-seeking graduate student attempting 9 semester hours in a semester.</td>
</tr>
<tr>
<td>GPA</td>
<td>Grade Point Average. Please check elsewhere in this catalog for method of calculation.</td>
</tr>
<tr>
<td>Graduation</td>
<td>The ceremonial completion of a degree program. The degree is not awarded until all academic requirements are certified as completed.</td>
</tr>
<tr>
<td>Graduate Student</td>
<td>The student initiates application for graduation at point of registration for last term of study. Application must be processed for each attempt.</td>
</tr>
<tr>
<td>Hold</td>
<td>A student who holds a baccalaureate degree and is enrolled in a graduate program of study.</td>
</tr>
<tr>
<td>Hold</td>
<td>A note placed in a student record which restricts a particular activity. Only the office which places a hold can remove it.</td>
</tr>
<tr>
<td>Late Registration</td>
<td>A period beginning with the first day of classes and ending on or before the census date during which registration may occur. Special permission may be required. A late registration fee is assessed.</td>
</tr>
</tbody>
</table>

- E. Student Travel Rule
Matriculation  The initial registration as a degree-seeking student toward a particular degree. A student matriculates once for each degree.

Non-Degree Student  One taking classes without the expectation of receiving a degree. A non-degree student is neither part time nor full time, and is not classified as freshman, sophomore, junior, or senior.

Pre/Co Requisite  A requirement that must be completed before/at the same time a course may be attempted.

Registration  Reserving space in a course (a process called tallying) followed by payment of all tuition and fees: it is a two-part process. Registration is not completed until payment has occurred.

Restricted Course  One for which admission is limited to a particular classification of student. A student who has been enrolled in error can be removed administratively.

Transcript  A record of a student's academic history at the University. It is prepared by the Office of the University Registrar. Please check with that office for preparation schedule and fees.

Withdrawal  The process of dropping all classes for a given term. A check-out process is involved, and the student is not associated with the University until he/she seeks reinstatement for a subsequent term.

B: Lower-Division Transfer Courses: Common Courses.

Texas Common Course Numbering System (TCCNS)

The Texas Common Course Numbering System (TCCNS) is a cooperative effort among Texas community colleges and universities to facilitate transfer of freshman- and sophomore-level general academic courses.

The TCCNS provides a shared, uniform set of course designations for students and their advisors to use in determining both course equivalency and degree applicability of transfer credit on a statewide basis. When students transfer between two participating TCCNS institutions, a course taken at the sending institution transfers as the course carrying, or cross-referenced with, the same TCCNS designation at the receiving institution.
In the common course numbering system, each course is identified by a four-letter "rubric" (i.e., prefix or department abbreviation) and a four-digit number. The first digit of the number reflects the academic level of the course (1 and 2 are lower-division courses) and the second digit reflects the semester-credit-hour value of the course. The third and fourth digits establish course sequencing and/or distinguish this course from others of the same level, credit value, and rubric. Texas A&M University-Corpus Christi uses this format as the basis for numbering most lower-division courses.

Table of Common Courses

The following table identifies selected TCCNS courses and the equivalent lower-division Texas A&M University-Corpus Christi courses. The equivalency table is updated periodically.

Students attending community colleges or universities that are participating TCCNS institutions may use the table as a guide in selecting courses that will transfer to Texas A&M University-Corpus Christi. Students should become familiar with the requirements of the University Core Curriculum Program and with degree requirements so that they may select appropriate transfer courses. (A list of core curriculum transfer courses is provided later in this chapter.)

Some college-level courses that are not equivalent to courses at the University may transfer for credit. The Office of Recruitment and Admissions can provide information about the transferability of particular courses.

<table>
<thead>
<tr>
<th>TCCNS Courses</th>
<th>Texas A&amp;M University-Corpus Christi Course Numbers &amp; Titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 2301</td>
<td>Principles of Accounting I - Financial</td>
</tr>
<tr>
<td></td>
<td>ACCT 2301 Financial Accounting</td>
</tr>
<tr>
<td>ACCT 2302</td>
<td>Principles of Accounting II - Managerial</td>
</tr>
<tr>
<td></td>
<td>ACCT 2302 Managerial Accounting</td>
</tr>
<tr>
<td>ARTS 1301</td>
<td>Art Appreciation</td>
</tr>
<tr>
<td></td>
<td>ARTS 1301 Art and Society</td>
</tr>
<tr>
<td>ARTS 1303</td>
<td>Art History I</td>
</tr>
<tr>
<td></td>
<td>ARTS 1303 Art History Survey I</td>
</tr>
<tr>
<td>ARTS 1304</td>
<td>Art History II</td>
</tr>
<tr>
<td></td>
<td>ARTS 1304 Art History Survey II</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>ARTS 1311</td>
<td>Design I (2-dimensional)</td>
</tr>
<tr>
<td>ARTS 1312</td>
<td>Design II (3-dimensional)</td>
</tr>
<tr>
<td>ARTS 1316</td>
<td>Drawing I</td>
</tr>
<tr>
<td>ARTS 1317</td>
<td>Drawing II</td>
</tr>
<tr>
<td>ARTS 2316</td>
<td>Painting I</td>
</tr>
<tr>
<td>ARTS 2323</td>
<td>Drawing III</td>
</tr>
<tr>
<td>ARTS 2326</td>
<td>Sculpture I</td>
</tr>
<tr>
<td>ARTS 2333</td>
<td>Printmaking I</td>
</tr>
<tr>
<td>ARTS 2346</td>
<td>Ceramics I</td>
</tr>
<tr>
<td>ARTS 2356</td>
<td>Photography I (fine arts emphasis)</td>
</tr>
<tr>
<td>BIOL 1308</td>
<td>Biology for Non-Science Majors I (lecture)</td>
</tr>
<tr>
<td>BIOL 1406</td>
<td>Biology for Science Majors I</td>
</tr>
<tr>
<td>BIOL 1407</td>
<td>Biology for Science Majors II</td>
</tr>
<tr>
<td>BIOL 2401</td>
<td>Anatomy and Physiology I</td>
</tr>
<tr>
<td>BIOL 2402</td>
<td>Anatomy and Physiology II</td>
</tr>
<tr>
<td>BIOL 2416</td>
<td>Genetics</td>
</tr>
<tr>
<td>BIOL 2420</td>
<td>Microbiology for Non-Science Majors</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>BIOL 2421</td>
<td>Microbiology for Science Majors</td>
</tr>
<tr>
<td>BCIS 1305</td>
<td>Business Computer Applications</td>
</tr>
<tr>
<td>BUSI 1301</td>
<td>Business Principles</td>
</tr>
<tr>
<td>BUSI 1307</td>
<td>Personal Finance</td>
</tr>
<tr>
<td>CHEM 1305</td>
<td>Introductory Chemistry I</td>
</tr>
<tr>
<td>CHEM 1411</td>
<td>General Chemistry I</td>
</tr>
<tr>
<td>CHEM 1412</td>
<td>General Chemistry II</td>
</tr>
<tr>
<td>COMM 1307</td>
<td>Introduction to Mass Communication</td>
</tr>
<tr>
<td>COMM 2330</td>
<td>Introduction to Public Relations</td>
</tr>
<tr>
<td>COMM 2311</td>
<td>Media Writing</td>
</tr>
<tr>
<td>COMM/DRAM 2366</td>
<td>Introduction to Cinema</td>
</tr>
<tr>
<td>COSC 1301</td>
<td>Introduction to Computing</td>
</tr>
<tr>
<td>COSC 1436</td>
<td>Programming Fundamentals I</td>
</tr>
<tr>
<td>COSC 1437</td>
<td>Programming Fundamentals II</td>
</tr>
<tr>
<td>COSC 2436</td>
<td>Programming Fundamentals III</td>
</tr>
<tr>
<td>CRIJ 1301</td>
<td>Introduction to Criminal Justice</td>
</tr>
<tr>
<td>----------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>CRIJ 1306</td>
<td>Court Systems and Practices</td>
</tr>
<tr>
<td>CRIJ 1310</td>
<td>Fundamentals of Criminal Law</td>
</tr>
<tr>
<td>CRIJ 2313</td>
<td>Correctional Systems &amp; Practices</td>
</tr>
<tr>
<td>CRIJ 2328</td>
<td>Police Systems and Practices</td>
</tr>
<tr>
<td>DRAM 1120</td>
<td>Theater Practicum I</td>
</tr>
<tr>
<td>DRAM 1121</td>
<td>Theater Practicum II</td>
</tr>
<tr>
<td>DRAM 1310</td>
<td>Introduction to Theater</td>
</tr>
<tr>
<td>DRAM 1330</td>
<td>Stagecraft I</td>
</tr>
<tr>
<td>DRAM 1341</td>
<td>Makeup</td>
</tr>
<tr>
<td>DRAM 1342</td>
<td>Introduction to Costume</td>
</tr>
<tr>
<td>DRAM 1351</td>
<td>Acting I</td>
</tr>
<tr>
<td>DRAM 1352</td>
<td>Acting II</td>
</tr>
<tr>
<td>DRAM 2120</td>
<td>Theater Practicum III</td>
</tr>
<tr>
<td>DRAM 2121</td>
<td>Theater Practicum IV</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
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</tr>
<tr>
<td>DRAM 2366</td>
<td>Introduction to Cinema</td>
</tr>
<tr>
<td>ECON 1301</td>
<td>Introduction to Economics</td>
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<tr>
<td>ECON 2301</td>
<td>Principles of Macroeconomics</td>
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<td>ECON 2302</td>
<td>Principles of Microeconomics</td>
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<td>Introduction to the Teaching Profession</td>
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<td>ENGL 1301</td>
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<td>ENGL 1302</td>
<td>Composition II</td>
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<tr>
<td>ENGL 2331</td>
<td>World Literature (Single-Semester Course)</td>
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<tr>
<td>ENGL 2332</td>
<td>World Literature I</td>
</tr>
<tr>
<td>ENGL 2333</td>
<td>World Literature II</td>
</tr>
<tr>
<td>ENGR 1201</td>
<td>Introduction to Engineering</td>
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<tr>
<td>ENGR 1304</td>
<td>Engineering Graphics I</td>
</tr>
<tr>
<td>ENGR 2301</td>
<td>Engineering Mechanics-Statics</td>
</tr>
<tr>
<td>ENGR 2302</td>
<td>Engineering Mechanics-Dynamics</td>
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<td>ENGR 2304</td>
<td>Programming for Engineers</td>
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<tr>
<td>ENGR 2305</td>
<td>Electrical Circuits I</td>
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<td>ENGT 1401</td>
<td>Circuits I for Engineering Technology</td>
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<td>ENVR 1401</td>
<td>Environmental Science I</td>
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<td>FREN 2311</td>
<td>Intermediate French I</td>
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<td>FREN 2312</td>
<td>Intermediate French II</td>
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<td>GEOG 1303</td>
<td>World Regional Geography</td>
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<td>GEOG 1301</td>
<td>Physical Geography</td>
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<td>GEOL 1303</td>
<td>Physical Geology (lecture)</td>
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<td>GEOL 1403</td>
<td>Physical Geology</td>
</tr>
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<td>GEOL 1404</td>
<td>Historical Geology</td>
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<td>GERM 2312</td>
<td>Intermediate German II</td>
</tr>
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<td>GOVT 2304</td>
<td>Introduction to Political Science</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>GOVT 2305</td>
<td>Federal Government (Federal Constitution &amp; topics)</td>
</tr>
<tr>
<td>GOVT 2306</td>
<td>Texas Government (Texas Constitution and topics)</td>
</tr>
<tr>
<td>GOVT 2311</td>
<td>Mexican-American Politics</td>
</tr>
<tr>
<td>HIST 1301</td>
<td>United States History I</td>
</tr>
<tr>
<td>HIST 1302</td>
<td>United States History II</td>
</tr>
<tr>
<td>HIST 2301</td>
<td>Texas History</td>
</tr>
<tr>
<td>HIST 2311</td>
<td>Western Civilization I</td>
</tr>
<tr>
<td>HIST 2312</td>
<td>Western Civilization II</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>College Algebra</td>
</tr>
<tr>
<td>MATH 1316</td>
<td>Plane Trigonometry</td>
</tr>
<tr>
<td>MATH 1324</td>
<td>Mathematics for Business &amp; Social Sciences</td>
</tr>
<tr>
<td>MATH 1325</td>
<td>Calculus for Business &amp; Social Sciences</td>
</tr>
<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics (Quantitative Reasoning)</td>
</tr>
<tr>
<td>MATH 1350</td>
<td>Mathematics for Teachers I (Fundamentals of Mathematics I)</td>
</tr>
<tr>
<td>MATH 1351</td>
<td>Mathematics for Teachers II (Fundamentals of Mathematics II)</td>
</tr>
<tr>
<td>MATH 1442</td>
<td>Elementary Statistical Methods</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------</td>
</tr>
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<td>MATH 2305</td>
<td>Discrete Mathematics</td>
</tr>
<tr>
<td>MATH 2312</td>
<td>Precalculus Math</td>
</tr>
<tr>
<td>MATH 2413</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 2414</td>
<td>Calculus II</td>
</tr>
<tr>
<td>MATH 2415</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MUSI 1116</td>
<td>Sight Singing &amp; Ear Training I</td>
</tr>
<tr>
<td>MUSI 1117</td>
<td>Sight Singing &amp; Ear Training II</td>
</tr>
<tr>
<td>MUSI 1181</td>
<td>Piano Class I</td>
</tr>
<tr>
<td>MUSI 1182</td>
<td>Piano Class II</td>
</tr>
<tr>
<td>MUSI 1303</td>
<td>Fundamentals of Music (guitar)</td>
</tr>
<tr>
<td>MUSI 1306</td>
<td>Music Appreciation</td>
</tr>
<tr>
<td>MUSI 1307</td>
<td>Music Literature (one semester version)</td>
</tr>
<tr>
<td>MUSI 1311</td>
<td>Music Theory I</td>
</tr>
<tr>
<td>MUSI 1312</td>
<td>Music Theory II</td>
</tr>
<tr>
<td>MUSI 2116</td>
<td>Sight Singing &amp; Ear Training III</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>MUSI 2117</td>
<td>Sight Singing &amp; Ear Training IV</td>
</tr>
<tr>
<td>MUSI 2181</td>
<td>Piano Class III</td>
</tr>
<tr>
<td>MUSI 2182</td>
<td>Piano Class IV</td>
</tr>
<tr>
<td>MUSI 2311</td>
<td>Music Theory III</td>
</tr>
<tr>
<td>MUSI 2312</td>
<td>Music Theory IV</td>
</tr>
<tr>
<td>PHED 1301</td>
<td>Foundations of Kinesiology</td>
</tr>
<tr>
<td>PHIL 1301</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>PHIL 2303</td>
<td>Introduction to Logic</td>
</tr>
<tr>
<td>PHIL 2306</td>
<td>Introduction to Ethics</td>
</tr>
<tr>
<td>PHYS 1303</td>
<td>Stars and Galaxies (lecture)</td>
</tr>
<tr>
<td>PHYS 1304</td>
<td>Solar System (lecture)</td>
</tr>
<tr>
<td>PHYS 1401</td>
<td>College Physics I</td>
</tr>
<tr>
<td>PHYS 1402</td>
<td>College Physics II</td>
</tr>
<tr>
<td>PHYS 2425</td>
<td>University Physics I</td>
</tr>
<tr>
<td>PHYS 2426</td>
<td>University Physics II</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>General Psychology</td>
</tr>
<tr>
<td>Course</td>
<td>Title</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>PSYC 2314</td>
<td>Life Span Growth &amp; Development</td>
</tr>
<tr>
<td>PSYC 2319</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>SOCI 2326</td>
<td>Introduction to Sociology</td>
</tr>
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<td>SOCI 1306</td>
<td>Social Problems</td>
</tr>
<tr>
<td>SOCI 2326</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>SPAN 2311</td>
<td>Intermediate Spanish I</td>
</tr>
<tr>
<td>SPAN 2312</td>
<td>Intermediate Spanish II</td>
</tr>
<tr>
<td>SPAN 2313</td>
<td>Spanish for Native/Heritage Speakers I</td>
</tr>
<tr>
<td>SPCH 1311</td>
<td>Introduction to Speech Communication</td>
</tr>
<tr>
<td>SPCH 1315</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>SPCH 1318</td>
<td>Interpersonal Communication</td>
</tr>
<tr>
<td>SPCH 1342</td>
<td>Voice and Diction</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>SPCH 2333</td>
<td>Discussion &amp; Small Group Communication</td>
</tr>
</tbody>
</table>

**Lower-Division Core Curriculum Transfer Courses**

The core curriculum requirements are discussed in the "University Core Curriculum Program" section of this catalog. The following table lists lower-division Texas A&M University-Corpus Christi core curriculum courses for which there are transfer
 equivalents. The approved core curriculum transfer courses are identified by their common course numbers and titles.

Transfer students also have several other means of meeting the core curriculum requirements. See "General Education Requirement" in the section entitled "Undergraduate Programs" for details.

Texas A&M University-Corpus Christi Core Transfer Courses (Texas Common Course Core Courses Numbers and Titles)

Composition

<table>
<thead>
<tr>
<th>ENGL 1302 Writing and Rhetoric*</th>
<th>ENGL 1302 Composition II</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 1311 Foundation of Communication*</td>
<td>SPCH 1311 Intro to Speech Communication</td>
</tr>
</tbody>
</table>

U.S. History (6 sem. hrs.)

<table>
<thead>
<tr>
<th>HIST 1301 - U.S. History to 1865*</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1301 U.S. History to 1865</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HIST 1302 - U.S. History Since 1865*</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1302 U.S. History Since 1865</td>
</tr>
</tbody>
</table>

(HIST 2301 Texas History may be substituted for either HIST 1301 or HIST 1302 to meet 3 hours of the Core History requirement at A&M-CC. However, taking both HIST 1301 and HIST 1302 rather than making the Texas History substitution is strongly recommended.)

Political Science (6 sem. hrs.)

<table>
<thead>
<tr>
<th>POLS 2305 - U.S. Government and Politics*^</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVT 2305 Amer. Govt. I (Federal)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POLS 2306 - State and Local Government*^</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVT 2306 Amer. Govt. II (State)</td>
</tr>
</tbody>
</table>

Natural Science (6 sem. hrs.) Select two from:

<table>
<thead>
<tr>
<th>BIOL 1308 Science for Life I (Non-Majors Biology)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1308 Biology for Non-Science Majors I (lecture)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BIOL 1406 - Biology I</th>
<th>BIOL 1406 General Biology I</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BIOL 1407 - Biology II</th>
<th>BIOL 1407 General Biology II</th>
</tr>
</thead>
</table>
BIOL 2401 Anatomy and Physiology I
BIOL 2402 Anatomy and Physiology II
BIOL 2420 Principles of Microbiology
CHEM 1305 Introductory Chemistry*
CHEM 1411 - General Chemistry I*
CHEM 1412 - General Chemistry II
ESCI 1401 - Environmental Science I: Intro to Environmental Science
GEOL 1303 Essentials of Geology*
GEOL 1403 - Physical Geology
GEOL 1404 - Historical Geology
GISC 1301 Physical Geography
PHYS 1303 Introduction to Astronomy: Stars and Galaxies
PHYS 1304 Introduction to Astronomy: Solar System
PHYS 1401 - General Physics I
PHYS 1402 - General Physics II
PHYS 2425 - University Physics I
PHYS 2426 - University Physics II

**Provided the ASTR/PHYS course was part of the general education requirement at the transferring institution.
Mathematics (3 sem. hrs.) Select one from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>MATH 1314</td>
<td>College Algebra</td>
</tr>
<tr>
<td>MATH 1324</td>
<td>Mathematics for Business and Social Sciences</td>
</tr>
<tr>
<td>MATH 1325</td>
<td>Calculus for Business &amp; Social Sciences</td>
</tr>
<tr>
<td>MATH 1442</td>
<td>Statistics for Life*^</td>
</tr>
<tr>
<td>MATH 1332</td>
<td>Contemporary Mathematics****</td>
</tr>
<tr>
<td>MATH 2413</td>
<td>Calculus I</td>
</tr>
<tr>
<td>PHIL 2303</td>
<td>Introduction to Logic and Critical Thinking</td>
</tr>
</tbody>
</table>

PHIL 2303 Intro to Logic

***MATH 1342 will only be accepted for core curriculum credit if it is in the core curriculum of the transferring institution.

****MATH 1332 Pending final approval for Fall 2017

Social/Behavioral Sciences (3 sem. hrs.) Select one from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 1301</td>
<td>Introduction to Economics*</td>
</tr>
<tr>
<td>ECON 2301</td>
<td>Macroeconomics Principles* ECON 2301 Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECON 2302</td>
<td>Microeconomics Principles* ECON 2302 Principles of Microeconomics</td>
</tr>
<tr>
<td>PSYC 2301</td>
<td>General Psychology*</td>
</tr>
<tr>
<td>SOCI 1301</td>
<td>Introduction to Sociology* SOCI 1301 Introductory Sociology</td>
</tr>
</tbody>
</table>

Language, Philosophy, & Culture (3 sem. hrs.) Select one from:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 2332</td>
<td>Literature of the Western World: From the Classics to the Renaissance*</td>
</tr>
<tr>
<td>ENGL 2332</td>
<td>World Literature I</td>
</tr>
</tbody>
</table>
ENGL 2333 - Literature of the Western World: From the Enlightenment to the Present*  
ENGL 2333 World Literature II  
ENGL 2321 British Literature  
ENGL 2326 American Literature  
Any one of the following will also fulfill the literature requirement:  
ENGL 2322 British Literature I  
ENGL 2323 British Literature II  
ENGL 2327 American Literature I  
ENGL 2328 American Literature II  

ENGL 2316 Literature and Culture*  
ENGL 2331 World Literature  
PHIL 1301 Introduction to Philosophy  
PHIL 1301 Intro to Philosophy  
PHIL 2306 Introduction to Ethics  
PHIL 2306 Introduction to Ethics  

Creative Arts (3 sem. hrs.) Select one from:  
ARTS 1301 - Art and Society  
ARTS 1301 Art Appreciation  
ARTS 1303 Art History Survey I  
ARTS 1303 Art History I  
MEDA 1305 - Film and Culture*^  
COMM 2366 Introduction to Film or DRAM 2366 Development of the Motion Picture I  
MUSI 1306 - Understanding and Enjoying Music*  
MUSI 1306 Music Appreciation  
MUSI 1307 - Elements of Musical Style  
MUSI 1307 Music Literature or  
THEA 1310 - The Art of the Theatre*  
DRAM 1310 Introduction to Theatre  

Component Area Option (6 sem. hrs.)  
To satisfy the 6 semester hour Component Area Option students may select any Core courses that are not already being used to satisfy another Core requirement. In addition, students are able to use lab hours, from 4-hour Core courses, for up to 3 hours of the Component Area Option. Students may take MATH 2414 to satisfy 4 hours of the Component Area Option. MATH 2414 is not included in the Mathematics Component
Area, and will only satisfy the Component Area Option. The Core includes 42 hours. Some degree plans, however, require the selection of Core courses that may lead up to 3 additional hours (for example, courses with credit labs). Those 3 additional hours may be applied to the Component Area Option.

Note: Additional courses that are not included in the above list may fulfill specific Texas A&M University-Corpus Christi core curriculum requirements. For more information on transfer equivalencies, please contact either the Director of Transfer Admission Services at 361-825-5692 or the Department of Undergraduate Studies at 361-825-5931.

C: Drug and Alcohol Abuse Prevention Program

Texas A&M University-Corpus Christi is committed to a campus-wide plan to educate students and employees about alcohol and drug issues, discourage the irresponsible use of alcoholic beverages, and prohibit the unlawful use, possession or distribution of controlled substances. The University will act to ensure compliance with all local, state, and federal laws, System policies and University rules and procedures dealing with controlled substances, illicit drugs, and the use of alcohol. The Code of Conduct provides information on alcohol and drug rules and university sanctions. To review the Student Code of Conduct online, go to http://judicialaffairs.tamucc.edu.

To implement an effective drug and alcohol abuse prevention plan, the University will use both formal and informal channels of communication to: 1) disseminate the standards of conduct that govern student and employee behavior, 2) communicate legal sanctions, as well as university disciplinary sanctions that can result from violations, and 3) distribute information about the health risk associated with use and abuse. The campus will make available referrals to local treatment centers and counsels programs. These referrals will be made within a supportive, confidential, and non-punitive environment under the auspices of the University Health Center, Counseling Center, and/or Human Resources.

Alcohol and Drug Rules

The University prohibits the use or possession of alcoholic beverages on campus by any individual under the age of 21. Failure to comply with this rule violates state law and the rules governing student conduct and will subject the individual to disciplinary action.

Students of lawful age under Texas Statutes may possess and/or consume alcoholic beverages in the privacy of their rooms or apartments in campus residence facilities. However, residence hall occupants and their guests must comply with state and local statutes concerning possession, sale, and consumption of alcoholic beverages. Any use of
alcoholic beverages should be in moderation. Therefore, bulk quantities of alcohol (kegs, cases, party balls, etc.) are not allowed on campus or in residence facilities. Loud or disruptive behavior, interference with the cleanliness of residence facilities, or drinking habits that are harmful to the health or education of an individual or those around him/her are reasons for appropriate disciplinary action by the University.

With limited exceptions, the possession of open containers and the consumption of beer, wine, and/or distilled spirits is prohibited in all public areas of the campus. For the purposes of this rule, residence hall balconies and patios are considered public areas. Although students of lawful age may possess and consume alcoholic beverages in the privacy of their rooms or apartments, all alcoholic beverages transported through public areas on the University grounds and in residence facilities must be unopened and concealed.

All members of the University community are expected to abide by state and federal laws pertaining to controlled substances and illicit drugs. Standards of conduct strictly prohibit the unlawful manufacture, distribution, possession or use of controlled substances, illicit drugs or drug paraphernalia on University property, at University-sponsored activities, and/or while on active duty. Individuals may use prescription medications that are medically necessary and prescribed by a licensed physician.

While the University has limited jurisdiction when alcoholic beverages and illegal drugs are consumed off-campus, members of the University community are encouraged to consider these regulations as a guideline for responsible and lawful behavior. Any recognized student organization that plans to include alcohol at an official function off-campus must obtain permission from Student Activities under the University risk management guidelines. Failure to comply with this requirement will be reason for appropriate disciplinary action by the University.

University Sanctions

Students suspected or found in violation of University drug or alcohol rules and regulations will be notified in writing to appear for a hearing with a judicial affairs officer. Procedures for hearings are outlined in the Student Code of Conduct.

A student found responsible for violating the rules and regulations will be subject to sanctions commensurate with the offenses and any aggravating and mitigating circumstances. Disciplinary actions in cases involving alcohol and drug-related violations result in sanctions up to and including suspension or expulsion from the University and referral for prosecution. Any disciplinary action imposed by the University may precede and be in addition to any penalty imposed by an off-campus authority. Students will be advised of available alcohol and drug counseling at the University Counseling Center.
and/or referred to a community organization. The University Counseling Center and the University Health Center can provide assistance and referral to appropriate community agencies.

Advisors and faculty members have the responsibility to supervise student activities on all trips. Faculty members should inform students that actions violating state laws, local regulations, and University rules regarding alcohol and drugs will not be permitted on any University trip. Students who violate these guidelines regarding alcohol and drug use on field trips will be subject to disciplinary action.

Health Risks

Alcohol abuse can cause many health-related problems. Approximately 150,000 deaths annually are directly related to alcohol abuse and/or alcoholism. Alcohol abuse can lead to alcoholism, premature death through overdose, and complications involving the brain, heart, liver, and many other body organs. Alcohol abuse is a prime contributor to suicide, homicide, motor vehicle deaths, and other accidental causes of death. Alcohol abuse also causes liver disease, gastritis, and anemia.

Alcohol abuse interferes with psychological functions, causes interpersonal difficulties, and is involved in many cases of child abuse. Alcohol abuse also disrupts occupational effectiveness and causes legal and financial problems. Alcohol used in any amount by a pregnant woman can cause birth defects.

The abuse of illicit drugs can result in a wide range of health problems. In general, illicit drug use can result in drug addiction, death by overdose, death from withdrawal, seizures, heart problems, infections (i.e., HIV/AIDS, hepatitis), liver disease, and chronic brain dysfunctions. Other problems associated with illicit drug use include psychological dysfunctions such as memory loss, thought disorders (i.e., hallucinations, paranoia, psychosis), and psychological dependency. Additional effects include occupational, social, and family problems as well as a reduction in motivation. Drug use by a pregnant woman may cause addiction or health complications in her unborn child.

Campus Resources

A&M-Corpus Christi offers a variety of programs to promote healthy lifestyles and substance-free alternatives. Students can become involved with the planning of drug and alcohol education programs by contacting Student Engagement & Success at 361-825-4284.
University Counseling Center - The University Counseling Center offers students individual counseling, educational programming and support groups focused on alcohol and other drug use, abuse and addiction. An Alcohol Education Program for Minors is also available for minors cited/charged with alcohol-related offenses (MIP, DUI, and Public Intoxication). For more information, call 361-825-2703 or visit the web site at http://counseling.tamucc.edu.

University Health Center - The University Health Center can provide information about the health risks of drug and alcohol abuse, as well as general medical care for students. For more information, call 361-825-2601.

I-TEAM - I-TEAM Peer Educators strive to educate the campus community and promote healthy behaviors related to alcohol and drugs. The group facilitates a host of activities year round. Call 361-825-4284 for more information.

University Police Department - The University Police Department educates the University community about drug and alcohol issues as well as enforces local, state and federal law. For more information, call 361-825-4444.

Annual Security Report - This report includes statistics for the previous three years concerning reported crimes that occurred on campus; in certain off-campus buildings or property owned or controlled by A&M-Corpus Christi; and on public property within, or immediately adjacent to and accessible from, the campus. The report also includes institutional policies concerning campus security, such as policies concerning sexual assault, and other matters. Obtain a copy of this report by contacting the University Police Department 361-825-4444 or by accessing the following web site: http://falcon.tamucc.edu/~police/UPD/statis.htm.

The Biennial Review of the Drug and Alcohol Abuse Prevention Program is conducted to determine program effectiveness and consistency of policy enforcement. Obtain a copy of this report at http://iadapt.tamucc.edu.

D: Hazing

Hazing is strictly prohibited and the University will investigate any claim of hazing and take appropriate action. Hazing is defined as:

Any intentional, knowing, or reckless act, occurring on or off the campus of an educational institution, by one person alone or acting with other, directed against a student, that endangers the mental or physical health or safety of a student for the purpose of pledging, being initiated into, affiliating with, holding office in, or maintaining membership in an organization. The term includes, but is not limited to:
• Any type of physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing of a harmful substance on the body, or similar activity.

• Any type of physical activity, such as sleep deprivation, exposure to the elements, and confinement in a small space, calisthenics, or other activity that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student.

• Any activity involving consumption of a food, liquid, alcoholic beverage, liquor, drug, or other substance that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student.

• Any activity that intimidates or threatens the student with ostracism, that subjects the student to extreme mental stress, shame, or humiliation, that adversely affects the mental health or dignity of the student or discourages the student from entering or remaining registered in an educational institution, or that may reasonably be expected to cause a student to leave the organization or the institutions rather than submit to acts described in this subdivision.

• Any activity that induces, causes, or requires the student to perform a duty or task that involves a violation of the Texas Education Code Sec. 37.152 and 37.153.

The intent of the act or the consent or cooperation of the hazing recipient will not constitute a defense. The University may charge an individual and/or the officers of a recognized organization with responsibility for the hazing act(s) both on or off-campus. Hazing is also a violation of Texas state law. See the Texas Education Code, sections 37.151 and 51.936 at www.stophazing.org/texas. In summary, a person may be found guilty of criminal conduct for hazing, encouraging hazing, permitting hazing, or having knowledge of the planning of hazing incidents and failing to report in writing his/her knowledge to the Dean of Students or other appropriate institutional official.

Texas law provides any person reporting a specific hazing incident to the Dean of Students or other appropriate institutional official is immune from civil and criminal liability unless the report is in bad faith or malicious.

For additional information on hazing, students may refer to the Student Code of Conduct, which can be found online at judicialaffairs.tamucc.edu, or contact the Student Conduct & Community Standards directly.

E. Student Travel Rule

1. Overview
Texas A&M University-Corpus Christi is supportive of student travel and recognizes that the safety of its students is of the utmost importance. The requirements outlined below apply to student travel that is more than 25 miles from campus to an activity that is organized, sponsored and/or funded by the University or by an organization properly registered at the University. Students traveling on behalf of the University must obtain prior approval from the appropriate department. This rule applies to travel by car, truck, van, bus and airplane. It must be read in conjunction with University Procedure 13.04.99.C1.01, Student Travel Procedures.

2. Travel Safety Guidelines

During travel situations specified above, students must abide by the following safety guidelines.

1. Drivers and passengers must abide by all federal and state laws. In accordance with State law, drivers and passengers must use seat belts or other available safety restraints.
2. Drivers must possess a valid driver's license that is appropriate for the classification of vehicle being driven.
3. Drivers, occupants, and their luggage should not exceed the vehicle manufacturer's recommended capacity.
4. Operator fatigue should be considered when selecting drivers. On lengthy trips, alternate drivers should be used to avoid fatigue.

3. Vehicle Options

Listed below are the basic means of travel available to students:

1. Rental Vehicles: Students traveling using a rental vehicle must comply and abide with all University and rental provider rules, regulations, and stipulations.
2. Vans: Fifteen (15) passenger vans may be used; however, only (9) occupants, including the driver, may ride in the van. Nothing may be loaded on top of the van, and all cargo should be loaded evenly. Cargo limit must meet safety requirements. It is preferred that a University employee drive the van.
3. Personal Vehicles: The driver must have adequate motor vehicle insurance and the vehicle must meet all state safety and registration requirements.
4. Commercial Carrier (airplane, bus, train, etc.) Students traveling by commercial transportation must comply with all rules specific to the carrier. This includes laws and regulations regarding carry-on luggage and weight restrictions.
4. Additional Standards

This rule is considered to be a minimum standard. Departments, units, and/or student organizations may mandate additional standards as deemed necessary to address the unique requirements associated with a particular type of student travel.