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## Undergraduate

# 2013-2014 <br> Undergraduate Catalog 

www.tamuc.edu

## An Equal Opportunity University

It is the policy of Texas A\&M University-Commerce to recruit, hire, and promote for all university academic and non-academic staff without regard to race, color, national origin, gender, disability, age or religion.

Admission to A\&M-Commerce is based upon stated academic requirements regardless of race, color, national origin, gender, disability, age or religion.

## Directory Information and Its Release

In compliance with Section 438 of the General Education Provisions Act (Title IV of Public Law 90-247 as amended) and generally known as the Privacy Rights of Parents and Students, effective November 19, 1974, Texas A\&M University-Commerce gives notice that the following directory information will be released upon request: student's name, address (permanent or local), telephone listing, email address, classification, class standing, date(s) of attendance, date of graduation, degrees/honors/awards received, program of study, previous educational agencies and sports participation. Any student who objects to the release of all or any part of the directory information on file in his or her name must notify the Registrar's Office, Administration Building, in writing, that he or she does not wish to have such information released. This request will be honored, and all or any portion of the information which the student requests to be withheld will be held confidential by the Registrar's Office. Any questions concerning this policy may be directed to the Registrar's Office, Administration Building, Texas A\&M University-Commerce, P. O. Box 3011, Commerce, Texas 75429.

## University Statement of Policies

The policies, procedures and regulations governing the conduct of students at A\&M Commerce are outlined in the Student Guidebook. The Guidebook is available online at www.tamuc.edu/studentlife/guidebook.asp (https://www.tamuc.edu/studentLife/documents/studentGuidebook.pdf). It is the responsibility of the student to make himself/herself aware of all policies. Disciplinary matters are handled by the Dean of Students Office. University policies and procedures are subject to change without prior notice.

## Texas Higher Education Coordinating Board

The Texas Higher Education Coordinating Board provides leadership and coordination for the Texas higher education system. Since being created by the Texas Legislature in 1965, the Board has worked to achieve excellence for the college education of Texas students. The Texas Higher Education Coordinating Board's mission is to work closely with policymakers and education stakeholders to develop and implement a higher education framework focused on initiatives to:

- Dramatically increase the number of postsecondary completions;
- Keep college affordable and accessible for all Texans; and
- Align higher education outcomes with current and future workforce needs.


## UNIVERSITY ACCREDITATION

Texas A\&M University-Commerce is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate, masters, and doctorate 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-Commerce.

To inquire about Texas A\&M University-Commerce's accreditation status, please contact Dr. Marila Palmer, marila.palmer@tamuc.edu or 903-886-5936.

## Program Accreditations

The American Chemical Society (ACS) approves the chemistry program at A\&M-Commerce as meeting the ACS guidelines. ACS authorizes the chair of the ACS-approved program to certify graduating students who complete a Bachelor of Science in Chemistry as meeting the ACS guidelines.

[^0]- The Masters in Applied Psychology is accredited by the Masters Psychology Accreditation Council (MPAC).
- Texas A\&M University-Commerce is an accredited associate institutional member of the National Association of Schools of Art and Design (NASAD).
- Texas A\&M University-Commerce is an accredited Institutional member of the National Association of Schools of Music (NASM).
- The Educational Specialist in School Psychology is National Association of School Psychologists (NASP) approved.
- The State Board for Educator Certification (SBEC) accredits all programs leading to educational certification in the College of Education and Human Services.


## Professional Affiliations, Memberships, and Licensing Agencies

- American Association for Paralegal Educators
- American Association of Colleges of Nursing
- American Association of Colleges for Teacher Education
- American Association of State Colleges and Universities
- American Association of University Women
- American Kinesiology Association
- Association of Certified Fraud Examiners
- Association of Texas Graduate Schools
- Council of Colleges of Arts and Sciences
- Council of Graduate Schools in the United States
- Federation of North Texas Area Universities
- Inter-University Council of the North Texas Area
- Council for Higher Education Accreditation
- Non-Land-Grant Agricultural and Renewable Resources Universities
- Southeastern Association for Research in Astronomy
- Texas Association of Deans and Directors of Professional Nursing Programs
- Texas Association of Social Work Deans and Directors
- Texas Field Educators Consortium
- Texas Organization of Baccalaureate and Graduate Nursing Education
- Texas Space Grant Consortium
- Texas State Board of Public Accountancy for CPA exam
- Trainers of School Psychology

The provisions of this catalog do not constitute a contract, expressed or implied, between any applicant, student, faculty or staff member of Texas A\&M University-Commerce 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 of the catalog.

Students are held individually responsible for the information contained in the University Catalog. Failure to read and comply with University regulations will not exempt students from whatever penalties they may incur.

## Official University Calendar

To access the University Calendar, please click on the link below.
https://ems.tamuc.edu/MasterCalendar/MasterCalendar.aspx

## General Information

Click on either of the following links for information:

- University Purpose
- The Campus


## University Purpose

## Our History

Texas A\&M University-Commerce began as East Texas Normal College in 1889 when founder William Leonidas Mayo opened the doors to a onebuilding campus in Cooper. His creed, which continues today, was "ceaseless industry, fearless investigation, unfettered thought and unselfish service to others." The institution's history of dynamic change began in 1894 when "Mayo's College" moved to Commerce. The State of Texas took over the campus in 1917 and the name was changed to East Texas State Normal College. In 1923, the school was renamed East Texas State Teachers College. The graduate program was added in 1935, and in 1957 the Legislature, recognizing that the purpose of the institution had broadened from teacher education, changed the name to East Texas State College. Following the inauguration of the first doctoral program in 1962, the name was changed to East Texas State University. In 1996, the institution entered The Texas A\&M University System and became Texas A\&M University-Commerce. Today, on the Commerce campus, the Metroplex Center, the Rockwall Facility, the Universities Center at Dallas, Navarro College Partnership, and through state-of-the-art distance learning, the University meets the undergraduate, graduate and professional needs of the citizens of Northeast Texas and beyond. Its mission is achieved through teaching, scholarship and service activities on its campuses, and in the community and region. History Texas A\&M University-Commerce began as the East Texas Normal College in 1889 when founder William Leonidas Mayo opened the doors of a onebuilding school in the town of Cooper in northeast Texas... After the original campus was destroyed by fire in 1894, Mayo moved the college 16 miles to Commerce, Texas to take advantage of westward railroad lines to Dallas and other parts of the state.

The State of Texas purchased the campus from Mayo in 1917. In 1923, in recognition of the school's strong reputation for training teachers, its name was changed to East Texas State Teachers College.

A graduate program was added in 1935. Acknowledging that the institution was doing much more than producing teachers, in 1957 the Texas legislature changed the name of the school to East Texas State College. With the inauguration of the first doctoral program in 1962, the school became East Texas State University, a title it kept for the next 34 years. In 1996, the university was brought into the Texas A\&M University System and became Texas A\&M University-Commerce. The university's satellite campus in Texarkana was renamed Texas A\&M University-Texarkana. For the past 17 years the school has grown in both stature and student population, expanding its foundations to include agriculture, science, engineering, music, nursing and distance education programs.

## Characteristics

Located 60 miles northeast of the Dallas-Ft Worth Metroplex, A\&M-Commerce offers a small-town atmosphere ideal for living, learning, teaching, and research. As the second-largest member in the prestigious Texas A\&M University System, A\&M-Commerce is home to more than 12,000 students, more than 120 degree programs and four academic colleges.

The majority of students attending the university come from Dallas and 38 other Texas counties. There are teaching sites in downtown Dallas and in the cities of Mesquite, McKinney, Corsicana, Midlothian, and the newest location in Rockwall. Known for its care of and support for its students, Texas A\&M University-Commerce also attracts many students from out of state who are enrolled in online degree programs and has over 800 international students. The founder of East Texas Normal College, William L. Mayo, was committed to providing affordable educational opportunities to first- generation college students. A\&M-Commerce was recently recognized as the only university in the Dallas and Northeast Texas region to be ranked nationally as most affordable with the highest paid graduates. The university has a large number of graduate programs for a university of its size with approximately $40 \%$ of its enrollment at the graduate level. Student access and success are the hallmarks of the university. A\&M-Commerce was an early adopter of distance education delivery methods and is currently ranks third in the state of Texas for semester credit hours generated through distance education.

## Our Vision

Texas A\&M University-Commerce, as a part of the A\&M family of universities, will become the university of choice for all those seeking a higher education in the Northeast Texas region and beyond. It will provide traditional and non-traditional learning opportunities through existing and new programs that set high expectations and goals for students, faculty, and staff. The university will provide a sense of community through a nurturing environment for all individuals in order to maximize learning, career and personal development. A\&M-Commerce will become a place where students, faculty, staff, and community are engaged in the pursuit of excellence.

## Our Mission

Texas A\&M University-Commerce provides a personal educational experience for a diverse community of life-long learners. Our purpose is to discover and disseminate knowledge for leadership and service in an interconnected and dynamic world. Our challenge is to nurture partnerships for the intellectual, cultural, social, and economic vitality of Texas and beyond.

## The Campus

Texas A\&M University-Commerce covers 2,023 acres of land in and near Commerce. The university is located eight blocks southwest of Commerce's business center, and has a book value in excess of $\$ 203$ million.

## University Libraries

Assisting patrons is our top priority at the University Libraries. The James G. Gee Library in Commerce, the branch in Mesquite, and an electronic library lab in Rockwall have a staff of nearly 40 full-time workers and a number of student workers. The University Libraries offer decades of combined experience motivated by a strong service ethic. Our friendly staff does its best to support
faculty, students and staff, whether it is assistance with finding or using resources, doing research, acquiring new resources, offering Interlibrary Loan services, faculty reserves, keeping the collections orderly and accessible, or helping patrons borrow and return items. We also provide services to the surrounding community and the growing number of off-site programs.

Gee Library provides an Information Commons consisting of computers with Internet access and specialized programs, a multimedia production studio, as well as areas for individual study and collaborative spaces for group projects. The Information Commons and Library Bistro area are open for late night hours during the school year to provide technology access and a secure study environment for students.

## Administration Building

The three-story McDowell Administration/Business Administration Building houses administrative offices, classrooms, laboratories and computer facilities. The building was completed in 1970.

The Offices of the President, Vice Presidents and Chief Information Officer are housed on the second floor of the McDowell Administration Building. The Offices of Graduate School, Information Technology, Purchasing, Human Resources, Payroll, Contract Administration, Bursar and Financial Services are located on the ground floor. The office of Annual Programs is on the third floor. The College of Business is located in the eastern portion of the building.

## Student Services Building

Built in 1970, the three-story D. Whitney Halladay Student Services Building houses the offices of the Assistant Vice President and Dean of Campus Life and Student Development, Assistant Dean of Campus Life and Student Development and Judicial Affairs, Counseling Center, Residential Living and Learning, International Student Services, and TRIO Programs.

The Department of Residential Living and Learning at Texas A\&M University-Commerce offers a variety of living environments, including traditional residence halls, suite-style residence halls, and single student apartments. The Department of Residential Living and Learning strives to create a livinglearning environment in each residence hall that will enable each resident to succeed academically and developmentally. For more information about student housing, see Department of Residential Living and Learning and/or visit the department's website at www.tamuc.edu/housing.

## Rayburn Student Center (RSC)

With over 92,000 square feet of space for leisure enjoyment, facilities for meetings, banquets, and conferences, the RSC is the central hub of campus activity. The RSC serves as the heart of campus life and encourages students, faculty, staff, and the community to gather, connect, and experience.

The first floor features many services for the campus community, including lost and found and an information Welcome Desk. For fun, The Club provides nightly entertainment and hosts a recreation room with pool tables and the latest in electronic games. If you need a special gift, supplies, snacks, or books-the Campus Bookstore and Convenience Store is located there. A Food Court complete with Grill 151 and a variety of food options is right across from The Club and next to the Campus Dining Room. If you need large-scale printing, posters, or specially imprinted gifts or awards, the Pride Shop can help you design and impress!

The second floor houses the offices for Student Activities, Leadership Engagement \& Development (L.E.A.D.), Catering, and RSC Administration. The Student Activities and Leadership suite includes student organizations, the Campus Activities Board, Fraternity \& Sorority Life, The Golden Leos (the student ambassadors for the University), and Student Government. This is a place for the campus community to come together to create new programs, ideas, and projects. We promote student learning, involvement, and success. Activities sponsored by student organizations and university departments in the RSC include major events by nationally known entertainers, lectures, movies, cultural, social, and recreational programs and activities. A list of A\&M-Commerce's student organizations can be found online.

The RSC is expanding - adding 28,000 square feet of additional dining and meeting space. The first floor expansion will open in January 2014, with the second floor following in May 2014! With the expansion, there will be more space for all to enjoy.

## Morris Recreation Center (MRC)

Opened in the summer of 2003, the Morris Recreation Center (MRC) is a $\$ 12$ million state-of-the-art recreation facility that is a focal point of campus life at Texas A\&M-Commerce. The facility features the following activity areas:: two multi-purpose basketball courts, a 45 foot climbing and bouldering wall, three lane jogging track, four multi-purpose racquetball courts, large fitness room with cardiovascular machines and weight equipment, fitness activity room, classroom, lounge, and men's and women's locker rooms. The outside area includes: heated leisure pool, two-tier hot tub, two sand volleyball courts, two outdoor basketball courts, picnic tables, barbeque pits, and a sunbathing area. The Morris Recreation Center serves as the "heartbeat"
of student life where participants can learn, engage, grown, and recreate. Additional information about our services is available at the department's website: www.tamuc.edu/reccenter

## Cain Sports Complex

The $\$ 1$ million dollar facility includes a lighted NCAA softball field and baseball field, two lighted Intramural Sports fields, an informal soccer field, a picnic area, horseshoe pits, a lake and an undeveloped green space.

## Adventure Base Area

The Outdoor Adventure Program provides adventure and educational opportunities promoting active lifestyles, appreciation for natural environments and personal development. Activities include day and weekend trips, cycling and a bike shop, clinics, disc golf course, and outdoor gear rental. The Outdoor Adventure Center also features a challenge course which offers adventure-based learning opportunities to enhance leadership, decision-making and communication skills through an interactive process for groups to develop as a team. This hands-on approach is designed to help individuals learn from their interaction with others and then apply those principles to their life situations. The course offers 13 low challenge course elements and 18 high element challenges.

## Crabtree Tennis Courts

The Crabtree Tennis Court complex is a four court fenced off tennis complex that is open for informal play and tournaments. The complex is well-lit and open for play seven days a week.

## Other Recreational Facilities

A\&M-Commerce's Memorial Stadium, which seats 10,000, is used for athletics and other special events. The Field House, which seats approximately 2,000 , is used for athletic and other special events, including concerts and various commencement exercises for the University and local high schools. In intercollegiate athletics, A\&M-Commerce competes in football, basketball, track and field, cross country, golf, soccer and volleyball. Softball competition will begin in 2014-2015. Texas A\&M University-Commerce is a member of the Lone Star Conference of Texas and the National Collegiate Athletic Association (NCAA) Division II.

Imagine learning in the new, state-of-the-art Keith D. McFarland Science and Technology Building, with one of the most technologically sophisticated planetariums in the Southwest or playing in the $\$ 29$ million Music Building, completed in the fall of 2010. The Music Building includes the Jack and Lou Finney Concert Hall, recital hall, five rehearsal halls, classrooms, piano and electronic music labs, studios and practice rooms.

The Performing Arts Center has two theatres, a revolving stage in the main playhouse, scene shop, dressing rooms, makeup rooms, and studios for KKOM radio station and ManeMedia Television cable Channel 3. The University Playhouse produces several plays during the school year. The Department of Music sponsors 14 musical groups, including A\&M-Commerce's Show Band.

The University's 100,000 watt public radio station, 88.9 KETR, is an NPR member station providing locally and nationally-produced programming. KETR-FM, heard within 75 miles of Commerce and online at www.ketr.org, is the radio home for A\&M-Commerce Lions football and basketball broadcasts each fall and spring. The mission of the station, which operates from historic Binnion Hall, is to provide Northeast Texas citizens and the A\&M-Commerce community with entertaining, educational, and informative programming, and to serve as a learning environment for students to pursue excellence in broadcasting and journalism.

The 1,200-seat University Auditorium is housed in the Ferguson Social Sciences Building.
More than 100 social, departmental, special interest and religious organizations offer many opportunities for students.

## Administrative Procedures

Click on any of the following links for information:

- Requirements for Undergraduate Admission
- Undergraduate Admission Policy
- Transfer Admission
- Texas Success Initiative (TSI)
- E-Mail for University Communication
- Registration (MyLeo)
- Tuition and Fees

The following section details steps to and eligibility for admission to undergraduate programs of the University. Services provided to students, as well as legal and policy requirements, are outlined.

## Requirements for Undergraduate Admission

Application for Admission. A paper application for admission and other necessary forms may be obtained from the Office of Undergraduate Admissions or may be filed electronically at http://web.tamuc.edu/admissions/getstarted/ The Apply Texas Application at www.applytexas.org (http:// www.applytexas.org) may also be submitted.

Official Transcript. High school transcripts should show the units completed, the grades earned, student's diploma plan, the date of graduation and the rank in class. Admissions acceptance will be tentatively granted on the basis of the completion of junior year. Upon graduating from High School, a final official transcript must be submitted to complete the admissions file.

An applicant who attended another academic institution or any institution for vocational or advanced education, if only for a short period of time, must include this work as a part of the admission application information.

Admission Test Results. All applicants for admission who have passed fewer than 21 semester hours of transferable academic work must submit scores from either the American College Test (ACT) or the College Entrance Examination Board Scholastic Aptitude Test (SAT). The A\&M-Commerce code for ACT is 4088 and the A\&M-Commerce code for SAT is 6188.

The ACT and SAT are given at more than 1,000 test centers throughout the United States, including A\&M-Commerce. High school officials can provide further details.

Social Security Number/Campus Wide ID Number (CWID). A new campus wide ID number is now used as a permanent student identification number. The campus wide ID number is generated for all students admitted to the University. Campus Wide ID numbers are specific to Texas A\&M University-Commerce. Students will be assigned a CWID when they submit an official document or application for admission. Only the last 4 digits of the SSN are printed on official transcript as a means of identifying students. Application for Social Security numbers may be obtained from any post office.

Application Deadlines. Application deadline dates are as follows:

| Description | Date |
| :--- | :--- |
| Fall Priority Deadline | March 1 |
| Fall Final Deadline | August 1 |
| Spring Priority Deadline | November 1 |
| Spring Final Deadline | December 1 |
| Summer I Priority Deadline | April 1 |
| Summer I Final Deadline | May 1 |
| Summer II Priority Deadline | April 1 |
| Summer II Final Deadline | June 1 |

The status of applications may be reviewed by using the myLEO system. Refer to the Schedule of Classes for instructions or access myLEO through http://www.tamuc.edu/myleo.aspx.

## Undergraduate Admission Policy

## Freshman Admission Requirements

First time freshmen may be admitted to Texas A\&M University-Commerce by one of the following ways:

- First time freshmen who graduate in the top $25 \%$ of their graduating class from an accredited or nonaccredited public or private high school in Texas are automatically admitted, but must submit ACT or SAT scores. To qualify for this automatic admission, high school graduation must be in one of the five years preceding the academic year for which the applicant is applying.
- First time freshmen who have an SAT combined critical reading and math score of 950 or higher.
- First time freshmen who score a minimum of 20 ACT or higher.

Required High School Curriculum: (Recommended Plan):

| Subject | Units | Notes |
| :--- | :--- | :--- |
| English | 4 units | English (I, II, III, IV) |
| Mathematics | 3 units | (Algebra I, II; Geometry or other Math course |
| bcience | 3 units | beyond Algebra II). |
| Social Science | 4 units | (Biology, Physics, or Chemistry) |
|  |  | (U.S. History, Government, World or State |
|  | History, Geography or Economics) |  |

Individual departments may have additional requirements for full participation in their programs. Please see specific departmental sections elsewhere in this catalog.

First-time freshman applicants who graduate from a Texas high school with a Recommended High School or the Distinguished Achievement Program are satisfactorily prepared for college level classes and meet Texas A\&M University-Commerce's minimum course requirements. Students who graduate from an accredited private high school, out-of-state high school, on a home school program that doesn't participate in the Recommended or Distinguished program will be required to complete a curriculum similar to the Recommended High School Program. Students who have not completed one of these programs must demonstrate completion of a high school curriculum more rigorous than what is required of the Minimum Graduation Plan.

Freshman applicants who do not meet the minimum Recommended High School Program, per Texas state law, Uniform Admissions Policy, TEC 51.803-51.809 requires that all students must meet one of the following college readiness standards in order to be eligible to be considered for admission at a Texas Four-year Public Institution.

- Successfully complete the recommended or advanced high school program or complete the portion of the program that was available to them; or
- Successfully complete a curriculum that is equivalent in content and rigor to the recommended or advanced high school program at a high school that is exempt from offering such programs; or
- Satisfy the College Readiness Benchmarks on the SAT or ACT assessment.
- SAT - 1500 out of 2400 (this score requirement includes writing)
- ACT - 18 English, 21 Reading, 22 Mathematics and 24 Science

Pending the 83rd Legislative session, the Uniform admissions Policy is subject to change. Please contact the Office of Undergraduate admissions for assistance.

## Admissions Review Process

Freshman applicants who do not meet the minimum Recommended High School Program and who do not meet the readiness standards above will be individually reviewed by the Office of Undergraduate Admissions. Admission consideration will be offered to those applicants who demonstrate potential for academic success. Factors used in the review process include an applicant's high school record to include high school preparation, class rank and standardized test score on the SAT or ACT. Additional factors such as high school activities, responsibilities while attending high school, bilingual proficiency, region of residence and if a student was awarded a competitive scholarship will also be taken into consideration by the Office of Undergraduate Admissions.

## Exceptional Application Categories:

1. First time freshmen applicants possessing the GED will be considered for admission only after their senior high school class graduates and they have reached the age of 18. A minimum of 20 ACT or 950 SAT (combined Critical Reading and Math) is required for admission.
2. First time freshmen whose high school graduation is more than five years preceding the academic year for which they are applying, will be required to submit a satisfactory score of 14 on the Reading Comprehension Test of the American College Testing program (ACT), administered by the Office of Testing and Evaluation Services at Texas A\&M University-Commerce. Students in this five-year category may also submit satisfactory scores from an ACT/SAT test administered within the last five years.

## Individual Approval

Applicants who do not meet automatic admission requirements based on ranking and/or SAT/ACT scores will be reviewed by the university's Admissions Appeal Committee. The committee will consider other factors including academic performance in the high school, socioeconomic status, extracurricular involvement, performance level of high school/district or any other information that might be helpful To be reviewed by the Admissions

Appeal Committee the applicant should submit a personal statement and at least two letters of recommendation. Information should be sent to the Director of Undergraduate Admissions.

## Admission to Concurrent Enrollment for High School Seniors

High School seniors may enroll in college-level courses beginning with the summer session following their junior year. These students must:

1. Qualify for standard admission with a minimum of 20 on the ACT or 950 on the SAT (combined Critical Reading and Math) or have a grade average of "A" (90\%) in high school work through the junior year, including selected core courses in English, math, history, and laboratory science.
2. Qualify for college-level courses by being exempt from TSI Assessment through high ACT, SAT or TAKS scores, or by passing all sections of the TSI assessment. Students who do not pass all parts of the TSI assessment may not take college-level classes related to portions of the test that have not been passed.
3. Submit a letter of recommendation from the principal and/or counselor.

Concurrent students may enroll for as many as two freshman classes per semester.

## Transfer Admission

A transfer student is defined as a student seeking first-time admission who previously attended an accredited institution of higher learning and is eligible to return to that institution. A transfer student will have 21 or more hours (excluding developmental courses). Students with fewer than 21 hours will be considered for admission on the basis of their ACT or SAT test scores, rank in high school class, and must have a cumulative GPA of 2.0 (on a 4.0 scale) on all college work attempted. To meet the needs of transfer students, Texas A\&M University-Commerce has joined the Texas Common Course Numbering System (TCCNS). Participating institutions and a list of common courses offered at A\&M-Commerce are found in the back of this catalog. TCCNS numbers are also shown in parenthesis after the catalog course number in the course description.

Beginning Fall 2000, all new students who enter A\&M-Commerce for the first time will have their cumulative grade point average calculated on courses taken at A\&M-Commerce only. Courses taken at other institutions will no longer be considered in the calculation of the A\&M-Commerce grade point average.

A transfer student must meet the following requirements:

1. File application for admission to the Office of Undergraduate Admissions by the deadline published in the official University Calendar found in the front of this catalog or in the schedule of classes for each semester.
2. Submit an official transcript from each institution previously attended. A transcript is considered official only if received directly from the sending institution or if hand delivered, in a sealed registrar's envelope. Transcripts should be submitted to the Office of Undergraduate Admissions.
3. Have a cumulative GPA of 2.0 (on a 4.0 scale) on all college work attempted. Individual departments may have additional requirements for full participation in their programs. Please see specific department sections elsewhere in this catalog.

Advanced-Level Requirement. Students must complete at least 36 semester hours at the advanced level ( 300 or 400 level courses). No advanced course from a junior or community college will be credited toward meeting advanced-level degree requirements unless specified below.

A minimum of sixty semester hours at Texas A\&M University-Commerce or another senior-level institution. Therefore, a maximum of sixty to sixtysix semester hours from a junior or community college will be counted towards an A\&M-Commerce degree. College Level Examination Program (CLEP) and extension and extended studies (correspondence) count toward this requirement. Specific initiatives targeted at facilitating community college transfer to a four-year university are exceptions to this rule. The initiatives include the Bachelor of Applied Arts and Sciences degree program and other degree programs, including students who transfer in with the Associate of Arts in Teaching degree, for which the combined number of hours in the Texas Higher Education Coordinating Board approved transfer core and field of student curricula exceed $50 \%$ of total hours required for the degree.

Transcripts are evaluated for credit by the Office of Undergraduate Admissions, and at times may undergo a review by faculty members serving as department heads or deans of your academic program. Credits for your specific degree must be determined by the academic departments. Once your transcript undergoes the review process, you will be provided with information concerning the transferability of your courses and how they will be applied to your degree program. A course must be college level to be transferable, and you must have earned a grade of D or better. In some instances a grade below a C may not be acceptable in cases where the course will be applied to your major. Students can access their degree plan through the online degree evaluation system once they have been admitted.

Should a dispute arise regarding the transferability of a course, the student must contact the Division of Enrollment Management. If the dispute is not satisfactorily resolved, the Dean will notify the Commissioner of Higher Education in accordance with the Texas Higher Education Coordinating Board rules. The Commissioner or an appropriate designee will make the final decision and notify the parties concerned.

Students on Academic Suspension from another institution are ineligible for admission to Texas A\&M University-Commerce until their designated suspension period has passed. When the period of suspension has passed, the student may be considered for admission.

## Second chance

As of Spring Semester 2012, transfer students who have attended an institution approved to offer baccalaureate degrees, will be admitted based on criteria used for freshmen students if they do not meet the criteria for admission as a transfer student (completion of 21 hours and a GPA of 2.0 ). Students admitted under the Second Chance initiative are not eligible for freshmen scholarships. Once admitted, students must meet institutional GPA requirements to remain in good standing.

## Admission to Special Programs

An undergraduate student who desires to take courses at Texas A\&M University-Commerce and who is not presently working toward a degree at A\&MCommerce may be admitted to a special program if admission requirements are met.

A special program does not lead toward a degree granted at A\&M-Commerce. These are:

1. The Vocational teacher training program;
2. Any course to meet school board or state requirements for public school teachers;
3. Isolated personal enrichment courses;
4. Pre-professional courses to meet requirements for a state license; and
5. Any other program or course not applicable toward a degree.

A student who has been denied regular admission to A\&M-Commerce because of low admission test scores or a low grade point average may not apply for the special admission status. A student who has been dismissed because of low academic standing from Texas A\&M-Commerce or another institution may not apply for admission to a special program until such a time as the student is eligible to return to the educational institution last attended.

## Readmission

Students who have attended Texas A\&M-Commerce but have not been in attendance in the long semester preceding the semester of anticipated return must apply for readmission well in advance of the registration date. If students seeking readmission were enrolled at another college or university, official transcripts must be provided to the A\&M-Commerce Office of Undergraduate Admissions and a grade point average of 2.00 on a 4.00 scale must have been attained. See the Scholastic Probation and Suspension section of this catalog.

## Out-of-State Students

Applicants residing out of state must meet all the requirements specified for freshman admission or transfer admission. Students whose legal residence is in Oklahoma, Louisiana, or Arkansas should refer to the Residents of States Other than Texas section of this catalog.

## International Students

An international student is any degree-seeking student holding a non-immigrant student visa.
Residents of foreign countries who wish to enter the University should apply to the Office of Admissions (90) days prior to the semester they plan to attend. Please see below for admission deadlines for International Applicants. Every applicant must show evidence of:

1. scholastic ability;
2. proof of financial support; and
3. an adequate command of the English language as demonstrated by a score of at least 550 (PBT) or 213 (CBT) or 79 (IBT) on the Test of English as a Foreign Language (TOEFL).

An official report of these scores must be submitted to the Undergraduate Admissions Office prior to admission. Educational Testing Services (ETS) will not release scores that are older than two years.

Texas A\&M University-Commerce will waive the 550 (PBT) or 79 (IBT) score requirements and recommend conditional admission without a TOEFL score for students successfully completing a semester of study with the Texas Intensive English Program (TIEP) in: Level 160 with no grade lower than a B and Level 150 with no grade lower than an A.

Texas A\&M University-Commerce will waive the TOFEL 550 TOEFL (PBT) or 213 (CBT) or 79 (IBT) score requirements for students who successfully meet the following exemptions:

- Students who have completed and ENG 1302, at a U.S. institution, with a grade of "C" or better. Students may provide a certified older score if they have been continuously studying at a U.S. college or university.
- Students who have completed the advanced level with a grade of an A or B at the A\&M-Commerce English Language Institute (ELI).
- Students who have successfully completed the Texas International Education Consortium (TIEPs) advanced-level program as defined in the information provided by TIEP and who are seeking admission to our campus.
- Students who have completed a minimum of one year of study in a Texas public high school with the completion of English III or English IV (including Advance Placement/AP) with a grade of "B" or better.
- Students who are citizens of Australia, New Zealand, the British Virgin Island, Jamaica, United Kingdom, Ireland, Antigua, Northern Ireland, Scotland, South Africa, St. Lucia, Wales, Bahamas, Barbados, and Canada (excluding French-speaking Quebec) or Switzerland. Proof of citizenship must be provided such as birth certificate or passport.
- Students who have completed one of the following tests with the acceptable scores:

| - Test | Score |
| :--- | :--- |
| CAE | B or Higher |
| CPE | C or Higher |
| SAT II E | 968 or Higher |
| IELTS | Overall band 6.0 or Higher |
| SAT Verbal | 500 or Higher |
| ACT Verbal | 19 or Higher |

- Students who have obtained one of the following foreign high school diplomas/tests/scores:

| - Test | Score |
| :--- | :--- |
| GCE, GCSE, IGCSE | C or higher in English Language |
| WASC, KCSE, SSCE or equivalent national exams | C or higher in English Language |
| IB (International Baccalaureate) | Grade 4 or higher in English subject |

## Undergraduate International Students:

For students that do not meet the TOEFL requirements or other language proficiency exemptions, A\&M-Commerce offers an English Language Institute (ELI).

For more information on the process to issue the immigration documents and application process for a visa, please contact the International Student Services office at 903-886-5097 or email intl.stu@tamuc.edu.

All international students are required to attend international student orientation and undergraduate international students are also required to attend a separate new student orientation for undergraduate students. New international students are also required to check-in with an international advisor at the international office during early check-in times. Students will provide copies of their immigration documents, personal and emergency contact information at the time of check-in. Please contact the International Student Services office or visit their website at http://www.tamuc.edu/studentLife/ campusServices/internationalStudentServices/default.aspx

International students who hold F-1 visas are not eligible for non degree or provisional student status. Only international students who hold J-1 non-degree visas are eligible for non-degree status. Students may be employed part-time (up to 20 hours per week) on campus only. Off-campus employment requires permission from an international advisor and USCIS. Spouses in F-2/J-2 status may not work and may attend school only for leisure learning courses. If admitted to a degree program, F-2 visa holders must apply for a change of status to F-1 and be approved for F-1 status before permitted to register for classes.

All international students are to be reported in the Student and Exchange Visitor Information System (SEVIS) with the U.S. Department of Homeland Security. They are also required by those regulations to be enrolled in a full course load for each fall and spring semester. Only new international students beginning their studies in the summer are required to enroll in a full course load during the summer semester. Entering information into SEVIS, monitoring of these regulations, and questions regarding international student issues are addressed by the Office of International Student Services. Visit http://www.tamuc.edu/studentLife/campusServices/internationalStudentServices/default.aspx or phone 903-886-5097, fax 903-468-3200, email:intl.stu@tamuc.edu.

## Admission Deadlines for international Applicants

| Semester | Date |
| :--- | :--- |
| Fall | May 1 |
| Spring | October 1 |
| Summer | March 1 |

## Graduate Students

Admission to the Graduate School is under the direction of the Dean of Graduate Studies and Research. See the Graduate Catalog for procedures and practices or web.tamuc.edu/academics/graduateSchool/default.aspx

## Texas Success Initiative (TSI)

As an undergraduate attending a state supported university, all students must take an assessment or be exempt from assessment according to the exemptions below prior to enrolling in college level courses. Students without assessment scores because of exemptions that are not test or grade based must take a placement test to determine entry level in math and English courses.

You may submit scores from the TSI assessment to satisfy this requirement. Students are responsible for providing proof of exemption and will be considered assessment required until official documentation is provided of state exemption.

Assessment exemptions:

1. ACT scores-Composite 23; English 19 or Math 19—no older than 5 years.
2. SAT scores-Composite 1070; Verbal 500 or Math 500-no older than 5 years.
3. TAKS scores-2200 Math or 2200 English/Language Arts with a 3 writing subscore.
4. Received an associate degree or baccalaureate degree from a Texas public institution.
5. Out-of-state/private institution transfer who has satisfactorily completed college level work with a " C " or better in areas of reading, math, and writing.
6. Has met readiness standard at another Texas public higher education institution with a " C " or better in developmental course work.
7. Serving in active military
8. Serving as a member of a reserve component of the armed forces for at least three years preceding enrollment.
9. Honorably discharged, retired, or released from active duty in military on or after August 1, 1990.

Institutions are allowed by the Texas Success Initiative to establish placement requirements above the state minimums listed above. Contact the Office of the Dean of University College for additional information.

## Approved Reading Courses

## History HIST 1301, HIST 1302

English ENG 2326, , ENG 2331
Political Science PSCI 2301, PSCI 2302
Psychology PSY 2301
Sociology SOC 1301

## Approved Writing Courses

English ENG 1301, ENG 1302

## Approved Math Courses

Math MATH 1314, MATH 1324, MATH 179
Any higher-level math course beyond MATH 1314 or MATH 1324
A math placement exam is available if you are trying to place into a math class at a higher level than you are currently placed. This includes attempting to place from a developmental level class into College Algebra or from College Algebra into Pre-Calculus or Calculus. Call the Office of Student Assessment and Evaluation for further details.

All Transfer students from other Texas public institutions who have not passed all sections of an assessment or have not met the TSI readiness standard will be required to take appropriate developmental courses. Transfer students can meet the TSI readiness standard by transferring approved courses in the three skill areas with a grade of "C" or better.

If you are in need of an assessment or have questions concerning retaking an assessment, you will need to contact the Office of Student Assessment at 903-886-5122.

Students with a documented learning disability may apply for assistance with the Office of Disability Resources and Services at 903-886-5835.

## Basic Skills Policy

All students must enroll in and complete an English course and a Mathematics course until the basic skills requirements of English and Mathematics are met (ENG 1301 and MATH 1314 or MATH 1324 or MATH 179). The student must remain continuously enrolled in and may not drop a basic skills requirement course from their schedule. Contact the Dean of University College with questions at 903.886.5878.

## Credit by Examination

A\&M-Commerce awards undergraduate credit on the basis of a variety of local and nationally available examinations. The examinations include:

1. the Advanced Placement Examination (AP);
2. the College Level Examination Program (CLEP);
3. the International Baccalaureate (IB) program;
4. the Defense Activity for Non-Traditional Educational Support Examinations (DANTES);
5. The Scholastic Achievement Test (SAT);
6. the American College Test (ACT) of the American College Testing Program; and
7. locally administered departmental exams.

The Advanced Placement (AP) program provided by the College Board enables students to enroll in challenging college-level studies while they are still in high school and to obtain college placement, credit, or both, on the basis of their performance on rigorous AP examinations. AP exams are given nationally at designated high schools during the month of May. AP exams are graded on a scale of $0-5$. A score of 3 or higher is needed for credit.

The CLEP program administered by the College Board and ETS helps students gain credit for prior knowledge and, subsequently, enroll in advanced courses more quickly. CLEP offers exams which cover areas of Business, Composition and Literature, Foreign Languages, History and Social Studies, Science and Math. CLEP exams are scored on a scale of 0-80. Upon making an acceptable score as determined by Texas A\&M-Commerce, the student is awarded a set number of credit hours in a course equivalent to the subject area in which they took the CLEP exam.

The International Baccalaureate (IB) program is a rigorous pre-university program available worldwide through the International Baccalaureate Organization leading to assessment in six subject areas (Best Language, Second Language, Individuals and Societies, Experimental Science, Mathematics and Computer Science, and the Arts). The curriculum encourages critical thinking, community service, individual research and inquiry into the nature of knowledge. The subject exams are scored on a 0-7 scale by a panel of international examiners. A minimum score of 4 is required to be considered for credit.

A matrix of all credit-by-exam programs including the exam titles, course equivalents, number of semester hours credited, and required scores can be obtained through the Office of Student Assessment.

All credits by examination are subject to the following guidelines:

1. Credit earned by examination may not be used to reduce in residence or advanced hour degree requirements established by A\&M-Commerce.
2. Credit earned by examination is not included in the computation of grade point averages.
3. It is the responsibility of the student to present official scores to the Office of Student Assessment for submission of the appropriate paperwork to the Office of the Registrar for posting of credit on the student's transcript. Credits earned by exam will be recorded on the student's permanent record after the census date of the semester in which is it requested.
4. Credit for courses by exam received at another college or university will be accepted in transfer upon receipt of an official transcript.
5. Standards for awarding credit by exam for courses are set by the academic department.
6. Students may repeat a course for which credit was earned by exam by enrolling in a regularly scheduled class. The grade will replace the credit earned by examination.
7. Fees for credit by examinations have been established by the Student Assessment Office. Fees vary by examination.

## Applicability to a Degree Program

Persons achieving credit by one or more of the above methods should work closely with the faculty mentor within the major department to plan the completion of the degree program. Applicability to a degree program of credit earned through a non-traditional manner will vary according to the major chosen.

Correspondence concerning testing programs should be addressed to the Office of Student Assessment, Texas A\&M University-Commerce, Student Access \& Success Center, Room 169, Commerce, Texas 75429

Credit for first semester College English composition should be requested if any of the following criteria are met:

1. SAT Composite score of 1270 or higher and Verbal section score of 630 or higher (scores from April 1995 or after);
2. ACT Composite score of 26 or higher and English section score of 29 or higher; or
3. Advanced Placement (AP) Language and Composition exam or Literature and Composition exam score of 3 or higher.**
** Credit for first and second semester College English composition may be granted with an AP score of 4 or higher.
Credit for College Algebra should be requested if any of the following criteria are met:
4. SAT Composite score of 1270 or higher and Math section score of 650 or higher (scores from April 1995 or after); or
5. ACT Composite score of 26 or higher and Math section score of 30 or higher.

Credit for first semester Biological Sciences should be requested if the following criteria are met:
ACT Composite score of 26 or higher and a Scientific Reasoning score of 30 or higher.
Correspondence concerning Credit-by-Exam should be addressed to: Office of Student Assessment and Evaluation, Student Access \& Success Center, room 169, Commerce, Texas 75429; Telephone 903-886-5122; Fax 903-468-3210.

## Undergraduate Non/Traditional Education

Texas A\&M University-Commerce students may receive college credit by examination and/or advanced placement. In some instances, credit may be obtained in more than one of these areas.

## In-Service Training

Credit can be granted for educational experiences such as in-service training, institutes, etc., of governmental agencies and private business. The student may have his experiences evaluated if they included at least 18 hours of lecture/discussion-type activity or 54 hours of contact in laboratory-type instruction and are a program or course recommended for college credit by the American Council on Education in the latest edition of the National Guide to Educational Credit for Training Programs. Application should be made in the Office of Undergraduate Admissions. Student should contact the Office of Undergraduate Admissions for an evaluation of credit form.

## Military Service Credit

Limited credit may be considered for military-technical courses listed for credit in the latest edition of $A$ Guide to the Evaluation of Educational Experiences in the Armed Services. The veteran should contact the Office of Undergraduate Admissions for an evaluation of credits form

Students who have completed a continuous active duty period of six months or more with the United States Military Services (Air Force, Army, Coast Guard, Marine Corps, Navy) will be granted one semester hour of credit for physical education activity for each six months of duty up to a maximum of four hours credit. For consideration of physical education credit for military service the student should submit a copy of DD Form 214 to the Office of Undergraduate Admissions.

## Technical Education

Credit may be obtained through regionally accredited technical educational programs, including work completed in a teaching hospital which is accredited through the appropriate national agency of the field in which credit is sought. Courses in an accredited Associate of Applied Science degree program may be accepted for transfer if applicable to the student's degree plan, and the student has completed requirements and received the Associate of Applied Science degree. Other technical-vocational courses are accepted when recommended by the appropriate department head at A\&M-Commerce. Students should contact the Office of Undergraduate Admissions for an evaluation of credit form.

## Academic Fresh Start

Senate Bill 1321 entitles residents of this state to seek admission to public institutions of higher education without consideration of courses undertaken ten or more years prior to enrollment. This bill has been called the "right to academic fresh start" and it 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 Office of Undergraduate Admissions may be contacted for further information regarding academic fresh start. Academic fresh start can only be applied for and granted prior to initial enrollment.

## First-Year Success Seminar

The First-Year Success Seminar (FSS) is a one-hour required course, Theory and Application of Learning and Critical Thinking. Success in the first-year of college requires a significant adjustment to new academic and intellectual challenges. Concepts studied include perception, memory, creativity and problem solving as they relate to critical thinking. FSS aims to improve vital skills necessary for success in college and establish a support system for the entering student. The course is taught under multiple prefixes depending upon student's major department or college. This requirement can also be met by completing AG 100 or BSC 111 for students majoring in those disciplines.

## EMail for University Communication

Electronic mail or email is considered an official means of communication at Texas A\&M University-Commerce.
2. Each student will be assigned a university email address when his or her application for admission to the university is processed. This email address will remain active throughout the student's academic career. Email accounts will expire after one long semester in which the student is no longer enrolled at Texas A\&M University- Commerce.
3. Students are expected to monitor their official Texas A\&M-Commerce email accounts regularly. The university recommends checking emails at least once per day. Student should report any problems with e-mail accounts or access to email to the Texas A\&M-Commerce Technology Services Help Desk at 903-468-6000.
4. Requests to substitute non-university email addresses for purposes of official communication will not be honored.
5. Electronic mail is subject to the same policies regarding information disclosure as other methods of communication. The privacy of personally identifiable information must be protected under the Family Rights and Privacy Act of 1974 (FERPA). The confidentiality of email cannot be assured and any confidentiality may be compromised by access consistent with applicable law or policy, including this Policy, by unintended redistribution or due to current technologies inadequate to protect against unauthorized access. Students, therefore, should exercise extreme caution in using email to communicate confidential or sensitive matters and should not assume that their email is private or confidential. Examples of confidential or sensitive information include, but are not limited to: drivers' license numbers, credit card numbers, social security number, grades, current or past academic history, medical information and medical history, criminal history, personal bank account numbers and payroll information other than gross pay.

## Registration (myLeo)

Registration is conducted for each semester prior to the beginning of the semester. MyLeo allows eligible students to register via the Internet. Students can access myLeo through leo.tamuc.edu/. Students eligible to use myLeo to register are graduate students and continuing undergraduate students who have completed 24 credit hours, are Basic Skills complete and have officially declared a major.

All new freshman students will be registered by their Success Coach until the meet they criteria above. New transfer students will be registered by either a Success Coach or Faculty Mentor as appropriate for at least their first semester.

## Tuition and Fees

Tuition and fee rates are set by the State Legislature and The Texas A\&M University System Board of Regents. Current fee schedules are available at the Office of Undergraduate Admissions, Financial Services and online through the University website for the particular semester in which you plan to enroll.

Tuition and fees during registration periods may be estimated and are subject to change. All university charges are due at the beginning of each semester. During the fall and spring semesters students can enroll for an installment payment plan. The payment plan is offered at a fixed charge but additional charges may accrue if payments are not made in accordance with the terms of the plan.

A $\$ 10$ general property deposit shall be collected from each student to insure against losses, damages and breakage in libraries and laboratories. The deposit is refundable upon written request after graduation or withdrawal from the university.

The audit fee is the same as for credit courses (refer to procedure for auditing).
Tuition and fees collected for courses from which students drop within the first 12 days of a fall or spring semester or within the first four days of a summer term will be refunded, provided the student remains enrolled at the institution for that semester or term.

Revenues from the designated tuition portion of the tuition rates can be for the specific purposes of providing or making available to the student any property, buildings, structures, activities, services, operations or other facilities, or for the retirement of debt service on institutional plant or on renewals, replacement, or additions to the institutional plant. Designated tuition revenues may also be used for general financial aid purposes.

The Texas Legislature and the Coordinating Board, Texas College and University System, have established guidelines for determining residency status. Texas residency for tuition purposes is generally obtained by working in Texas for 12 months immediately prior to enrollment in any college or university, by being a dependent of a Texas resident, or by being classified as a Texas resident for the first five of the six years immediately preceding registration. Complete regulations are available in the Office of Undergraduate Admissions.

## Limitation on In-State Tuition Rates for Some Undergraduates

New undergraduate students enrolling in an institution of higher education in Fall 1999 or afterward are subject to the conditions of Senate Bill 345 passed in the 76th Legislative Session. This law states that a resident undergraduate student whose attempted hours exceeds, by at least 45 semester hours, the number of hours required for completion of the degree program may be charged tuition at a higher rate. The higher rate will not exceed the rate charged to non-resident undergraduate students. A resident student is one who has met the requirements to be classified as a resident of the State of Texas for tuition purposes.

First time undergraduate students who enroll in Fall 2006 and thereafter will be charged tuition at a higher rate if they exceed 30 semester credit hours over that required for a degree program. Courses dropped or withdrawn are counted as attempted hours and count towards the 30 and $45-h o u r ~ r u l e . ~$

## Limitation on the Number of Courses that may be Dropped under Certain Circumstances by Undergraduate Students

Section 51.907 of the Texas Education Code states than 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. This statute was enacted by the State of Texas in spring 2007, and applies to students who enroll in a public institution of higher education as first-time freshmen in fall 2007, or later. Course(s) dropped after the census date of a semester will be counted toward the six course limit.

## Repeated Courses (Three-Peat Rule)

Enacted in the 78th Legislative session, HB1 mandates that students repeating a course for a third or more time will be subject to an additional fee for the repeated course. Students enrolling for a course for the third time will be assessed a higher fee beginning Spring 2005. Courses dropped or withdrawn are counted as attempted hours and count towards the three-peat rule.

## Tuition Rebates for Certain Undergraduates

Senate Bill 1907 modified the Education Code to create a tuition rebate program for undergraduate students who complete their degrees after attempting not more than three hours more than the number required.

The purpose of this program is to provide tuition rebates that will provide a financial incentive for students to prepare for university studies while completing their high school work, avail themselves of academic counseling, make early career decisions, and complete their baccalaureate studies with as few extraneous courses as possible. Minimizing the number of courses taken by students results in financial savings to students, parents and the state.

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 have received a baccalaureate degree from a Texas public university;
3. They must have been a resident of Texas and 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 hours required to complete the degree under the catalog under which they were graduated. Hours attempted include transfer credits, course credit earned exclusively by examination, courses that are dropped after the official census date, and for-credit developmental courses.

Application for the tuition rebate must be submitted to the Registrar's Office the same semester the degree is conferred. This requirement cannot be waived. Questions regarding the tuition rebate program should be directed to the University Graduation Coordinator.

## Special Fees

| Description | Fee |
| :--- | :--- |
| Diploma fee (payable when applying for degree) | $\$ 40$ |
| Certificate | Fee based on type of certificate earned |
| Late registration fee | $\$ 100$ |
| Reinstatement Fee | $\$ 200$ |
| Lab fees | $\$ 5$ to $\$ 30$ |
| Course enhancement fees | $\$ 8-\$ 16$ per course |
| Graduate courses through the College of Business | Assessed an additional \$25 per credit hour |
| Installment Payment Plan fee | $\$ 35$ |
| Late Payment fee (Installment Plan) | $\$ 25$ per payment date |
| Late Payment fee (Institutional Loans) | $\$ 25$ |
| Returned Check fee | $\$ 30$ |
| Academic Achievement Seminar | $\$ 45$ per semester |
| Duplicate Diploma fee | $\$ 30.00$ |
| Motor Vehicle Registration and Parking Permits | $\$ 40$ if purchased in Fall, \$32 in Spring, and \$24 in Summer |

## Residents of States Other than Texas

A non-resident student is legally defined to be a student of less than 18 years of age living away from his family and whose family resides in another state or whose family has not resided in Texas for the 12 months immediately preceding the date of registration; or a student 18 years of age or older who resides out of the state or who has not been a resident of Texas 12 months immediately preceding the date of registration. The responsibility of registering under the proper residence is placed upon the student. It is their duty at or before registration, if there is any possible question of their right to legal residence in Texas under the state law and the university rules, to raise the question with the Office of Undergraduate Admissions and have such question settled prior to registration. There can be no change of residence status except upon express authorization by the director of the Office of Undergraduate Admissions. Attempts on the part of a non-resident to evade the non-resident fee will be taken seriously and may lead to expulsion. Out-of-state students should contact the Office of Undergraduate Admissions (903-886-5000). Students who would like to establish their residency in Texas can review the requirements and questionnaire form at: http://www.tamuc.edu/admissions/oneStopShop/undergraduatedAdmissions/ residency.aspx

Legislative approval has been given for a separate tuition rate for Arkansas, Oklahoma, and Louisiana residents based on reciprocity agreements with universities in those states. Two types of tuition have been established: Bordering Oklahoma and Arkansas counties and Louisiana parishes to

Texas—In-state, Texas resident, tuition. All other counties in Oklahoma and Arkansas and parishes in Louisiana—Reduced out-of-state tuition for undergraduates.

## Hazlewood Act for Veterans

Many veterans (and some veterans' dependents), who do not qualify for federal educational benefits, may be eligible for tuition exemptions for up to 150 semester hours of academic course work under the Texas Hazlewood Act, if they were residents of Texas at the time they entered the armed forces, entered the military at a Texas MEPS station, have served on active duty for at least 181 days, and have an honorable discharge from the service.

The Hazlewood Act application can be picked up at the Veterans' and Military Services Office in the Student Access and Success Center, Room 122. To establish eligibility for the exemption, veterans must complete an application, provide a copy of their discharge papers (DD Form 214), and provide a statement from the VA establishing their ineligibility for veterans educational benefits.

Please submit all paperwork as early as possible - prior to the census date of each semester - so that the Veterans \& Military Services Office can complete the process of establishing your eligibility before your tuition and fees are due.

## Children of Certain Disabled Public Employees

Children of certain firefighters, peace officers, employees of the Texas Department of Corrections and game wardens who have suffered injury resulting in death or disability sustained in the line of duty are exempt from payment of all dues, fees, and charges. Application for this exemption should be made to the Student Services Division, Higher Education Coordinating Board, P.O. Box 12788, Austin, Texas 78711.

## Hearing Impaired and Visually Impaired Students

Certain hearing impaired and visually impaired persons, as defined by law, who are Texas residents are eligible for exemption from payment of tuition and fees. Students who are eligible must be certified by one of the following agencies: Texas Rehabilitation Commission; Texas Commission for the Blind; or the Texas Commission for the Deaf and Hearing Impaired.

## Good Neighbor Scholarship

Certain native-born students from other nations of the American hemisphere may be eligible for exemption of tuition following approval of the Texas Higher Education Coordinating Board. Individuals requesting this exemption should contact John Mark Jones, Director, International Student Office at A\&M-Commerce (903-468-8144).

## Valedictorian Exemption

The highest ranking graduate of each accredited Texas public high school is eligible for an exemption from tuition for both semesters of the first regular session immediately following his graduation. When, in the opinion of the institution's president, the circumstances of an individual case (usually military service) merit such action, this exemption may be granted for any one of the first four regular sessions following that individual's graduation from high school. Certificates of eligibility are issued by graduating high schools.

## Children of Prisoners of War or Persons Missing in Action

Dependent children of any person who is a legal resident of Texas on active duty as a member of the armed forces of the United States, and who at the time of registration is classified by the Department of Defense as a prisoner of war or as missing in action, are eligible for exemption of tuition and fees. Proof from the U.S. Department of Defense must be provided.

## Students in Foster or Other Residential Care

A student is exempt from the payment of tuition and fees if the student was in a foster home or other residential care under PRS conservatorship on or after:

1. The day before their 18 th birthday; or
2. The day the youth graduated from high school or received a GED; or
3. The day of the youth's 14th birthday, if the youth was also eligible for adoption on or after that day. (This includes youth age 14 and older who are adopted or for whom parental rights have been terminated.)

To be eligible, youth must enroll as an undergraduate student no later than:

1. Three years after being discharged from foster or other residential care; or
2. Three years after receiving a high school diploma or GED, whichever occurs first; or
3. The youth's 21st birthday.

Application for this exemption should be made in Financial Services prior to registration.

## Children of Deceased Texas Veterans Exemption

Qualifying students will be exempted from tuition and mandatory student fees, except for student service fee and property deposit. Eligible students are dependents of Texas veterans who were killed in action or died while in service, or whose death was directly caused by illness or injury connected with service in the armed forces. Required documentation: Official documentation from the military, indicating eligibility.

## Withdrawal

A student wishing to withdraw from all courses before the end of a semester or summer term for which he/she is registered must clear his record by filing an application for voluntary withdrawal on a form which can be secured online at: Withdrawal Form or from the Office of the Registrar. This is a withdrawal from the semester, not the university.

This action must be taken by the date stated in the Academic Calendar as the last day to drop a class or withdraw. Any student who withdraws from the university is subject to the conditions outlined in the section regarding Scholastic Probation or Suspension. It is the student's responsibility to withdraw from classes if he or she does not plan to attend during the semester in he/she has enrolled. A student has one year from the first day of a semester to appeal a withdrawal refund. Courses withdrawn are counted as attempted hours and count towards the three-peat, 45 -hour and 30 -hour rule.

## Refund of Fees

A student officially withdrawing will receive a refund of his fees according to the following scale:
*Class days refer to the university Class Days, not particular class days. ** For example: If a class meets MWF, the 12th class day is not the 12th day of the student's actual class, it is the 12th day of the University Class Days. See the Academic Calendar for specific date.

## Sixteen-Week Fall/Spring Semester:

- 100 percent prior to the first class day of the semester
- 80 percent during the first five class days of the semester
- 70 percent during the second five class days of the semester
- 50 percent during the third five class days of the semester
- 25 percent during the fourth five class days of the semester
- No refund after the fourth five class days of the semester


## Thirteen-Week Semester:

- 100 percent prior to the first class day of the session
- 80 percent during the first, second, third and fourth class days of the session
- 50 percent during the fifth, sixth, seventh and eighth class days of the session
- 25 percent during ninth, tenth, eleventh and twelfth class days of the session
- No refund after the twelfth class day of the semester


## Twelve-Week Semester:

- 100 percent prior to the first class day of the session
- 80 percent during the first, second, third and fourth class days of the session
- 50 percent during the fifth, sixth, seventh and eighth class days of the session
- No refund after the eighth class day of the semester


## Ten-Week Semester:

- 100 percent prior to the first class day of the session
- 80 percent during the first, second, third and fourth class days of the session
- 50 percent during the fifth, sixth, seventh and eighth class days of the session
- No refund after the eighth class day of the semester


## Five, Six, Seven \& Eight-Week Semester:

- 100 percent prior to the first class day of the session
- 80 percent during the first, second or third class day of the session
- 50 percent during the fourth, fifth, or sixth class day of the session
- No refund after the sixth day of class of the session.


## Four-Week Semester:

- 100 percent prior to the first class day of the summer session
- 80 percent during the first, second or third class day of the summer session
- 50 percent during the fourth, fifth, or sixth class day of the summer session
- No refund after the sixth of class of the summer session and thereafter


## Three-Week Mini Semester:

- 100 percent prior to the first class day of the session
- 80 percent during the first and second class days of the session
- 50 percent during the third and fourth class days of the session
- No refund after the fourth day of class of the session


## Thirty Two-Week Semester:

- 100 percent prior to the first class day of the semester
- 80 percent during the first five class days of the semester
- 70 percent during the second five class days of the semester
- 50 percent during the third five class days of the semester
- 25 percent during the fourth five class days of the semester
- No refund after the fourth five class days of the semester


## Refund Information:

- Refunds will be the applicable percentage of the total fees due for the semester, less any amount not paid.
- If a scheduled course of instruction fails to materialize, because of lack of required students, all tuition for same will be refunded. Late fees and installment fees are not refunded.
- No refunds will be made unless application is made within the same school year as withdrawal.
- No refunds will be made on auditor's fees.

Withdrawal refunds for students receiving federal funds is based on how much Title IV aid a student has received and not earned at the time of withdrawal. The amount of aid earned is calculated on a pro-rata basis through 60 percent of the term. Contact the Financial Aid Office before withdrawing for additional information about this new law.

## Overdue Financial Obligations

All accounts (tuition/fees, parking citations, loans, housing/meal charges, etc.) must be paid when due. Before the end of each semester or term, each student should determine that all accounts are paid. Further enrollment will be blocked and the Registrar's Office will withhold any transcripts, diplomas and other benefits until the obligation is discharged. Overdue financial obligations are subject to late fees and interest in addition to a hold on students records. Past due accounts may be sent to outside collection agencies. If such action is required, student's may become liable for additional fees or charges as allowed by law.

## Transcript of Credits

A transcript fee in the amount of eight dollars (\$8) is charged to all students each semester as part of tuition and fees. Official transcripts are provided at no charge to all current and former students.

## Academic Procedures

Click on any of the following links for information:

- Grades-Their Meaning and Value
- University College Success Coaches
- Class Attendance Rule
- Scholastic Probation and Suspension
- Bachelor's Degree Requirements

The university year is divided into a long session of two semesters and a summer session of two terms.

## Grades-Their Meaning and Value

| Grade Marks | Grade Meaning | Grade points Per Semester Hour |
| :--- | :--- | :--- |
| A | Excellent | 4 |
| B | Good | 3 |
| C | Average | 2 |
| D | Passing (Minimum) | 1 |
| F | Failure | 0 |
| X | Incomplete | 0 |
| I | Incomplete | 0 |
| IP | (thesis \& dissertation only) | 0 |
| W | In Progress | 0 |
| S | Withdrew | 0 |
| U | Satisfactory | 0 |
| Q | Unsatisfactory | 0 |

Beginning Fall 2008 the Q denotes a dropped course. DP, DF, DS \& DU no longer apply to dropped courses.
Passing Grades: A, B, C, D, S
Failing Grades: F, U,
Grades of S, and U do not affect the GPA.
Remedial Grades: RA, RB, RC, RD and RF are grade symbols appearing on the academic transcript to indicate remedial courses only. Remedial grades do not calculate into the grade point average and do not apply toward earned hours. A grade of RC or better is required in a remedial course.

The bachelor's degree will not be conferred upon any student whose total grade average is less than " C " (2.00). Transfer students must also have a " $C$ " average on work completed on this campus to qualify for a bachelor's degree.

A grade of " $D$ " is the minimum passing grade for credit in a course.
Students who officially withdraw from school prior to the date stated in the current Schedule of Classes will receive a mark of "W".
The grade " $F$ " means failure.
Students, who because of circumstances beyond their control, are unable to attend classes during finals week or the preceding three weeks will, upon approval of their instructor, receive a mark of " $X$ " (incomplete) in all courses in which they were maintaining passing grades.

When an " X " is given for a grade in a course, the credit hours are not included for one semester (exclusive of summer) in calculating the grade point averages. Grades of " $X$ " earned during the spring or summer are to be completed by the end of the following fall semester. If the " $X$ " is not removed by that time, the grade becomes an F and the hours are included in the number of hours attempted.

Recording a grade of " X " requires the filing of a plan for completion. The plan will be submitted with the official grade record sent to the department head who will forward it to the Dean's office. The plan will include why the grade was given and steps necessary for the student to receive the final grade.

A grade of "IP" (In Progress) will be used for courses that are scheduled over more than one semester. The grade of IP will not be computed in the grade point average and will be removed when the final grade is filed by the instructor.

A grade of "l" will be given for courses in dissertation and thesis (including undergraduate honors thesis) for all registrations prior to the semester in which the final document is completed. The time limit imposed on the grade of " $X$ " (one semester) does not apply for these courses.

## Computation of Grade Point Averages

All grade point averages will be computed by dividing grade points accumulated by the number of hours attempted, with grades of "X", "I", "IP", "Q", "W" being excluded.

## Repeated Courses

When a course is repeated, only the last enrollment for that course will be used in computing the grade point average. This second grade will be used to determine credit earned for the course. This procedure invalidates the first credit earned in that course. Courses taken before a degree is awarded (regardless of whether the course is applied to the degree) cannot be repeated and the grade point average recalculated once the degree is awarded. While grades of "DF" and "DU" indicate the course was dropped, these grades have the same effect on the GPA as a course that was repeated and completed with a grade of "F" or "U". "Q" and "W" drops do not count in the GPA and therefore are not marked as repeats

Any student who enrolls in the same course a second or subsequent time must notify the Registrar's Office during the semester in which the course is being repeated. Information and a form is located at http://web.tamuc.edu/admissions/registrar/default.aspx . When the semester is completed, the Registrar's Office will then update the student's grade average to reflect the duplication of the course.

Enacted in the 78th Legislative session, HB1 mandates that students repeating a course for a third or more time, may be subject to an additional fee for the repeated course. Courses dropped or withdrawn are counted as attempted hours and count towards the "Three-Peat Rule."

## Calculating your GPA

Each grade received has a corresponding number of points associated with it and each class has a certain number of hours:
Points for each letter grade:

| Grade | Points |
| :--- | :--- |
| A | 4 |
| B | 3 |
| C | 2 |
| D | 1 |
| F | 0 |

Take the number of hours of the course (English $=3$ ) and multiply it by the points for the grade you earned $(\mathrm{A}=4)$ so your grade points for a 3 hour course with the grade of A would be 12.

Add all of your grade points and divide it by the total number of hours taken:
English 1301-3 hours - letter grade A - would be $3 \times 4=12$ grade points
Biology 1407-4 hours - letter grade C - would be $4 \times 2=8$ grade points
PE 102-1 hour - letter grade $B$ - would be $1 \times 3=3$ grade points
Add your grade points $(12+8+3=23)$ and divide by your total number of hours $(3+4+1=8)$
23 divided by $8=2.875$ (GPA will only go out two decimal places and will not be rounded)
Total GPA would be 2.87

## Native GPA

Beginning Fall 2000, all new students who enter Texas A\&M-Commerce for the first time will have their cumulative grade point average calculated on courses taken at A\&MCommerce only. Courses taken at other institutions will no longer be considered in the calculation of the Texas A\&M-Commerce grade point average.

## Good Standing Rule

This policy defines good standing for all undergraduate students enrolled at Texas A\&M University-Commerce effective August 1, 1996.
Entering students, (first time enrollees or transfers) who have been fully admitted (without any type of probation provision or restriction) will be considered in good standing. A student is in good academic standing if, and only if, he or she has a cumulative grade point average of at least 2.00 and is not on disciplinary suspension. Students placed on academic probation or suspension must attain a cumulative grade point average of 2.00 or higher to be in good standing, regardless of whether he or she is allowed to re-enroll. For good standing status, an undergraduate student must maintain a
2.0 GPA and be in compliance with ethical and professional standards as determined by the student's academic department. The Dean of Enrollment Management \& Retention is responsible for the good academic standing designation and reporting.

## President's Honor Roll and Dean's List

Undergraduate students who maintain sufficiently high academic averages each semester are placed on the university's special honor rolls-the President's Honor Roll and the Dean's List. The Dean's List includes the names of those undergraduate students who have been registered for not less than 12 hours of academic work during the semester, not counting non-academic service courses, and who have maintained a minimum semester academic grade average of at least 3.25 . The President's Honor Roll includes the names of those undergraduate students who have met the above requirements and have maintained a semester academic grade average of 4.00 .

## Academic Distinction

Undergraduate students completing the requirements for baccalaureate degrees with exceptional scholastic averages may be graduated with academic distinction. Students are recognized at the graduation ceremony with academic distinction based on grade point average calculations at the end of the previous term. In determining eligibility for recognition, the grade point average will be calculated based on all hours attempted, including all transfer work, and the native grade point average. The lower of the two grade point averages determine the level of attainment. If a student's last period of enrollment raises his or her average to the level required for distinction, or to a higher level of distinction, the appropriate notation will be made on the academic record and diploma. Likewise, if a student's last period of enrollment lowers his or her average below the minimum grade point average requirement for distinction, the academic record and diploma will not reflect a distinction level.

The levels of recognition and the grade point averages required for each are: Summa Cum Laude, 3.90-4.00; Magna Cum Laude, 3.70-3.89; Cum Laude, 3.50-3.69.

## Numbering of Courses

Courses are numbered according to the following scheme: Freshman courses are 100-199 inclusive; sophomore courses, 200-299 inclusive; junior courses, 300-399 inclusive; senior courses, 400-499 inclusive; and graduate courses, 500-799. Courses completed at four-year institutions and numbered at the 300 level or above are considered to be advanced. All courses with a semester credit hour other than three are designated with the semester credit hour value.

## Texas Common Course Numbers

Institutions teach courses that are similar in nature and have been designated by a common number. The common course number, a four-digit abbreviation for the discipline and a four-digit course number, is to facilitate the transferability of these courses between the participating institutions. The first digit reflects the academic credit; the second digit indicates the semester hour credit; and the third and fourth digits establish course sequence. The common course number is shown in parenthesis to the right of the Texas A\&M University-Commerce course number in departmental course descriptions. A listing of all common courses numbers adopted by A\&M-Commerce as well as institutions participating in the TCCNS are available in the back of this catalog. In that section, the common courses which fulfill University Studies requirements are identified with a "US" to the right of the A\&MCommerce course number.

For more information about the Common Courses at Texas A\&M-Commerce, please contact the Office of Undergraduate Admissions 903-886-5000. Those currently enrolled at another institution should contact the appropriate departments for information. A complete listing of common courses taught statewide at colleges and universities in Texas is available at www.tcens.org (http://www.tcens.org)

## Value and Definition of Courses

The semester hour value of each course is determined by the number of clock hours spent in classwork. One clock hours per week in lecture or two to three hours per week in laboratory for one semester is the normal amount of classwork required for one semester hour of credit.

## Mid-Term and Final Semester Grade Reports

Mid-Term and Final semester grades will be updated to the student information system. Students may check the status of their grades by accessing myLeo at leo.tamuc.edu/. A PIN (Personal Identification Number) is required to access myLeo. Grade reports are no longer mailed from the university.

## University College Success Coaches

University College and its Success Coaches are responsible for advising all undergraduate students new to Texas A\&M-Commerce.
First year students are required to consult Success Coaches for advisement until they meet the following conditions:
A. Complete their first academic year at A\&M-Commerce;
B. Complete twenty-four semester hours of credit bearing courses;
C. Complete the university's basic skills requirements; and

## D. Declare a major.

All entering transfer students will be advised by a Success Coach until they meet the following conditions:
A. Complete thirty semester hours of credit bearing courses, whether at Texas A\&M-Commerce or elsewhere;
B. Complete the university's basic skills requirements; and
C. Declare a major.

Students who have met the conditions above will then be referred to the appropriate college and/or department for future advising. Success Coaches will notify each student and their receiving college and/or department at the time that they meet these conditions.

Students and their Success Coaches are partners in meeting the essential learning outcomes that support student success. The partnership requires participation and involvement of both the Success Coach and student. In this partnership both the Success Coach and student have well-defined responsibilities.

Success Coach Responsibilities-What You Can Expect
Success Coaches will:

- Effectively communicate the curriculum and graduation requirements for your major and university and college academic policies and procedure.
- Encourage and guide students as you define and develop realistic goal.
- Provide you with information about strategies for using the available resources and services on campus.
- Assist you in understanding the purposes and goals of higher education and its effects on your life and personal goals.
- Monitor and accurately document your progress toward meeting your goals.
- Be accessible in person, by telephone, e-mail, or web access during posted office hours.
- Assist you in gaining decision making skills and skills in assuming responsibility for your educational plans and achievements.
- Maintain confidentiality.

Student Responsibilities-What Your Success Coach Can Expect
Students have clear responsibilities in this partnership:

- Schedule regular appointments or make regular contacts with Success Coach during each semester
- Come prepared to each appointment with questions or materials for discussion
- Ask questions if you do not understand an issue or have a specific concern
- Enroll in the courses selected for you by you and your Success Coach
- Keep a personal record of your progress toward meeting your goals
- Organize official documents in a advising portfolio that enables you to access them when needed
- Complete all assignments or recommendations from your Success Coach
- Clarify personal values and goals and provide Success Coach with accurate information regarding your interests and abilities
- Become knowledgeable about college programs, policies and procedures
- Accept responsibility for your decisions

Expected Student Learning Outcomes for Student Interaction with Success Coaches
Through the interaction with Success Coaches at Texas A\&M University-Commerce,

- Students will be able to articulate a basic understanding of degree requirements.
- Students will be able to articulate a basic understanding of the University's primary academic tools, policies and procedures.
- Students will be able to articulate a basic understanding of general education core requirements.
- Students will be exposed to the value of life-long learning.


## Class Attendance Rule

Students are expected to be present for all class meetings of any course for which they are enrolled. Students are responsible for learning about and complying with the attendance policy stated in the catalog, Student's Guidebook, and/or faculty syllabi. Faculty members will provide details on requirements and guidelines for attendance in their classes in their course syllabi. Faculty members will keep students' attendance records.

Students are responsible for requesting makeup work when they are absent. They will be permitted to make up work for absences which are considered by the faculty member to be excusable. The method of making up this work shall be determined by the faculty member.

The student is responsible for providing the faculty member reason(s) for his/her absence. The faculty member then determines the validity of the reason(s) for the absence and whether the student is to be excused for the absence. Faculty members may consider the following reasons for absence as excusable.

1. Participation in a required/authorized university activity;
2. Verified illness;
3. Death in a student's immediate family;
4. Obligation of a student at legal proceedings in fulfilling responsibility as a citizen; and
5. Others determined by individual faculty to be excusable (e.g., elective University activities, etc.).

Appeals can be made through normal administrative channels.
A record of excused and unexcused absences will be maintained by a faculty member for reference because financial aid and scholarship programs require attendance records.

Students who have failed any part of the Texas Academic Skills Program (THEA) test are required by the State of Texas to attend developmental courses. Students who do not attend developmental courses or tutorial sessions may be withdrawn from the university.

When requested by the student, teachers will inform the student who has been absent whether makeup work is allowed and whether absences jeopardize the student's standing in a class.

It is the prerogative of the faculty to drop students from courses in which they have accrued excessive absences as defined in the course syllabus. In such cases, faculty recommend through the department head to the appropriate college dean that a student be dropped from a class. The faculty member will document absences and will make a reasonable effort to communicate with the student prior to recommending the drop. If approved, the college dean will forward the recommendation to the Registrar's Office.

Students who wish to drop a course or withdraw from the university are responsible for initiating this action.
If a student believes the final grade is unfairly impacted by attendance requirements, an appeal can be made. This appeal process is explained in "Student's Appeal of Instructor's Evaluation" (Procedure A13.06).

## Summons to Administrative Offices

There are times when students may be requested to report to an administrative office. The summons may be transmitted in the form of a letter, telephone call, or by personal messenger. A student who receives a summons is expected to report immediately or on the date scheduled. Failure to do so is a violation of the Student Code of Conduct (\#15) and may result in disciplinary actions.

## Scholastic Probation and Suspension

### 11.04.99.R0.06 Undergraduate Scholastic Probation and Dismissal

Effective September 1, 1996
Revised May 12, 2008
Supplements System Policy 11.04 (http://web.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/ rulesProcedures/11centersDegreesPrograms/undergraduate/11.04.99.R0.06UndergraduateScholasticProbationAndDismissal.pdf)

Texas A\&M University-Commerce calculates course work based on the institutional GPA to reflect work completed only at A\&M-Commerce. Official transcripts reflect the institutional GPA unless the student entered prior to Fall 2000.

Definitions:

- Institutional (native) grade point average: Applies to all students who enrolled Fall 2000 or after. Applies only to coursework completed at Texas A\&M University-Commerce.
- Cumulative GPA (institutional and transfer work combined): Applies to students who enrolled in courses at Texas A\&M University-Commerce PRIOR to Fall 2000. Applies to all coursework.

1. The regulations concerning probation, suspension, and reinstatement in the university were established by the University Academic Council and are administered by the deans of the colleges. In certain cases where there are extenuating circumstances, appeals regarding academic probation and suspension may be made to the Academic Affairs Undergraduate Student Suspension Appeal Committee. Refer to procedure 11.04.99.R0.06 (http://web.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/11centersDegreesPrograms/ undergraduate/11.04.99.R0.06UndergraduateScholasticProbationAndDismissal.pdf)
2. A satisfactory level of academic achievement is determined on the basis of each student's institutional grade point average calculated on the basis of all academic work attempted, and, if the student is in remediation, on satisfactory progress toward completion of required remedial work. To be eligible for continued enrollment in good standing in the University, a student must maintain a minimum cumulative grade point average of 2.00 , and, if in remediation, must pass each required remediation course in no more than one attempt for each course. When a remediation course must be attempted for the second time, the student will be considered to be on probation regardless of his or her grade point average. Students
who do not pass a remediation course on the second attempt will be placed on suspension regardless of the grade point average, subject to the requirements of suspension. Upon readmission, each time the same remediation course is attempted and not passed the student will again be placed on suspension.
3. Should any student fail to maintain satisfactory progress toward graduation as specified by these regulations, the student will be permitted to enroll for further work only on academic probation. Students enrolled on academic probation may register for no more than fourteen (14) semester hours (academic, remedial, or physical education activity) in any one semester of the regular academic year. A full summer session (two terms) will be considered equivalent under these requirements to one semester of the regular academic year. Probationary students may enroll for no more than two courses during any term of a summer session or no more than four courses for a full summer session.
4. A student on academic probation will remain subject to the requirements of probation until the institutional grade point average has been raised to the level of satisfactory progress specified above and, if in remediation, must continue to make satisfactory progress toward completion of remedial work as stated above. To qualify for continued enrollment while on probation, however, the student must maintain a semester grade average of at least 2.00 . Should any probationary student fail to maintain such a 2.00 semester grade average in the academic courses attempted in any semester of probation, the student will be required to leave the university on academic suspension for at least one calendar year. In cases where there are extenuating circumstances, a student who has failed to maintain the required 2.00 semester grade point average in academic courses to qualify for continuance of probation may be permitted, with the approval of the dean of the appropriate college, to enroll for one additional semester of extended probation. Refer to procedure 11.04.99.R0.07 (http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/11centersDegreesPrograms/ undergraduate/11.04.99.R0.07AcademicAffairsUndergraduateStudentSuspensionAppealCommittee.pdf) for further appeal guidelines. Should the student fail again, however, to maintain an adequate 2.00 semester grade point average in academic courses attempted during that semester, the student will be required to leave the university on academic suspension for one calendar year as specified above. After the period of academic suspension, the student will be permitted to enroll again on academic probation. Students wishing to return following completion of the suspension period must reapply to the university and file an appeal with the Academic Affairs Undergraduate Student Suspension Appeal Committee.
5. To ensure that the grade point average on the official record has been updated to account for duplicated courses, any student enrolling for the same course must notify the Office of the Registrar during the semester in which the course is being repeated.
6. Transfer students whose grades at other colleges or universities were unsatisfactory ( $D$ or lower) according to the regulations of $A \& M-C o m m e r c e$ will be placed on academic probation subject to the same requirements as apply to other students on probation. Students on academic suspension from other institutions will not be permitted to enroll at A\&M-Commerce until their specified periods of suspension expire.
7. A student must be in residence at A\&M-Commerce in order to remove the conditions of probation. If the student attends another college or university, the conditions of probation will not be removed; however, the academic record will be updated to reflect the transfer work. A student, however, who withdraws for a period of at least one calendar year or is suspended for the same period may, upon re-enrollment, petition the dean of the appropriate college to have the unsatisfactory grades eliminated from the calculations of the official institutional grade average. Courses eliminated from the calculation of a student's official grade point average may not be Basic Skills courses (mathematics, English, etc) or courses that apply toward the current major. In addition, this applies only to credits earned at A\&M-Commerce (excludes all transfer work).
8. A\&M-Commerce reserves the right to deny admission to a student suspended from another college even though the suspension period has expired.
9. Students on academic suspension are not eligible for correspondence or extension courses.

References: Prior ETSU Policies V E 13 and B-33 approved September 1, 1974; revised November 9, 1979, January 7, 1995, and June 3, 1996; Procedure A11.Suspension and Probation

## Undergraduate Student Loads

## Regular Session

Exclusive of physical activity courses, twelve hours is considered by the institution as a full-time load (Procedure A11.20). However, to graduate in four years, it is recommended students enroll in 15 hours each semester or complete coursework in the summer. Many scholarships specify enrollment in 15 semester hours.

Appropriate administrative staff will use the following guidelines for approving exceptions to the above:
Any student enrolled for student teaching will be limited to a maximum of fifteen semester hours.
An undergraduate student who wishes to enroll for more than 19 hours must have the approval of his academic dean before adding the courses. Any student who exceeds the normal load by adding additional course(s) and does not have the appropriate academic dean's approval will be automatically dropped from that course and notified of this action by the dean.

Students required to enroll in university designated developmental reading, composition or mathematics in any long semester will be restricted to a 14 -hour course load, approved by the academic adviser. All approvals for overloads are obtained from the dean of the college in which the student is majoring.

## Summer Session

Six semester hours, exclusive of physical education activity, is the normal student load for each summer term. A student may not enroll for two subterm courses simultaneously within the same subterm.

An undergraduate student may schedule one semester hour above the normal load each summer term.
An undergraduate student lacking fifteen semester hours to graduate at the end of that summer and who has an overall "C" (2.00) average may schedule nine semester hours one term with dean's approval.

Freshmen admitted provisionally will be limited to 10 semester hours, for the entire summer.
An undergraduate student who lacks 30 semester hours to graduate in December may schedule nine semester hours during one summer term only if the fall schedule would include student teaching and if the student has an overall " $C$ " (2.00) average.

A last semester senior who lacks 12 hours or fewer to graduate at the end of the summer and who has an overall "C" (2.00) average may schedule nine semester hours one term with the appropriate dean's approval.

Any student who exceeds the normal load by adding an additional course(s) and does not have the appropriate academic dean's approval will be automatically dropped from the course and notified of this action.

For scholastic probation details, see Scholastic Probation and Suspension.
All approvals for overloads are obtained from the dean of the college in which the student is majoring.

## Mini Session

Any student registering for classes during the mini term should be aware of the accelerated nature of the class. The maximum load for a mini-term is 3 hours

## Student Class Schedule Adjustments

Students are expected to make all necessary adjustments in their class schedules by the fourth class day of a regular semester and the second class day of a summer semester. Eligible students may use myLeo to process drops and adds. Students may add classes until the fourth class day during the fall and spring semesters and the second class day during the summer terms. Students may drop a class with a full refund (if remaining enrolled) until the twelfth class day during the fall and spring semesters and fourth class day during the summer terms.

The student desiring to add a course(s) after the fourth class day of a regular semester or second class day of a summer semester should pick up a drop/add sheet at the Registrar's Office. The student should proceed to the department(s) where he obtains department/instructor approval and then to the appropriate dean for approval. The drop/add form is then returned to the Registrar's Office. Students will not be allowed to add classes after the twelfth class day during Fall/Spring or the fourth class day during a summer semester. Students not eligible to use MyLeo should contact their academic advisor.
*EFFECTIVE SUMMER 2012
Instructor approval will no longer be required to DROP a course prior to the drop deadline for eligible students. Athletes, international students and advised students will be required to obtain a signature from the appropriate office.

- Athletes must be approved through the Associate Athletic Director, Judy Sackfield located at the Field House, Room 002C.
- International students must obtain approval from the international student office located in Halliday Student Services, Room 104.
- University College students must obtain approval from their success coach located in the Student Access \& Success Center.
- Honors College students must obtain approval from Dr. Eric Gruver, the Director of Honors Advising, in order to drop a course.
- Students with holds must clear their holds through the appropriate office.

A drop/add form for courses to be dropped may be obtained at the Registrar's Office, or is available online at the following website : http:// www.tamuc.edu/home/registrar/pdfs/dropaddform.pdf. No course may be added to student schedules after the census date shown on the University Calendar, except in very special cases and then only by approval of the instructor and appropriate dean.

Students dropping all of their courses OR enrolled only in one class must complete a withdrawal form. Mini terms require a withdrawal form to be completed and returned to the Registrar's Office. Information and a withdrawal form is located at the following website: web.tamuc.edu/admissions/ registrar/documents/WithdrawalForm.pdf.
** Effective Fall 2008, a course dropped after census date in a term will receive a grade of "Q". Drops with "Q" grade will not affect the GPA overall status, but are counted as attempted hours and count towards the 6 drop rule, three-peat, 45 -hour and 30-hour rule. Graduate students are not subject to the six-drop rule but will have the advantage of the "Q" grade. See the following website for specific dates: web.tamuc.edu/admissions/registrar/ generallnformation/dropAdd.aspx

## Auditing Courses

Students desiring to audit a course may do so with the consent of the instructor and department head. Enrollment for audit courses is not until the first day of classes. The tuition, fees and admission requirements are the same as for credit. Students enrolling for a course for audit must notify the Registrar's Office prior to completing registration for the course. A student may not change from credit to audit after the twelfth class day during the long session or the fourth class day in a summer term.

## Seniors in Graduate Courses

A last semester A\&M-Commerce senior who lacks 12 hours, or fewer, to graduate and has a grade point average of 2.75 or higher, may enroll for 3 to 6 hours of graduate credit, subject to prior written recommendation from the major department head and approval of the Dean of Graduate Studies and Research. Undergraduate students registering for graduate classes without prior approval will be dropped. Seniors desiring to take Business Administration courses for graduate credit must also have permission from the Director of Graduate Programs in Business Administration. Graduate hours taken cannot apply toward an undergraduate degree. The maximum load for seniors who register for graduate credit is 12 credit hours per semester or six hours per summer term. Students in the BPA/MBA five-year accounting program may be exempt from the requirements for this section with the approval of the department head and the Dean of Graduate Studies and Research.

## Classification Level

Freshman, sophomore, junior, and senior classification will be granted on completion of a designated number of semester credit hours passed. These are:

| Classification | Semester Credit Hours |
| :--- | :--- |
| Freshman | $1-29$ |
| Sophomore | $30-59$ |
| Junior | $60-89$ |
| Senior | $90-\mathrm{above}$ |

In general, students should take courses at the level of their classification and lower level courses should be completed insofar as possible before upper level courses are taken.

## Bachelor's Degree Requirements

The University offers 13 recognized degrees on the undergraduate level-the Bachelor of Science, the Bachelor of Arts, the Bachelor of Arts in Criminal Justice, the Bachelor of Science in Criminal Justice, the Bachelor of Arts in Interdisciplinary Studies, the Bachelor of Science in Interdisciplinary Studies, the Bachelor of Business Administration, the Bachelor of Applied Arts and Sciences, the Bachelor of Science in Computer Information Systems, the Bachelor of Fine Arts, the Bachelor of Music, the Bachelor of General Studies and the Bachelor of Social Work. The curricula leading to a baccalaureate degree are designed to give the student a well-rounded and liberal education with specialized study in one or more fields.

## Requirements for all undergraduate degrees

A student entering under this catalog must meet the degree requirements listed below or those of a subsequent catalog. However, a student who fails to graduate within five years after admission will be required to meet the degree requirements of a subsequent catalog that is within five years of currency at the time of his graduation.

As required by the Southern Association of Colleges and Schools (SACS), at least 25 percent of the hours applicable to a degree must be earned through instruction by the institution awarding the degree. This rule is effective for students enrolled for the first time at Texas A\&M University-Commerce during or after the fall semester 1979.

- Majors, Emphasis, Broad-Field Majors, Minors, and Interdisciplinary Studies Minor. A student must complete a major and a minor, a broad-field major, or two majors in order to be graduated from Texas A\&M University-Commerce. Some majors have emphasis areas. All students must take at least six advanced semester hours of work in each of their majors at Texas A\&M University-Commerce. Specific course requirements are identified in the departmental sections of this catalog.

A major consists of a minimum of 24 semester hours in one subject field, including at least 12 advanced hours.
An emphasis consists of a minimum of 15 semester hours in a 24 -semester-hour major or 18 semester hours in a 36 -semester-hour major.
A broad-field major consists of a minimum of 48 semester hours, including at least 18 advanced hours.
A minor consists of a minimum of 18 semester hours in a subject field, including at least six semester hours of advanced courses.
An interdisciplinary studies minor includes 18 semester hours in two or more fields, nine of which are advanced and all of which are outside the student's major.

[^1]- Advanced Level Requirement. A student must complete at least 36 semester hours at the advanced level ( 300 or 400 level courses). No advanced course from a junior or community college will be credited toward meeting advanced-level degree requirements unless specified below. A minimum of 60 semester hours must be completed at a senior level institution. Specific initiatives targeted at facilitating community college transfer to a four-year university are exceptions to this rule. The initiatives include the Bachelor of Applied Arts and Sciences degree program and other degree programs, including students who transfer in with the Associate of Arts in Teaching degree, for which the combined number of hours in the Texas Higher Education Coordinating Board approved transfer core and field of student curricula exceed $50 \%$ of total hours required for the degree.
- Institutional Requirement - Students must complete 25 percent of degree requirements from Texas A\&M-Commerce per the Southern Association of Colleges and Schools (SACS). Extension and correspondence credits may be used to satisfy residence requirements.
- Fitness and Recreational Activity Requirements. Two one-semester-hour courses in fitness and recreational activity are to be completed during the freshman and sophomore years at A\&M-Commerce. For other options, see University Studies Requirements (p. 39).
- Special Major Requirements. In addition to meeting the above minimum requirements, the student must complete any other special requirements as outlined for each major subject. Effective for all new undergraduate students beginning Fall 1999, a minimum grade of "C" will be required in all undergraduate major courses. This includes all transfer and A\&M-Commerce courses in the student's major area of study.Semester Hours. A student must complete a minimum of 120 semester hours, exclusive of English 100 and Math 131, with the following grade point requirements:
a. an overall 2.00 average;
b. a 2.00 average on all work completed at A\&M-Commerce;
c. a 2.00 average in each major and minor; and
d. a 2.00 average at A\&M-Commerce in each major and minor.
- Correspondence and Extension Courses. No more than 30 semester hours of extension and correspondence combined may apply toward a degree. No more than 18 of these 30 hours may be completed by correspondence. A maximum of 18 semester hours of advanced credit in a major field, when prerequisites have been satisfied, may be earned and counted toward a baccalaureate degree from this institution. Note: The grade from a correspondence course will apply to your Texas A \& M University-Commerce GPA.


## Bachelor of Science

A Candidate for the Bachelor of Science degree must meet all of the requirements specified above.

## Bachelor of Arts

A Candidate for the Bachelor of Arts degree must meet the requirements specified for the Bachelor of Science degree. In addition, the candidate must complete at least 12 semester hours (four courses) in one foreign language, or complete six semester hours above the elementary courses if two units of high school credit in the language have been submitted as a part of the regular university admission requirements, or complete three semester hours if he presents three or four high school credits.

A student who holds the Bachelor of Science degree from this university may acquire the Bachelor of Arts degree by completing the foreign languages requirements for the same and surrendering the Bachelor of Science degree.

## Bachelor of Arts or Bachelor of Science in Criminal Justice

Requirements are the same as for the Bachelor of Science degree with the following exceptions:
The criminal justice major consists of a 58 semester hour broad field program of study. The major includes a balance of criminal justice and advanced sociology courses. Twelve semester hours are electives. No minor is required.

## Bachelor of Arts or Bachelor of Science in Interdisciplinary Studies

The Bachelor of Science in Interdisciplinary Studies degree (B.S.I.S.) is designed specifically for students who desire the Texas Provisional Teaching certificate in K-8 classrooms. The requirements for the B.S.I.S. degree are the same as for the Bachelor of Science degree with the following exceptions:

A minimum of 43 semester hours of specified course work in University Studies is required. Course work in the major, Interdisciplinary Studies, requires 42 semester hours of course work. Students must have completed a minimum of 45 semester hours of college coursework, have satisfactory scores on the THEA, have an overall GPA of 2.5, and have a 2.5 minimum GPA in coursework in their area of specialization (no grade below "C") to take courses in the Department of Elementary Education. Students must achieve admission to Teacher Education to be admitted to student teaching. Recommendation for certification is contingent upon completing the degree, maintaining established standards, passing the competency examination (TExES) in teaching field(s) and in professional education.

The requirements for the Bachelor of Arts in Interdisciplinary Studies degree (B.A.I.S.) are the same as for the Bachelor of Arts degree with the following exception: candidates must also meet all requirements for the Bachelor of Science in Interdisciplinary Studies degree.

## Bachelor of Science in Computer Information Systems

While sharing a common core subset with the Bachelor of Science with a major in Computer Science, the Bachelor of Science in Computer Information Systems emphasizes the application of computers for information processing by organizations. Requirements for the Bachelor of Science in Computer Information Systems degree are the same as for the Bachelor of Science degree with the following exceptions:

Candidates for the non-certification degree must complete a minimum of 41 semester hours in computer science, 18 semester hours in required support courses, and a minor from another department (an area of business is recommended).

Candidates for the degree with secondary certification must complete 38 semester hours in computer science, 15 semester hours in required support courses, and the secondary professional development sequence of courses.

## Bachelor of Fine Arts

The requirements for the Bachelor of Fine Arts are the same as for the Bachelor of Science degree with the following exceptions:
Ninety-one to 95 semester hours in art, including a minimum of 36 advanced hours. (See the specific requirements for each Bachelor of Fine Arts). The Bachelor of Fine Arts requires no minor area of study.

## Bachelor of Music

The requirements for the Bachelor of Music are the same as for the Bachelor of Science degree, with the following exceptions:
Seventy-eight semester hours are required in the major, including 31-33 hours in the emphasis area. No second major field is required for the B.M. Music electives on the B.M. degree vary from five hours to 13 hours depending on the emphasis area.

## Bachelor of Social Work

The requirements for the Bachelor of Social Work degree are the same as for the Bachelor of Science degree, with the following exceptions:
Fifty-four semester hours in social work and 6 hours in psychology and sociology are required. No minor or second major is required.

## Bachelor of Applied Arts and Sciences

The Bachelor of Applied Arts and Sciences (BAAS) degree at Texas A\&M University-Commerce requires the completion of 120 semester hours. The BAAS degree is designed to meet the following student needs:

- Persons who hold an Associate (college track) degree from a regionally accredited institution.
- Persons who hold an Associate of Applied Arts and Sciences (technical track) degree from a regionally accredited institution.
- Persons who have completed at least 44 semester hours of college credit from a regionally accredited institution with a minimum of 26 semester hours in general education (including English Composition, American History, US Science 8 semester hours and College Algebra or equivalents) and at least 24 semester hours in a career, technical or vocational discipline. The ideal candidate for the BAAS degree is someone who has completed all of the general education and career courses required ( 85 semester hours) prior to entering the BAAS program at Texas A\&M-Commerce.
- Persons who have an overall GPA of at least 2.6 on a 4.0 scale.


## Bachelor of General Studies

This is a degree available through the College of Business \& Entrepreneurship at Texas A\&M University-Commerce. The degree provides maximum flexibility for students who have well-defined career objectives and wish to determine the content of their degree rather than pursue one of the established majors at Texas A\&M Commerce. The degree program includes general education requirements and an area of concentration but not a specific major.

## Second Bachelor's Degree

Holders of a baccalaureate degree from this university or other accredited four-year college or university may be awarded a second baccalaureate degree. All catalog requirements for the second degree must be met including:

1. A minimum of 30 semester hours of credit earned in residence at $\mathrm{A} \& \mathrm{M}$-Commerce;
2. A minimum of 24 of the 30 semester hours earned must be advanced level;
3. Completion of all requirements for the major, including GPA requirements; and
4. Completion of the State of Texas required American History and Political Science courses.

## Application for Graduation

The graduation application is available online through your myLeo account during the following time periods: Spring/fall first three weeks of the semester; summer, first two weeks of semester. Once the application period has ended, your faculty advisor will begin reviewing your application. The faculty advisor will forward the graduation checklist and, if needed, the degree evaluation to the dean's office for review and approval. When the dean (or designee) has approved the graduation checklist and other necessary documentation, the forms will be submitted to the University Registrar.

A $\$ 40.00$ application fee is required from the student upon submission of the graduation application.
The Graduation Coordinator will notify the student when the graduation application packet is complete. If the student does not fulfill the degree requirements, he or she will be required to cancel the graduation application and reapply (A13.26).

## Commencement Participation

Commencement ceremonies recognize academic achievements of students and faculty. While ceremonial in nature, commencement is a time for the university to celebrate a major milestone in the life of the academic community. Participation in commencement at Texas A\&M University-Commerce is an earned honor shared among graduates.

Participation in the commencement ceremony is restricted to students who have completed all degree requirements. Commencement exercises are held three times each academic year in May, August and December. Participation in the commencement ceremony does not guarantee conferring of any degree. Degrees are conferred based on official grades received in the Registrar's Office following commencement. Students with holds will not receive a diploma or official transcript until all obligations to the university have been cleared. (A13.14)

Texas A\&M University-Commerce has the right to rescind any conferred degree if the university becomes aware of information that the student did not meet degree requirements.

## University Studies Requirements

University Studies is an essential element in the educational process that results in professional success, personal growth, and responsible citizenship. In this process, students have the opportunity to acquire knowledge, learn reasoning and communication skills, examine their goals, values, and potentialities, and develop an enduring commitment to learning through both formal and informal educational experiences.

The University Studies program at A\&M-Commerce embodies the characteristics and purposes of the University. With both professional and liberal arts programs, A\&M Commerce recognizes general education as a necessary component in the development of all students. The general education which takes place in the University Studies program is therefore not only compatible with specialization but is the context in which specialization occurs.

The breadth and depth offered by University Studies is necessary to the meaningful and informed study of any major field. Though the courses are required, they are not to be regarded as inconveniences, but rather as the intellectual foundation upon which a university education is built.

Specifically, the University Studies program

- stresses breadth and provides a person with opportunities to perceive the integration of knowledge;
- involves the study of liberal arts and science;
- encourages understanding of our heritage as well as respect for other people's cultures;
- develops mastery of linguistic, analytical, and computational skills that are necessary for lifelong learning; and
- fosters development of such personal qualities as appropriate acceptance of ambiguity, empathy and acceptance of others, and expanded understanding of self.

Presently, there are two configurations by which students may satisfy the University Studies requirement at A\&M-Commerce:

1. Completion of the current block of courses that comprises the University Studies Curricula (Table 1). These must total 43 semester hours.
2. A combination of Generic Transfer Equivalent Courses for initial transfer students (Table 2) and courses from Table 1. These must total 43 semester hours.

In both cases it is essential that students recognize that individual courses are not necessarily interchangeable. Certain science courses, for example, are intended for those majoring in science. Depending upon major, different math courses might be more applicable or even preferred by departments. Students considering University Studies courses should consult with the appropriate advising personnel or offering departments as a part of making an informed choice prior to enrollment.

Table 1 - University Studies Courses

## Communications

| English Composition |  |  |
| :---: | :---: | :---: |
| ENG 1301 | College Reading and Writing | 3 |
| ENG 1302 | Written Argument and Research | 3 |
| Speech |  |  |
| SPC 1315 | Fundamentals of Public Speaking | 3 |
| or SPC 1321 | US - Business and Professional Speaking |  |
| Mathematics |  |  |
| MATH 1314 | College Algebra | 3 |
| or MATH 1324 | Mathematics for Business Applications |  |
| or MATH 179 | Mathematics: Applications and Philosophy |  |
| or MATH 2413 | Calculus I |  |
| Natural Sciences |  |  |
| 8 sh from the following (all courses 4sh): |  | 8 |
| Biological Sciences |  |  |
| BSC 1406 | Introductory Biology I |  |
| BSC 1407 | Introductory Biology II |  |
| BSC 1409 | Human Biology: Structure and Function |  |
| BSC 1411 | Botany |  |
| BSC 1413 | Zoology |  |
| BSC 2401 | Human Anatomy and Physiology I |  |
| BSC 2402 | Human Anatomy and Physiology II |  |

[^2]

| or HIST 265 | A World Divided: Global History |  |
| :---: | :---: | :---: |
| JOUR 1307 | Mass Communication in Society |  |
| PHIL 1301 | Introduction to Philosophy |  |
| PHIL 331 | History of Philosophy I |  |
| PHIL 332 | History of Philosophy II |  |
| PHIL 360 | General Ethics |  |
| PHIL 362 | Aesthetics |  |
| PSCI 410 | Political Theory I |  |
| PSCI 411 | Political Theory II |  |
| PSCI 412 | Political Theory III |  |
| RTV 1335 | Studies in Electronic Communications |  |
| SPC 201 | US-STUDIES IN HUMAN/COMM |  |
| Visual and Performing Arts* |  |  |
| 3 sh from the following: |  | 3 |
| ART 1301 | Art, Technology and Civilization |  |
| ART 1303 | History of Art I** |  |
| ART 1304 | History of Art II** |  |
| ART 227 | Sophomore Studio: Introduction to Painting |  |
| ART 240 | Sophomore Studio: Introduction to Sculpture |  |
| ART 250 | Sophomore Studio: Introduction to Ceramics |  |
| ENG 432 | History and Aesthetics of Film | 3 |
| ENG 434 | Literature and Film |  |
| MUS 1310 | Jazz; New Orleans to Jazz/Rock |  |
| MUS 1308 | Introduction to World Music Literature |  |
| PHO 111 | Introduction to Digital Media |  |
| THE 1310 | Introduction to the Theatre |  |
| THE 340 | History of the Theatre I |  |
| THE 440 | History of the Theatre II |  |
| Fitness and Recreational Activity |  |  |
| 2 fitness and recreational activity courses *** |  | 2 |
| Honors ${ }^{* * *}$ |  |  |
| Total Hours |  | 49 |

* Selected courses from the British Studies program may be transferred to satisfy University Studies requirements in the categories of Social and Behavioral Sciences, Humanities, and Visual and Performing Arts.
** ART 1303 or ART 1304 can be counted towards the major requirement in Art History.
*** Students must complete two Fitness and Recreational Activity (FRA) courses to satisfy the requirement. FRA 120 Varsity Sport and MUS 100 (marching band) may be utilized to fulfill all or part of this requirement. Only FRA 100 (with departmental approval from Health and Human Performance), FRA 120 Varsity Sport or MUS 100 (marching band) may be taken twice to satisfy this requirement. HHPK 200 may be taken to fulfill the two credit hour requirement for BAAS majors only. Students who have completed a continuous active duty period of six months or more with the United States military services (Air Force, Army, Coast Guard, Marine Corps, Navy) will be granted one semester hour of credit for fitness and recreational activity for each six months of duty up to a maximum of four hours credit. For consideration of fitness and recreational activity credit for military service, the student should submit a copy of DD Form 214 to the University Admissions Office.
**** Honors sections of University Studies courses are designed to allow more personal attention from the instructor, and they provide students with wider opportunities for critical analysis and independent study. Such sections are identified by the letter H, such as ENG 1301.01H, etc. These course sections are restricted to students in the Honors College only.

Table 2-Generic Transfer Equivalent Courses for Initial Transfer Students

## Communication

English Composition - Any two college-level courses in English composition. 6
Speech - Any course in public speaking. 3
Mathematics
Mathematics - Any mathematics course at the level of college algebra, college algebra-based business mathematics, or higher level.

## Natural Science

Any two laboratory based courses in biological and/or physical science. 8

## Social and Behavioral Sciences

History - Any two survey courses in American history. ..... 6
Government - Any two survey courses in American history. ..... 6
Three semester hours of any course in introductory psychology, sociology, logic, anthropology, economics or a survey of the social sciences. ..... 3
Humanities
Any one course in sophomore survey of English, American, or comparative literature or a combination; or, one course in mass communications, ..... 3
or introduction to philosophy or general ethics or world civilization.

## Visual and Performing Arts

One course from music history, music literature, art history, film history, film and literature, and introductory or survey courses in theatre, or
music or art or theatre appreciation. Courses in art, music, or theatre fundamentals, theory, or methods, and applied music will not substitute.

## Fitness and Recreational Activity

Any two fitness and recreational activity (FRA) courses. One semester hour Marching Band may be substituted for this requirement; or active military service: one hour credit per six months of active service.
Total Hours
Table 3-Texas Common Course Numbers Equivalent/Substitution Courses for Initial Transfer Students

## Communication

English Composition
ENG 1301 College Reading and Writing 3

ENG $1302 \quad$ Written Argument and Research 3
Speech - 3 sh selected from the following: 3
SPC 1311
SPC 1315 Fundamentals of Public Speaking
SPC 1321 US - Business and Professional Speaking

## Mathematics

| 3 sh selected from the following: |  |
| :--- | :--- |
| MATH 1314 | College Algebra |
| MATH 1316 | Mathematics for Business Applications |
| MATH 1324 |  |
| MATH 1414 |  |
| MATH 2312 |  |
| MATH 2313 |  |
| MATH 2412 | Calculus I |
| MATH 2413 |  |

## Natural Sciences

8 sh taken from any of the following: 8

Biology
BIO 1106/1301
BIO 1107/1307
BIO 1406
BIO 1407
BIO 1108/1308
BIO 1109/1309
BIO 1408
BIO 1409
BIO 1111/1311
BIO 1113/1313
BIO 1411
BIO 1413
BIO 2101/2301

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    BIO 2102/2302
    BIO 2106/2306
    BIO 2401
    BIO 2402
    BIO 2406
Chemistry
    CHEM 1107/1307
    CHEM 1105/1305
    CHEM 1405 Survey of General Chemistry
    CHEM }140
    CHEM }140
    CHEM }140
    CHEM 1111/1311
    CHEM 1112/1312
    CHEM 1411 General and Quantitative Chemistry I
    CHEM 1412 General and Quantitative Chemistry II
    CHEM }141
    CHEM }141
Earth Sciences
    GEOL 1103/1303
    GEOL 1104/1304
    GEOL }110
    GEOL }130
    GEOL }140
    GEOL }140
    GEOL }140
    GEOL }140
    GEOL }140
    GEOL }144
    GEOL }144
Physics
    PHYS 1101/1301
    PHYS 1102/1302
    PHYS 1105/1305
    PHYS 1107/1307
    PHYS }140
    PHYS }140
    PHYS }140
    PHYS }140
    PHYS }141
    PHYS }141
    PHYS }141
    PHYS 1413
    PHYS 1111/1311
    PHYS 1112/1312
    PHYS 1115/1315
    PHYS }141
    PHYS }141
    PHYS 1117/1317
    PHYS 2125/2325
    PHYS 2126/2326
    PHYS 2425
    University Physics I
```

PHYS $2426 \quad$ University Physics II

## Environmental Sciences <br> ENVS 1401 <br> ENVS 1402 <br> Social and Behavioral Sciences

## History

HIST $1301 \quad$ US History to 1877 3
HIST 1302 US History from 1865 ..... 3
GOV 2301 and ..... 3
\& GOV 2302
or GOV 2305 and
\& GOV 2306Social and Behavioral Sciences
3 sh taken from any of the following: ..... 3
ANTH 2346
ANTH 2351 World Cultures: Perspectives from Anthropology
ECO 2301 Principles of Macro Economics
ECO 2302 Principles of Micro Economics
PHIL 2303 Logic
PSY 2301 Introduction to Psychology
PSY 2306 Psychology of Sexual BehaviorPsychology of Adjustment
SOCI 1301
SOCI 1306
Humanities
3 sh from the following: ..... 3
ENG 2322
ENG 2326 Introduction to Literature
ENG 2327
ENG 2328
Literature of the Western World
ENG 2333
HIST 2321
COMM 1307
PHIL 1301 Introduction to Philosophy
PHIL 2306
PHIL 2316
PHIL 2317
Visual and Performing Arts

| 3 sh from the following: * |  |
| :--- | :--- |
| ART 1301 | Art, Technology and Civilization |
| ART 1303 | History of Art I |
| ART 1304 | History of Art II |
| MUS 1306 |  |
| MUS 1308 | Introduction to World Music Literature |
| MUS 1309 |  |
| MUS 1310 | Jazz; New Orleans to Jazz/Rock |

DRA 1310
DRA 2361
DAR 2362
DRA 2322
Fitness and Recreational Activity
Two one-hour courses **
Total Hours 40

* Courses in art, music, or theatre fundamentals, theory, or methods and applied music will not substitute.
** Two one-hour courses from PHED 1100-1150 and/or PHED 2100-2150, or one two-hour course, PHED 1238, Concepts of Physical Fitness. Music Marching Band may be taken to satisfy this requirement; or active military service: one hour credit per six months of active service.

Transfer courses which are part of other Texas junior/community college's or another university's core curriculum shall be used to satisfy the core component areas at Texas A\&M University-Commerce. Additional core curriculum courses may only be required as approved by the Texas Higher Education Coordinating Board.

## Special Services and Opportunities

Click on any of the following links for information:

- Division of Student Access and Success
- Enrollment and Retention Division Offices
- Campus Life and Student Development Programs
- University Institutional Advancement
- University Police Department
- Safe Spaces Ally Project


## Division of Student Access and Success

The Division of Student Access and Success was created in January 2009 to provide students at Texas A\&M University-Commerce with opportunities and experiences that will foster their access to and success in higher education. The unprecedented organizational structure of this division reflects a continuum of support services that are required for today's students to have the transformational experience desired from earning a college degree.

The Division of Student Access and Success includes the following units: Enrollment Management and Retention, including Undergraduate Admissions, Registrar, Military Personnel and Veteran's Services, Financial Aid and Scholarships, Hispanic Outreach and Student Programs (includes New Student Orientation); University College, including Success Coaches, First-year Leadership Class (FLC), Regent's Scholar Program, Student Assessment, College Readiness and Retention, Developmental Education, Early Intervention, Freshman Success Seminars and Student Engagement; Honors College; Student Support Services, including Trio programs, Career Development, Academic Success Center, Student Disability Resources and Services; Off-site Locations include A\&M-Commerce at Rockwall, Collin Higher Education Center, Mesquite Metroplex Center, Navarro College Partnership-Corsicana and Midlothian Higher Education Center, and Universities Center at Dallas; Campus Life and Student Development, including Residential Learning and Living, Morris Recreation Center, Sam Rayburn Student Center, Counseling Center, Children's Learning Center, Judicial Services, Student Organizations and Activities, Leadership Engagement and Development, and Student Health Services.

Texas' Closing the Gaps goals stress the need for higher education institutions to rethink current organizational structures to focus on student access and success. A cohesive and unified framework in which academic and social support policies and practices go hand-in-hand with increased expectations for student success is necessary for today's students, particularly those who have traditionally been underserved.

Texas A\&M University-Commerce has created an organizational structure that first focuses on creating partnerships with public schools and community colleges to align curriculum, instruction, and expectations. A Student Access and Success Center provides a one-stop shop concept for student support services. This facility is located at 2200 Campbell Street. Locating all enrollment management and University College functions in one facility allows the university to form a team to focus on the success of each new student. Freshmen Success Seminars, as well as early intervention processes, allow the university to diagnose concerns and prescribe strategies to assist students with their educational experience. Success coaches, rather than traditional academic advisors, have been hired and trained to assist students in developing personalized educational plans focused on career goals and financial resources.

The traditional Student Affairs organizational structure has been replaced by focusing on campus life and student development. Specific learning outcomes for the postsecondary experience have been developed so that students not only receive a degree that prepares them for success in their chosen careers, but also provides them with specific knowledge and skills that are transferable to any setting. These specific learning outcomes are focused on leadership, globalization, service learning and wellness.

The university has identified the traditional "gate-keeping" courses with which data indicate students have difficulty. Innovative academic support services have been and will continue to be implemented, monitored and adjusted to increase student success rates.

Texas A\&M University-Commerce has created two offices to focus on two populations targeted in the Strategic Enrollment Plan. An Office for Hispanic Outreach has been formed and resources dedicated to focus on the university's goal of becoming an Hispanic-Serving Institution within three years. An Office for Military Personnel and Veteran Services has been formed and Texas A\&M University-Commerce has been designated a "Military Friendly School" by G.I. Jobs. This designation is reserved for the top $15 \%$ of colleges, universities and trade schools in the United States that are reaching out to America's veterans as students.

## Enrollment Management and Retention

Located in the Student Access and Success Center at 2200 Campbell Street, the departments in Enrollment Management and Retention effectively recruits, enrolls and retains a diverse student body at Texas A\&M University-Commerce. The Enrollment Management and Retention Division prides itself in providing exemplary student service in a continuous improvement and cohesive environment. The offices that provide quality customer service to our students include: Undergraduate Admissions for Freshman and Transfer students, Registrar, including Veterans and Military Services, Financial Aid and Scholarships, Hispanic Outreach and Student Programs and New Student Orientation.

## Undergraduate Admissions Office-Freshman and Transfer

Located in the Student Access and Success Center at 2200 Campbell Street, this office is responsible for both the recruitment and enrollment of new undergraduate students. For more information, please contact the Office of Undergraduate Admissions at 903-886-5000.

## University Registrar

Located in the Student Access and Success Center at 2200 Campbell Street, the Registrar's Office is the custodian of student's permanent academic records. The Graduation Coordinator, located in the Registrar's Office, is responsible for the certification of university candidates for graduation. For more information, please contact the Registrar at 903-886-5068.

## Veterans and Military Services

Located in the Student Access and Success Center at 2200 Campbell Street, the Veterans and Military Services Office administers Veteran's Administration educational benefit programs for veterans and their dependents that may be eligible to receive benefits under any one of several programs. Applications and further information are available in the Veterans and Military Services Office or by calling 903-886-5123.

## Air Force ROTC Program

## Through the University of North Texas

Texas A\&M University-Commerce students are given the opportunity to participate in the Air Force ROTC program through the University of North Texas. For more information, the student should contact:

Unit Admissions Officer
Division of Aerospace Studies
AFROTC-Detachment 835
940-565-2074

Aerospace Studies, Department Chair
1155 Union Circle \#305400
Denton, TX 76203-5400
(940) 565-2074

AFROTCDET835@unt.edu
The courses which may be taken in this AFROTC program are located below.

## Courses in Aerospace Studies

The Air Force ROTC courses are taught on the campus of the University of North Texas, Denton, Texas. Students register and pay for the courses through MyLeo. Directions to UNT

## Aerospace Studies, AER

103-104. The Foundation of the United States Air Force. 1 hour each. ( $1 ; 1$ ) Survey of the structure and missions of Air Force organizations; officership and professionalism; and an introduction to communication skills.

203-204. The Evolution of the U.S.A.F. Air and Space Power. 1 hour each. (1;1) Focus on factors contributing to the development of air power from the earliest beginnings through two world wars; the evolution of air power concepts and doctrine; the global war on terrorism; and an assessment of communicative skills.
292. Cooperative Education in Aerospace Studies. 1-3 hours. Supervised work in a job directly related to the student's major, professional field of study or career objective. Prerequisite(s): student must meet employer's requirements and have consent of department chair. May be repeated for credit.

331-332. Leadership Studies. 4 hours each. $(3 ; 1)$ Study of leadership and management fundamentals, professional knowledge, leadership ethics and communication skills required of an Air Force officer. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied.
332. Prerequisite(s): AERO 331.

431-432. National Security Affairs/Preparation for Active Duty. 4 hours each. (3;1) Examines the need for national security, analyzes the evolution and formulation of the American defense policy, strategy, and joint doctrine; investigates the methods for managing conflict; and overview of regional security, arms control and terrorism. Special topics of interest focus on the military as a profession, officership, the military justice system, civilian control of the military, preparation for active duty, and current issues affecting military professionalism.
432. Prerequisite(s): AERO 331, 332 and 431.
492. Cooperative Education in Aerospace Studies. 1-4 hours. Supervised work in a job directly related to the student's major, professional field of study or career objective. Prerequisite(s): 12 hours credit in aerospace studies; student must meet employer's requirements and have consent of department chair. May be repeated for credit.

## Office of Financial Aid and Scholarships

Texas A\&M University-Commerce is dedicated to helping students attain a quality education. Numerous university scholarships are available to assist students with the costs associated with higher education. The general university scholarship application is accessed through the student myLEO portal. Some, but not all, of the competitive scholarship programs may act to reduce an out-of-state student's tuition charges from nonresident to Texas resident levels. This status is determined by legislative act and is subject to change. All students who have been admitted into the university may apply for scholarships. There are priority deadlines for aid with limited funding. Information on priority deadlines can be found on the Financial Aid and Scholarships website at: www.tamuc.edu/financialaid

Freshman Entering Texas A\&M-Commerce-Incoming freshman students who have been admitted to the university will automatically be considered for one of the freshman scholarships based on their official SAT or ACT college entrance test scores. The academic scholarships available to entering freshman are the: Academic Excellence, Blue and Gold, and Presidential. We encourage all students to complete the Scholarship Application in the myLEO student portal for other university scholarships. Additional information is available at the Financial Aid and Scholarships website at: http:// www.tamuc.edu/scholarships Select the SCHOLARSHIPS Tab for information.

Transfer Students—Students who have submitted official college transcripts to the Office of Admissions and have been admitted to the university will automatically be considered for a transfer scholarship. There are many other university endowments/departmental scholarships in which a Scholarship Application is required. We encourage all students to complete the Scholarship Application through the myLeo portal.

If you are Phi Theta Kappa Member, official documentation stating that you are a Phi Theta Kappa member will need to be sent to the Admissions Office. . Additional information is available at the Financial Aid and Scholarships website at:www.tamuc.edu/financialaid . Select the SCHOLARSHIPS tab.

Graduate Students-While graduate student scholarships are limited admitted graduate students are encouraged to apply by completing the General Scholarship Application. Access to the scholarships application will be available through the myLEO student portal.

## Financial Aid

A student planning to enroll at Texas A\&M University-Commerce who seeks financial aid should complete a Free Application for Federal Student Aid (FASFA). The FAFSA is completed on line at www.fafsa.gov. Additional information on financial aid programs, requirements, etc. is available at: www.tamuc.edu/financialaid.

Most financial aid granted at Texas A\&M University-Commerce is based upon a student's financial need and is awarded on a priority basis according to FAFSA completion date in our office. Dependent students who do not demonstrate financial need will be eligible for the unsubsidized Direct Stafford Loan and for the Federal Parent PLUS Loan. The Parents PLUS Loan application is found at www.studentloans.gov. Programs with limited funding (TPEG, FSEOG, CWS, Perkins, and other grants, but not the Pell Grant) are awarded to eligible students on a first-come, first-serve basis. Priority for these funds is given to full-time students who have completed their financial aid file by the priority deadline. Academic progress and scholastic standing are taken into consideration when aid is awarded. Recipients are required to maintain the number of hours for which they are paid. Pro-rated repayment of aid is expected from students who withdraw or drop hours. Information on requirements, priority deadlines, standards of progress for financial aid eligibility can be found at www.tamuc.edu/financialaid.

## Withdrawing on Financial Aid/Return of Title IV Aid

A student who receives Federal Student Aid (Title IV aid) and withdraws, receives semester grades of All F's, or is suspended from the university during a term in which the student began attendance, will have his or her financial aid eligibility recalculated as prescribed by the 1998 amendments to the Higher Education Act of 1965.

Federal Student Aid (Title IV aid) is earned in a prorated manner on a per diem basis up to and including the 60\% point in the term. After the 60\% point of the term, all aid is considered earned. The percentage earned is calculated by dividing the number of days completed by the total number of days in the term. It is the unearned percentage of aid that determines the amount that must be returned to the Federal Government (Title IV program(s)). The University, as well as the student, may be required to return to the federal government the unearned portion of the Title IV funds to the Federal government. When the university returns its unearned portion of the Title IV funds, a portion of the student's institutional charges may be left outstanding. The university will require students to pay any portion of institutional charges that are left outstanding after the university returns Title IV funds. As a result of this process, the student may owe both the university and the Federal government.

Students, who are considering withdrawing, should contact the Office of Financial Aid \& Scholarships for a thorough explanation of how this policy will affect them. Additional information on the Return of Title IV Aid policy, including examples, is available from the Financial Aid Office. This policy is accessible on the A\&M-Commerce Financial Aid and Scholarships website. www.tamuc.edu/financialaid

Scholarships for a thorough explanation of how this policy will affect them. Additional information on the Return of Title IV Aid policy, including examples, is available from the Financial Aid Office. This policy is accessible on the A\&M-Commerce Financial Aid and Scholarships website.
www.tamuc.edu/financialaid

## Satisfactory Academic Progress Procedure (SAP)

The Higher Education Amendment Act of 1965, as amended, mandates institutions of higher education to establish a minimum standard of "Satisfactory Academic Progress" for students receiving financial aid.

For additional information visit the Office of Financial Aid website at www.tamuc.edu/financialaid. A copy of the policy is also available in the Office of Financial Aid and Scholarships located in the Student Access and Success Building.

## Office of Hispanic Outreach and Student Programs

Located in the Student Access and Success Center at 2200 Campbell Street, the mission of the Office of Hispanic Outreach and Student Programs is to raise a greater awareness of the importance of higher education among groups and individuals at high schools, community colleges, and in the general community with a special focus on the Hispanic community. Office staff advises prospective Hispanic students and families on the college application process, how to finance an education, and the student support services available to ensure their success. The office is responsible for coordinating and implementing various outreach activities, new student orientation and educational programs in an effort to enhance the university's diverse enrollment. The Office of Hispanic Outreach and Student Programs can be reached via e-mail at HispanicOutreach@tamuc.edu or by calling our bilingual (English/ Spanish) line at 903-468-8699.

Hispanic Outreach: www.tamuc.edu/hispanicoutreach

## New Student Orientation

Located in the Student Access and Success Center at 2200 Campbell Street, the New Student Orientation program is the first step for all newly admitted students. Orientation is designed to make the transition to A\&M-Commerce a smooth and enjoyable experience by addressing the common needs of incoming students. New Student Orientation is designed to provide first-year and transfer students with the opportunity to become familiar with the campus services; meet faculty, staff and current students; learn about campus activities and organizations; receive academic advising; and register for classes. New Student Orientation is a mandatory step for all new students.

While parents are not required to attend orientation with their student, parent programming is available for those parents who choose to attend New Student Orientation. The Parent and Guest Orientation program provides an opportunity to meet key faculty and administrative personnel as well as current college parents.

New Student Orientation programs are offered prior to the fall and spring semesters. Students will be provided with dates upon their acceptance to the university. Before attending an orientation a student must be fully accepted to the university; have completed and met Texas Success Initiative requirements by either taking the new TSI Assessment or have documentation of being exempt; have provided evidence of compliance with the State of Texas Bacterial Meningitis Vaccination requirement (SB 1107); and complete the orientation reservation process to secure a spot at one of the scheduled orientation sessions. There is a $\$ 100$ orientation fee that will be assessed to all new students who are required to attend orientation. The fee will be posted to the student's account upon completion of orientation. If the student receives financial aid, scholarship or other financial assistance funds, these may assist in covering the fee; otherwise the student is responsible for payment of the fee.

Students enrolled in an undergraduate degree program either online or at an off-site location or teaching site should contact the academic college advisor or the specific off-site location director/coordinator for orientation information pertinent to that program. New online and transfer students will have an online orientation through SoftChalk software with interactive information regarding the services available and identify links to webpages, telephone numbers and persons to contact if there are questions.

Another opportunity offered through New Student Orientation is Lion Camp. Student leaders serve as camp counselors who facilitate activities, discussions, games, and presentations. During Lion Camp, new students develop friendships, an awareness of their personal values, and essential survival skills, as well as discover how to use the university services to maximize their strengths and success. Lion Camp occurs after the residence halls open and before classes begin for the fall. More information can be found at http://www.tamuc.edu/admissions/orientation/lionCamp.aspx

New Student Orientation: www.tamuc.edu/orientation

## University College

Located in the Student Access and Success Center at 2200 Campbell Street, University College provides entering undergraduate students access to guidance and services necessary for success at the university and coordinates the general education courses that will assist them throughout as they become life-long learners. University College supports the university's vision through application of high academic standards, high quality programs and a personal educational experience for each student. These efforts have resulted in an increased retention rate for FTFE. First-Year Seminar, First-Year Leadership Class, Regents' Scholars, and Early Intervention are some of the programs provided by the University College. Units within the College also include: Student Assessment and College Readiness, Success Coaches, and Developmental Education. Contact the office at 903-886-5878 or email successcoaches@tamuc.edu.

## Success Coaches

Success Coaches are responsible for advising undergraduate students new to Texas A\&M University-Commerce. First year students are required to consult Success Coaches for advisement until they meet the following conditions:
A. Complete their first academic year at A\&M-Commerce;
B. Complete twenty-four semester hours of credit bearing courses;
C. Satisfy the Texas Success Initiative requirements; and
D. Declare a major.

All entering transfer students will be advised by a Success Coach until they meet the following conditions:
A. Complete thirty semester hours of credit bearing courses, whether at Texas A\&M-Commerce or elsewhere;
B. Satisfy the Texas Success Initiative requirements; and
C. Declare a major.

Once students have met the conditions above they will then be referred to the appropriate college and/or department for future advising. Success Coaches will notify each student and their receiving college and/or department at the time that they meet these conditions after working with the UC office. Students who do not fall under a SC for advisement upon admission to the university will work directly with their faculty advisor or college advising staff.

Students and their Success Coaches are partners in meeting the essential learning outcomes that support student success. The partnership requires participation and involvement of both the Success Coach and student. In this partnership both the Success Coach and student have well-defined responsibilities.

## Success Coach Responsibilities-What You Can Expect

## Success Coaches will:

- Effectively communicate the curriculum for your major and university and college academic policies and procedure.
- Encourage and guide you define and develop realistic goals.
- Provide you information for using the available resources and services on campus.
- Assist you in understanding the purposes and goals of higher education and its effects on your life and personal goals.
- Monitor and accurately document your progress toward meeting your goals.
- Be accessible in person, by telephone, e-mail, or web access during posted office hours.
- Assist you in gaining decision making skills and skills in assuming responsibility for your educational plans and achievements.
- Maintain confidentiality.


## Student Responsibilities-What Your Success Coach Can Expect

Students have clear responsibilities in this partnership. Students will:

- Schedule regular appointments or make regular contacts with their Success Coach during each semester
- Come prepared to each appointment with questions or materials for discussion
- Ask questions if you do not understand an issue or have a specific concern
- Enroll in the courses selected for you by you and your Success Coach
- Keep a personal record of your progress toward meeting your goals
- Organize official documents in a advising portfolio that enables you to access them when needed
- Complete all assignments or recommendations from your Success Coach
- Clarify personal values and goals and provide Success Coach with accurate information regarding your interests and abilities
- Become knowledgeable about college programs, policies and procedures
- Accept responsibility for your decisions

Expected Student Learning Outcomes for Student Interaction with Success Coaches
Through the interaction with Success Coaches at Texas A\&M University-Commerce,

- Students will be able to articulate a basic understanding of degree requirements.
- Students will be able to articulate a basic understanding of the University's primary academic tools, policies and procedures.
- Students will be able to articulate a basic understanding of general education core requirements.
- Students will be exposed to the value of life-long learning.


## First-Year Leadership Class (FLC)

The First Year Leadership Class is a two-semester, two-credit hour course focused on leadership development, service and multiculturalism. FLC is a living and learning community that creates a close-knit Texas A\&M University-Commerce environment, equipping students with the personal leadership skills and education necessary to lead throughout their college experience. Students receive a $\$ 2000$ per semester tuition scholarship for their first year and live together in campus housing. The First-Year Leadership Class truly inspires participants to take an active role in the campus and Commerce community (requires application, Contact the Dean of University College with questions 903-886-5878).

## Regent's Scholars Program

## What is RSP?

Regents' Scholars Program provides outstanding freshmen a four-year scholarship equivalent to $70 \%$ of the published tuition, fees, and room and board rates for the academic year. The program allows students to pursue a bachelor's degree in their chosen field while developing their awareness of international issues and cultural contrasts. In addition, RSP provides students with leadership training and experience that will allow them to have a positive impact upon the lives of others on campus and in their future profession. Thirty to thirty-five students each year are admitted to the program.

## Qualifications

To qualify for RSP, an applicant must be accepted to the university, a first-year student and proceed through the Honors College application and interview process. They must meet the basic qualifications for Honors College. At the end of this process fifty students will be offered Honors College scholarships and thirty to thirty-five students will be offered the Regents' scholarship. The basic requirements for Honors College are:
ACT Composite of 27 or higher; SAT (Critical Reading and Math) of 1200.
Graduation in top $10 \%$ of high school class.

## Expectations

To maintain the RSP scholarship, a student must earn 3.25 GPA each semester and students must be enrolled full-time at the university. RSP students must live on campus their first year as a part of a living-learning community created around the program. Students wishing to live on campus in subsequent years will be grouped together in student housing to keep the community together.
All RSP students must sign and abide by the Regents' Scholars acceptance agreement and code of conduct. In recognition of the university's investment in their education, Regents' Scholars must contribute to the intellectual, social and cultural life of the campus and Commerce communities through campus and community service.

Finally, Regents' Scholars must complete the RSP academic program which includes specific core curriculum (University Studies), leadership and foreign language courses.

The most unique, life-changing aspect of this program is the opportunity for a study-abroad experience the summer after completing the junior year. Financed by a combination of scholarships, these travel experiences earn students' academic credit and a memorable foreign cultural experience. RSP students may opt to graduate with "Honors" by completion of an Honors Thesis and seven credit hours of honors program requirements.
For questions concerning the Regents' Scholars Program, contact the Dean of University College at 903-886-5878 or email
RegentsScholars@tamuc.edu

## Student Assessment, College Readiness and Retention

This unit administers various national, state and local testing instruments. Office effectiveness is measured by expansion and modification of services, as well as by volume of traffic and students assisted. The office also promotes college readiness through cooperation with public schools, academic departments and other campus offices in highlighting readiness issues.

## Developmental Education

The math skills center serves students requiring remediation in mathematics. The reading and writing falls under the Department of Literature and Languages but offers similar support. This involves close cooperation with the department of mathematics. The one of the main emphases of this cooperation has been insuring greater access to entering students to college-level math. The result has been an increased percentage of first-year students completing college-level math. The other area of cooperation has been in experimentation with delivery and pedagogy in developmental math (MATH 131). Both efforts contributed to institutional effectiveness by helping increase retention and decrease time to graduation.

## Honors College

The Honors College, located in Prairie Crossing, 1809 Monroe Street, is an honors learning community of 200 students, with 50 full ride academic scholarships awarded to incoming freshmen. As long as they meet the requirements of the program, the scholarship continues each year, building the ranks to 50 Honors College students as sophomores, juniors, and seniors. These students take half their core courses in Honors sections, attend a series of colloquia, and complete a thesis project in their major area. Although classes are a key part to the learning experience, also emphasized are the many learning opportunities that exist outside of the classroom. An Honors learning community, in keeping with the "personal educational experience," is fostered by housing Honors College students in the modern and attractive Prairie Crossing apartments. Many late night study and chat sessions invariably enhance the learning experiences of students. On and off campus programs are scheduled to provide educational and experiential opportunities. For students who are not in the Honors College, the Honors Scholar Program provides with opportunities to take courses in the Honors sections, and engage in high level creative and critical thinking. It provides students with many of the same academic benefits and requirements as the

Honors College and allows them to graduate with honors. Honors Scholars have the opportunity to enter at virtually any point in their university studies. Contact the Honors College at 903-468-3001 or email honorscollege@tamuc.edu.

## Admission

Students will be admitted into the Honors College as they begin their first (freshman) year at Texas A\&M University-Commerce. Although there are no strict cut-off scores for admission to the college, competition for space in intense. Generally, students should have ACT scores of 27 or higher and/or SAT scores (critical reading and mathematics) of 1200 or higher, and be in the top $10 \%$ of their class if they intend to apply for admission to the Honors College. However, exceptions can be made; for instance, a valedictorian with an SAT score of 1170 should consider applying for admission. The final step of the admission process is an interview.

## Honors Courses

Honors College students will take approximately $25 \%$ of their course work in Honors sections. Honors sections will be designated with an H on the course schedule and may only be enrolled in with Honors or Departmental permission. Enrollment in these sections will be capped at 25 . Honors College students should consult with the Dean of the Honors College and a departmental advisor before registration each semester.

Instructors for honors section will be carefully chosen by Department Heads in consultation with the Dean of the Honors College. Honors faculty will have reputations for excellence in teaching and a direct interest in teaching honors students.

## Honors Probation

Upon admission, Honors students are required to maintain a minimum 3.3 cumulative GPA. Students whose cumulative GPA falls between 3.0 and 3.29 will be assigned Honors probationary status which that allows the to raise their GPA while continuing to enjoy the benefits of the Honors College. An exception is allowed for first-semester freshmen who may be assigned probationary status with a GPA between 2.7 and 3.29 . Students may be on probation for a maximum of two consecutive semester.

## Honors Thesis

The honors experience culminates in a Honors Thesis. The Honors Thesis is an opportunity to pursue an area of interest in much greater detail than usually afforded in class. A thesis can take many forms including both "traditional" research and creative projects. Students are not required to pursue a thesis project based upon their major field of study - although they typically do. The thesis can count as course work in the student's degree program. The department courses numbered 490 H and 491 H are served for use in the students' major departments in designing their plans of individual study as candidates for graduation with Honors. A thesis proposal must be approved before the student moves on to the final thesis project.

Honor College students must complete an Honors Thesis to graduate from the University with a bachelor's degree. Students who withdraw from the Honors College before enrolling for their fifth semester at Texas A\&M University-Commerce will not be held to this requirement.

## Benefits

Honors graduates are rewarded by being given a Presidential reception as they near graduation and are awarded special recognition at the graduation ceremony. In addition, the level of honors is noted on the graduate's diploma and transcript. Students in the Honors College may register for all courses at the time of graduate student registration.

## Honors Scholar Program

All students are welcome to attempt to graduate with Honors from Texas A\&M University-Commerce. If the student is not a member of the Honors College, the pathway to doing so is the Honors Scholar Program. Students entering the Honors Program must fulfill the following four requirements to graduate with Honors.

1. Complete two Honors courses (See the Honors Dean to be permitted into one of the these courses.
2. Take one semester of Honors Colloquium (HC 300) for one semester credit hour sometime during the student's stay at A\&M-Commerce. (course is designated to get students started on their Honors Thesis)
3. Complete Honors Reading (491) and Honors Thesis (490) courses of three credits each. Students must submit the thesis and pass an oral exam to graduate with the appropriate level of Honors (Honors, High Honors, Highest Honors).
4. Attain a minimum 3.25 GPA at the time of graduation.

Students interested in entering the Honors Scholar Program should consult with the Dean of the Honors College. For additional information, visit the Honors Web Page at: www.tamuc.edu/honors

## Student Support Services

## Academic Success Center (http://www.tamuc.edu/studentLife/campusServices/academicSuccessCenter)

Located in the Student Access and Success Center at 2200 Campbell Street, the Academic Success Center (ASC) is an academic tutoring program for all students, and especially for those whose basic skills (math, reading, and writing) indicated more support was necessary for success in the Core Curriculum courses and other difficult traditional "gate-keeping" courses. As a result, a Supplemental Instruction (SI) program, JAMP study room for science courses, Walk-in tutoring program in the Library were implemented in Fall 2011 to provide tutoring, study groups, supplemental skills instruction
and peer mentoring for students. Beginning in fall 2013, an online tutoring program, Tutor.com, will be available to and benefit undergraduate students, whether on campus, at an off-site location, or online www.tutor.com/tamuc (http://www.tutor.com/tamuc). ASC provides support to students in courses identified as ones where students may be at a higher risk for failure. On average, students who regularly attend tutoring sessions have a higher percentage of ABC grades and fewer DF grades and drops than those who do not. Contact the ASC at 903-468-8620 or email ASC@tamuc.edu.

## Career Development

Located in the Student Access and Success Center at 2200 Campbell Street, the mission of the office is "to educate students and provide opportunities throughout their college career to achieve employment success." The office provides a number of programs and services throughout the academic year for students as they prepare for successful careers. Programs available on campus or by scheduled event at off-site locations include: job fairs both on-campus and off-site, an InternInDFW Fair, a S/FW Alumni Career Fair, job search workshops for professional development, mock interviews, Lion Job Shadow and a Career Closet (Dress for Success). Services available to all students, at off-site locations and online include résumé and cover letter consultation, career assessment and counseling, job search and applications and letters for professional schools or employment. Career Development provides a guide, "Make the Connection Handbook", available online for undergraduates, graduates and alumni, including students at a distance. All students may register and receive access to the job database, Lion Tracks (http://www.tamuc.edu/studentLife/campusServices/careerDevelopment/ lionTracks.aspx). Contact the Office of Career Development at 903-468-3223.

## Office of Student Disability Resources and Services (http://tamuc.edu/studentLife/ campusServices/studentDisabilityResourcesAndServices/default.aspx)

Located on the first floor of Gee Library, the office of Student Disability Resources and Services at Texas A\&M University-Commerce is committed to promoting an academic, recreational, and social experience for students with disabilities that is fully inclusive and accessible. Students with disabilities at Texas A\&M-Commerce are encouraged to participate in all aspects of campus life. Student Disability Resources and Services offers accommodations counseling, disability-related resources, access to adaptive technology, assistive equipment for on campus use, and academic/nonacademic accommodations.

All students with disabilities who need accommodations must file an application for eligibility as well as provide current documentation of disability. Applications are available in the Office of Student Disability Resources and Services and also on their website at http://tamuc.edu/studentLife/ campusServices/studentDisabilityResourcesAndServices/default.aspx

SDRS is located in Room 132 of the Gee Library. For additional information, email StudentDisabilityServices@tamuc.edu or call 903-886-5150 or visit www.tamuc.edu/SDRS

## TRIO Programs (http://www.tamuc.edu/studentLife/campusServices/trioPrograms/default.aspx)

Located in the Halliday Student Services building, the TRIO Programs of Texas A\&M University-Commerce consist of Student Support Services and Upward Bound. Each program is designed to assist low-income, first generation and disabled students with a quality education. The goal is to ensure that each student is provided with quality academic support in the areas of tutorial assistance, college and career counseling, leadership skills, and character education.

The TRIO Department is located on the third floor of the Halladay Student Services Building. Student Support Services provides advisement, academic counseling, and free tutorials in basic skills, general education subjects, and socio-cultural activities to strengthen each participant's academic and personal background. The Upward Bound Program is a "Pre-Collegiate" program designed to assist high school (9-12 grades) students in preparing for college academically and socially. The primary goal is to make certain that each student receives the proper academic and social skills, training and development necessary to succeed in high school and college. Contact TRIO at 903-886-5836.

## Additional Student Resources and Services

- Student Guidebook http://www.tamuc.edu/admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx
- University Registrar http://www.tamuc.edu/registrar
- IT Help Desk http://www.tamuc.edu/studentLife/campusServices/ITSupportCenter/support-services/default.aspx
- University Calendar Fall, Spring, and Summer 2013-2013 http://web.tamuc.edu/admissions/registrar/academicCalendars/
- Educator Certification http://www.tamuc.edu/academics/colleges/educationHumanServices/educatorCertificationAcademicServices/
- Texas Bookstore Textbooks http://www.amcbookstore.com/home.aspx
"Books/Materials" To determine textbooks for your courses and to purchase the correct textbooks for your courses or access:
http://www.amcbookstore.com/SelectTermDept.aspx
http://www.amcbookstore.com/Buyback.aspx
- James G. Gee Library http://www.tamuc.edu/library/
- International Student Services http://www.tamuc.edu/studentLife/campusServices/internationalStudentServices/default.aspx
- Global Programs-International Studies/Study Abroad http://famis.tamuc.edu/pb/?search=deptresult
- Veterans and Military Services http://www.tamuc.edu/admissions/veteransAffairs/
- Student Assessment, College Readiness and Retention http://web.tamuc.edu/academics/testingOffice/default.aspx
- Safe Spaces Ally Project http://www.tamuc.edu/studentLife/campusServices/safeSpaces/default.aspx
- Project Respect http://www.tamuc.edu/studentLife/campusServices/projectRESPECT/default.aspx
- Student ID card Mane Card office http://www.tamuc.edu/studentLife/campusServices/maneCard/
- University Police http://www.tamuc.edu/studentLife/campusServices/universityPoliceDepartment/


## Off-Site Location

## A\&M-Commerce at Rockwall http://www.tamuc.edu/academics/locations/rockwall/

Located at 2610 Observation Trail, Rockwall, Texas 75087, the Rockwall center is located 45 minutes from A\&M-Commerce's main campus. The College of Education \& Human Services offers a full master's program for RISD educators and doctoral program in Curriculum, Instruction \& Supervision. The College of Business and Technology offers their full MBA program as well a number of classes in other business related programs. These programs are administered and assessed by the academic programs. They are located at 2610 Observation Trail. Contact Rockwall at 214-771-4570 or email rockwall@tamuc.edu.

## Collin Higher Education Center www.tamuc.edu/chec

Located at 3452 Spur 399, McKinney, Texas 75069, Texas A\&M University-Commerce has partnered with three area universities to provide undergraduate and graduate degrees at the Collin Higher Education Center (CHEC) in McKinney. The CHEC is a great alternative for students that live in the Collin County area and want an education from A\&M-Commerce minutes from their home. Students who have already earned an associate degree or have a substantial number of college academic credit hours are able to complete their baccalaureate and graduate degrees offered at the CHEC. A\&M-Commerce offers three undergraduate degree programs, BA/BS Interdisciplinary Studies in Elementary Education (with Teacher Certification), BS in Psychology, and BA in Spanish, and two graduate degrees, MEd in Curriculum and Instruction (Elementary Education), and MEd in Counseling. Contact at CHEC at 972-599-4122 or email at CHEC@tamuc.edu.

## Mesquite Metroplex Center http://www.tamuc.edu/academics/locations/mesquiteMetro/default.aspx

Located at 2600 Motley Dr., Mesquite, Texas, 75150, A\&M-Commerce offers the BS in Social Work is offered in Mesquite beginning fall 2013 and A\&M-Commerce offers a variety of graduate degree programs. Students have the opportunity to earn their Master's degree in Curriculum \& Instruction (Elementary Education \& Secondary Education), Educational Leadership, Counseling, and Special Education, Social Work, and courses toward a MEd in Psychology. Additionally A\&M-Commerce offers several online degree programs. Contact Mesquite 972-613-7591 or email at mesquite@tamuc.edu.

## Navarro College Partnership-Corsicana http://www.tamuc.edu/academics/locations/ navarroPartnership/default.aspx

Located on the Navarro College Campus, 3200 W. $7^{\text {th }}$ Ave., Corsicana, Texas 75110, the A\&M-Commerce-Navarro College Partnership offers a Bachelor's degree in Interdisciplinary Studies with concentrations in EC-6, 4-8 Math, 4-8 Science, and 4-8 Math and Science available for students pursuing a career in teaching. A master's degree in Curriculum and Instruction is also available. Corsicana also provides advising for Bachelor's degrees through online programs in Applied Arts and Sciences, Business Administration and Liberal Arts. Contact Corsicana at 903-875-7617 or email Navarro.Corsicana@TAMUC.edu

## Navarro College Partnership - Midlothian Higher Education Center http://www.tamuc.edu/academics/ locations/midlothian/default.aspx

Midlothian Higher Education Center (MHEC) is located on the Navarro College Campus, 899 Mount Zion Rd., Midlothian, Texas 76065. Students attending the MHEC can complete their Bachelor's degree with a combination of face to face and online coursework in Interdisciplinary Studies with EC6 Education, 4-8 English Language Arts, 4-8 Science, and ESL/Bilingual certification options. The Master's degree in Curriculum and Instruction include Elementary, Early Childhood, and Special Education. Online program options through the MHEC include Applied Arts \& Sciences, Business Administration, and Liberal Studies. Contact MHEC at 972-775-7232 or email Navarro.Midlothian@TAMUC.edu

## Universities Center at Dallas http://web.tamuc.edu/academics/locations/dallas

The Universities Center at Dallas, located at 1901 Main Street, Dallas, Texas 75201, offers a variety of Texas A\&M University - Commerce undergraduate and graduate degree programs conveniently in downtown Dallas. The Universities Center at Dallas (UCD) was established in 1994 as the Dallas Education Center (DEC) and is located in the former Joske's Department Store building at 1901 Main Street in downtown Dallas. The UCD was the first multi-institutional teaching center (MITC) for higher education in Texas and was established by the Texas Higher Education Coordinating Board to provide access to public higher education at the upper division and graduate levels to citizens who live, work and find it convenient to take their education in downtown Dallas. The City of Dallas, the business community, and the Alliance for Higher Education partnered to provide opportunities for such access by establishing the DEC, which became the UCD. Contact UCD 214-915-1900 or http://www.ucddowntown.org/.

## Campus Life and Student Development Programs

Campus Life and Student Development supports the university's mission by providing support services and student development programming to assist students in having a personal educational experience through cultural and social opportunities, to encourage undergraduate and graduate students to become life-long learners, and to discover and disseminate knowledge for leadership and service.

## Residential Living and Learning

Located in the Halliday Student Services building, Residential Living and Learning (RLL) is committed to the educational philosophy of Texas A\&M University-Commerce and promotes the unique, personal development of each resident by providing them with a well-maintained, safe, secure, and reasonably priced living/learning environment. RLL has many opportunities for students to find a community that fits their interest and needs. It also provides opportunities for students to understand themselves and engage in global citizenship through innovative initiatives that encourage and value diversity, enlightened inclusion, and life-long learning. Each resident hall offers activities and events that engage the students in their living communities as well as the university community. Freshman resident communities include the Freshman Leadership Class, Regents Scholars, Spirit Den, and Women's Leadership. The Sophomore Year Experience offers students an opportunity to use the skills learned during the freshman year to implement change that will enhance their local and global communities. Residential Living and Learning serves both undergraduate and graduate students. 903-886-5798.

## Residency Requirement

All single, freshman and sophomore undergraduate students who are not commuting from the home of their partents or legal guardians mus reside in the University housing (residence halls) and all freshman are required to purchase an Unlimited Meal Plan for the full academic year. This policy covers all beginning students who are starting college in the same year as their date of graduation from high school. Students who have been out of high school for one year or more are exempt from this policy. Students planning to live at home in Commerce or the immediate vicinity are required to file a notarized Commuting Authorization form with the Department of Residence Life prior to registration. Students must notify the Department of Residence Life of any change in name or address. For cost information regarding both single and family housing, please contact the Department of Residential Living Learning , Texas A\&M-Commerce, P.O. Box 3011, Commerce3, tX 75429 or call 903-886-5797. Additional information is available at the department's website at http://www.tamuc.edu/studentLife/housing

## Housing

Single student housing provides students with the opportunity to experience the advantages of on-campus living. Single students will have the opportunity to select from co-ed, Greek, a small female hall, single or double room assignments, and apartment facilities. Each of these facilities will offer unique opportunities for students.

## Morris Recreation Center (http://www.tamuc.edu/studentLife/campusRecreation/default.aspx)

The Morris Recreation Center provides programming for undergraduate and graduate students to promote health, fitness and wellness through participation in a variety of structured and informal recreational activities, services, and educational programs emphasizing lifelong wellness. Some examples of the fitness program activities include yoga, zumba, cycling, Pilates, and TRX circuit training. The wellness programs offer wellness lectures, personal trainers, massage therapy, and wellness education programs. The Recreation Center coordinates the intramural sports program; the summer recreation camp; outdoor adventure programs, including the climbing facility and challenge course; the aquatics program; and many special events throughout the year. 903-468-3170.

## Cain Sports Complex

Located on the western edge of campus, the Cain Sports Complex is a multipurpose outdoor facility for Texas A\&M University-Commerce and the Commerce community. It features multiple sport fields, multipurpose green space, two barbecue grills, and eight picnic tables. Home to Campus Recreation's Intramural program, the Cain Sports Complex plays host to numerous outdoor Intramural events. Also featured at the complex are lighted NCAA softball and baseball fields, two lighted Intramural Sports fields, and an informal soccer field. This area is great for parties, organizational events, or simply a fun weekend with family or friends.

## Outdoor Adventure Center

The Outdoor Adventure program provides adventure and educational opportunities promoting active lifestyles, appreciation for natural environments and personal development. Activities include day and weekend trips, cycling and bike shop, clinics, disc golf course, and outdoor gear rental. Outdoor Adventure center also features a challenge course which offers adventure-based learning opportunities to enhance leadership, decision-making and communication skills through an interactive process for groups to develop as a team. This hands-on approach is designed to help individuals learn from their interaction with others and then apply those principles to their life situations. The course offers 13 low challenge course elements and 18 high element challenges.

## Crabtree Tennis Courts

The Crabtree Tennis Court complex is a four court fenced off tennis complex that is open for informal play and tournaments. The complex is well-lit and open for play seven days a week. Come show us what you've got!

## Rayburn Student Center (http://www.tamuc.edu/studentLife/studentCenter/default.aspx)

The Rayburn Student Center (RSC) hosts many campus activities and events aimed to enhance and nurture educational, cultural and social student experiences. The many campus activities and programs take into account the varied populations of both undergraduate and graduate students, ranging from nontraditional to traditional, students with families, and students who live off campus, in addition to faculty and staff. Students, faculty and staff experience the state-of-the-art facility by having a snack or beverage in The Club, enjoying music or playing a game in the Game Room, visiting the University Bookstore, attend a meeting in one of the conference rooms, or enjoying the outdoor patio. The Rayburn Student Center supports and hosts the Student Government Association, with over 100 different student organizations; Greek Life; the Pride Shop; and cafeteria. The Student Government Association serves as the liaison between students, faculty and staff by addressing issues, holding informational forums and finding solutions to campusrelated concerns. 903-886-5808.

## Counseling Center

Located in the Halliday Student Services building, the Counseling Center provides academic skills assistance; assessment and screening; consultation and referral; crisis intervention; educational outreach; individual and group counseling; legal advising; and a relaxation room which offers biofeedback for stressors, such as academic, interpersonal, family, work, and financial that can impact academic success. They serve as a resource for faculty, staff and parents and also play an active role in interpreting and advocating the concerns of students to the university community. The Center is sensitive to the needs of the diverse student populations that are served by the university-both undergraduate and graduate students. Students at off-site locations may use the campus services, and counselors will provide referrals. 903-886-5145.

## Children's Learning Center

The Children's Learning Center (CLC) offers campus child care in a rich learning environment to parents, who are university students or faculty/staff. The Center provides care for children ages six weeks to five years and an after-school program. It also operates a KID CAMP in the summers for children in elementary school. The CLC provides the latest in teaching programs and age appropriate educational play equipment and collaborates with academic programs as an observation site. The CLC serves both undergraduate and graduate students. 903-886-5769.

## Judicial Affairs

Located in the Halliday Student Services building, Judicial Affairs works to educate the campus community regarding standards for student conduct and to foster a community of civility, integrity, dignity, respect for others and appreciation for diversity. The office addresses behavioral misconduct, provides a resource for students concerning their rights and responsibilities and provides assistance to faculty, staff and students regarding student disciplinary matters. The Behavioral Intervention Team (BIT) is an advisory group to the Dean of Campus Life and Student Development. The focus of BIT is to focus on prevention and timely intervention before a crisis arises. The office addresses issues of both undergraduate and graduate student populations. 903-886-5171.

## Student Guidebook

Students are informed about their student rights and responsibilities primarily through the Student Guidebook which is produced by the Office of the Assistant Dean of Campus Life and Student Development annually. The Code of Student Conduct is applicable to every student enrolled at the university, whether the student is in residence, participating in study abroad, or completing coursework at an off-site location or online. Each student is expected to be fully acquainted with and held responsible for compliance with all published university policies. The student guidebook is available online http://www.tamuc.edu/admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx to all students, faculty and staff. Hard copies of the guidebook are available in the office of the Assistant Dean of Campus Life and Student Development.

## Leadership Engagement and Development

Located in the Sam Rayburn Student Center, the Leadership office offers opportunities to undergraduates to learn about and enhance leadership skills through various workshops, retreats and conferences that will help students discover their strengths, talents and values. The L.E.A.D. program develops well rounded, responsible leaders through leadership education, global education, and service-learning. The purpose for L.E.A.D. is to provide innovative, experiential opportunities which promote students' commitment to life-long learning and holistic development. 903-886-5816.

## Student Health Services

Located in Henderson Hall, the Health Services office offers affordable health care to undergraduate and graduate students as well as to the faculty and staff of A\&M-Commerce. Some of the primary health care services include acute care and injuries, allergy injections, birth control, EKG's, immunizations, flu shots, TB testing, labs, minor surgical procedures, physical exams, splints, STD/STI testing and treatment, stitches, women's health, wound care, $x$-rays, diabetic and smoking cessation classes, and health related presentations and workshops. 903-886-5853.

## Bacterial Meningitis Vaccination Requirement

The State of Texas has passed a new law (HR 4189) that will require all first-time freshman and transfer students who wish to live in campus residence halls or apartments to have a vaccination against bacterial meningitis. All first-time freshmen and transfer students wishing to live on campus after January 1, 2010, must provide the following before moving into campus housing:

1. Certification from physician evidencing that the student has bee vaccinated at least ten (10) days prior to moving into the residence halls; or
2. An affidavit or a certificate from a physician stating that the vaccination would be injurious to the health and well being of the student or stating that the vaccination has been declined for reasons of conscience. Contact Residential Living and Learning for help obtaining the affidavit.

## The Writing Center

Hall of Languages 106
(903) 886-5280

The Writing Center is located in the Hall of Languages on the east side of the campus. As you come in the main Hall of the Languages entrance, the Center is on the right (room 106).

Since 1977, the Writing Center at Texas A\&M University-Commerce has been committed to assisting writers at all levels. By working with students one-on-one or in small groups, tutors help writers at all stages of the writing process from brainstorming to polishing a final draft. Our goal is to improve student writers through improving their individual writing abilities. The ultimate goal is for students to take advantage of the learning inherent in the writing process.

Hours vary, but typically the Writing Center is open Monday-Thursday 9-4 and Friday 9-1. Online students may take advantage of our Online Writing Lab; more information about the Online Writing Lab (OWL) can be found here: http://www.tamuc.edu/academics/colleges/humanitiesSocialSciencesArts/ departments/literatureLanguages/writingCenter/default.aspx

## Mathematics Skills Center

The Mathematics Skills Center primarily provides assistance for students enrolled in entry and developmental level mathematics courses. Most student workers in the Math Skills Center are also capable of providing assistance for the students enrolled in calculus courses. Located in Binnion Hall, room 328, the Math Skills Center offers one-on-one tutoring throughout the day and includes evening tutoring on nights on nights when developmental and entry level math classes are held. Lab hours vary each semester. Call for posted hours.

Services other than tutoring which are offered in the Math Skills Center include calculator assistance and computer software programs which supplement entry and developmental level mathematics textbooks. The Math Skills Center has attached computer lab in Binnion 327, which is accessible through Binnion 328.

Students of faculty interested in further information are welcome to call the Math Skills Center at 903-886-5961. Also, the Director of the Math Skills Center is available to answer questions or discuss concerns with the Math Skills Center. Call Pamela Webster, Director, at 903-886-5950 or see her in Binnion 315.

## Office of Student Assessment and Evaluation

Exams administered by this office include the American College Test (ACT), Scholastic Aptitude Test (SAT and SAT II), the Texas Higher Education Assessment (THEA), Texas Exam for Educator Standards (TExES); the General Educational Development (GED), the Law School Admission Test (LSAT), and the College Level Examination Program (CLEP).

Additional information about any of these exams can be provided by calling the Student Assessment Office at 903-886-5122.

## International Studies Program (Study Abroad)

Texas A\&M University-Commerce promotes a number of international studies program as part of its globalization strategy. Students have the opportunity to participate in the Abbey Program (France), the British Studies Program (London), The Spanish Culture Program (Spain, Valladolid), Spanish in Spain (Madrid), Global Business (China), and special programs such as European Tourism, Politics in Argentina, and Korean Culture. Other programs are available in Argentina, Australia, Austria, Brazil, Chile, Costa Rica, Czech Republic, Germany, Greece, India, Ireland, Italy, New Zealand, Peru, Russia, South Africa and Turkey.

For information on these and other international studies programs, contact the Office of International Studies at 903-468-6034.

## International Student Office

The International Student Office offers assistance to international students and exchange visitors in regard to academic, personal and immigrationrelated concerns and refers them to other offices (on or off campus) as needed. Services provided by the International Student Office include an international new student orientation, informational workshops, coordination of special activities, liaison with the Department of Homeland Security and Department of State regarding non-immigrant students and exchange visitors, documentation for travel, employment authorization, extension of stay, etc. The International Student Office also handles the issuance of Forms I-20 and DS-2019 to non-immigrant students and exchange visitors who have been officially admitted or invited to the University. For more information, contact John Mark Jones; phone 903-886-5097; fax 903-468-3200: http:// www.tamuc.edu/studentLife/campusServices/internationalStudentServices/default.aspx

## University Institutional Advancement

This division of the university serves as the creative force that articulates a passion for the university, inspiring others to be generous in their giving and loyal in their support. It includes five areas: major gifts, annual programs, advancement services, alumni relations and marketing communications (including KETR)

## Major Gifts, Annual Programs and Advancement Services

The purpose of the Development Office is to acquire gifts for scholarships, endowments, fellowships, research, capital improvements and other programs. This is achieved through solicitation of individuals, corporations and foundations, direct mail, employee gifts (Bridge Builders), as well as special campaigns. With the support of the Advancement Services department, the development office also maintains, organizes, plans and develops activities for the Texas A\&M University-Commerce Foundation Board of Directors, Acquisition and disbursement of all gifts are monitored by the advancement office.

## Foundation

The Foundation was established in 1970 to assist the university in seeking and administering private sector support. Its assets are managed through The A\&M University System and there is an A\&M-Commerce board of directors who lead efforts to solicit gifts from corporations, foundations, government granting agencies, alumni and other individuals.

## Alumni Relations

This office is responsible for building and maintaining relationships with the university's 60,000-plus alumni. Alumni Relations provides administrative support for the Texas A\&M University-Commerce Alumni Association, as well as special services to individual alumni and alumni groups.

Alumni Relations assists Marketing Communications in producing The Pride, a twice-yearly magazine for alumni and friends of the university. The office also plans and executes alumni events such as class and organization reunions, homecoming weekend, commencement receptions, alumni chapter activities, alumni awards and recognition, alumni-funded scholarships, alumni ambassadors, distinguished alumni and other programs.

## Marketing Communications

The Marketing Communications department develops and implements the strategic marketing efforts for the university, including the design, production and implementation of all advertising, branding, marketing materials, Public Relations. The department supervises the operation of the on-campus public radio station, KETR 88.9 FM, and coordinates the university's collegiate licensing program. Marketing Communications is responsible for the university's integrated marketing strategy, communicating information about the university's activities, events, programs and people. The department includes graphic designers, publications and news writers, media specialists, photographers and videographers, and serves as the University's official liaison with the news media. The department is also responsible for the graphics standards and branding as well as crisis communications. This office also publishes several faculty/staff and alumni-related newsletters.

Marketing Communications designs and produces all of the promotional materials for the university, including the publication of the PRIDE magazine, the President's Report and a portion of university, college and department promotional materials including brochures, newsletters, flyers and other collateral materials.

The department oversees the collegiate licensing efforts of university.
As part of the Marketing Communications department, the 100,000-watt KETR 88.9 FM Public Radio station provides local and nationally produced news, sports, weather, public affairs, and national programming, The KETR staff includes the general manager, news director, program manager, and program producer as well as volunteers and students from the university's Radio/Television department. The KETR digital signal broadcasts to a $75-100$ mile radius of the University and is also online at www.ketr.org (http://coursecatalog.tamuc.edu/undergrad/special-services-and-opportunities/ www.ketr.org). The KETR studios, along with the Marketing Communication offices, are located on the first floor of Binnion Hall facing Education Drive.

## University Police Department (UPD)

This office provides police services and all services and all security functions for the university. The University Police Department also provides many services for the faculty, staff, students and visitors on campus. The department is responsible for investigation of criminal activity, crime prevention programs, safety awareness, public service assistance for motorists, event security and parking enforcement. The department is responsible for the enforcement of the university parking regulations as well as motor vehicle laws. All motor vehicles parking on campus must be registered with the department and the parking permit properly displayed.

Officers of the department are certified by the State of Texas as commissioned peace officers and have full law enforcement authority.
The University Police Department is open 24 hours a day for assistance. The office is located on the first floor of Henderson Hall on Monroe Street. Emergency - 911; Non-Emergency - 903-886-5868. For copy of crime statistics, call or come by the UPD or visit us online at http://www.tamuc.edu/ studentLife/campusServices/universityPoliceDepartment/.

## University Organization

Texas A\&M University-Commerce Organization Chart (http://www.tamuc.edu/aboutUs/administrativeOffices/organizationalCharts/university.pdf)
Provost \& Vice President of Academic Affairs (http://www.tamuc.edu/aboutUs/administrativeOffices/organizationalCharts/provostAcademicAffairs.pdf)
Vice President of Student Access and Success (http://www.tamuc.edu/aboutUs/administrativeOffices/organizationalCharts/studentAccessSuccess.pdf)
Vice President for Business and Administration (http://www.tamuc.edu/aboutUs/administrativeOffices/organizationalCharts/businessAdministration.pdf)
Vice President for Institutional Advancement (http://www.tamuc.edu/aboutUs/administrativeOffices/organizationalCharts/institutionalAdvancement.pdf)

## Common Course Numbers

These institutions have formally joined the Texas Common Course Numbering System:
Abilene Christian University
Alvin Community College
Amarillo College
Angelina College
Angelo State University
Austin Community College
Baylor University
Blinn College
Brazosport College
Central Texas College
Cisco Junior College
Clarendon College
Coastal Bend College
College of the Mainland
Collin County Community College District
Dallas Baptist University
Dallas County Community College District
Del Mar College
East Texas Baptist University
El Paso County Community College District
Frank Phillips College
Galveston College
Grayson County College
Hardin-Simmons University
Hill College
Houston Baptist University
Houston Community College System
Howard College
Howard Payne University
Jacksonville College
Kilgore College
Lamar Institute of Technology
Lamar State College-Orange
Lamar State College-Port Arthur
Lamar University
Laredo Community College
Lee College
LeTourneau University
Lon Morris College
McLennan Community College
McMurry University
Midland College
Midwestern State University
Navarro College
North Central Texas College
N. Harris Montgomery Comm. College Dist.

Northeast Texas Community College
Northwest Vista College
Odessa College
Our Lady of the Lake University
Palo Alto College
Panola College
Paris Junior College
Prairie View A\&M University
Ranger College
St. Mary's University
St. Philip's College

Sam Houston State University
San Antonio College
San Jacinto College District
South Plains College
South Texas Community College
SW Collegiate Institute for the Deaf
South Texas Community College
Southern Methodist University
Southwest Texas Junior College
Stephen F. Austin State University
Sul Ross State University
Tarleton State University
Tarrant County College District
Temple College
Texarkana College
Texas A\&M International University
Texas A\&M University
Texas A\&M University-Commerce
Texas A\&M Univ.-Corpus Christi
Texas A\&M University-Galveston
Texas A\&M University-Kingsville
Texas A\&M University-Texarkana
Texas Southern University
Texas Southmost College
Texas State Tech. College-Harlingen
Texas State Tech. College-Marshall
Texas State Tech. College-West Texas
Texas State Technical College-System
Texas State Technical College-Waco
Texas State University
Texas Tech University
Texas Wesleyan University
Texas Woman's University
The University of Texas at Arlington
The University of Texas at Austin
The University of Texas at Brownsville
The University of Texas at Dallas
The University of Texas at El Paso
The University of Texas-Pan American
The University of Texas -Permian Basin
The University of Texas at San Antonio
The University of Texas at Tyler
The University of Texas Health Science
Center-Houston
Trinity Valley Community College
Tyler Junior College
University of Houston
University of Houston-Clear Lake
University of Houston-Downtown
University of Houston-Victoria
University of the Incarnate Word
University of North Texas
University of St. Thomas
Vernon Regional Junior College
Victoria College
Wayland Baptist University
Weatherford College
West Texas A\&M University
Western Texas College
Wharton County Junior College
Wiley College

In addition to the common course numbers which follow, CORE equivalencies sheets and Courtesy Evaluation are available from the Office of Undergraduate Admissions.

| Common Course | Course Name | A\&M-Commerce Course |
| :---: | :---: | :---: |
| ACCT 2301 | Prin. of Acct. I | ACCT 221 |
| ACCT 2302 | Princ. of Acct. II | ACCT 222 |
| AGRI 1329 | Prin. of Food Sci. | FDSC 210 |
| AGRI 1407 | Agronomy | PLS 115 |
| AGRI 1415 | Horticulture | PLS 120 |
| AGRI 1419 | Intro. Animal Sci. | ANS 118 |
| AGRI 2317 | Intro. Agri. Eco. | AEC 219 |
| AGRI 2321 | Livestock Evaluation | ANS 205 |
| ANTH 2351 | Cult. Anthropology | Anth 114 (US) |
| ARTS 1301 | Art Appreciation | ART 1301 (US) |
| ARTS 1303 | Art History I | ART 1303 (US) |
| BCIS 1305 | Business Computer | Appl MIS 128 |
| BCIS 2332 | Advanced COBOL Prog. | CSCI 233 |
| BIOL 1409 | Human Biology | BSC 1409 (US) |
| BIOL 1411 | General Botany | BSC 1411 (US) |
| BIOL 1413 | General Zoology | BSC 1413 (US) |
| BIOL 2420 | Microbiology (Specialized) | BSC 254 |
| BIOL 2416 | Genetics | BSc 204 |
| BIOL 2401 | Anatomy and Phys. I | BSC 2401 (US) |
| BIOL 2402 | Anatomy and Phys. II | BSC 2402 (US) |
| BUSI 1301 | Intro. to Business | BA 195 |
| CHEM 1104 | Chem. Calc. I | CHEM 101 |
| CHEM 1405 | Intro. Chem. I | CHEM 1405 (US) |
| CHEM 1407 | Intro. Chem. II | CHEM 1407 (US) |
| CHEM 1411 | Gen. Chem. I | CHEM 1411 (US) |
| CHEM 1412 | Gen. Chem. II | CHEM 1412 (US) |
| CHEM 2423 | Organic Chemi. I | CHEM 211 |
| CHEM 2425 | Organic Chemi. II | CHEM 212 |
| COMM 1307 | Int. Mass Comm. | JOUR 1307 (US) |
| COMM 1335 | Survey of Radio/TV | RTV 1335 |
| COMM 2311 | News Gath/Writing I | JOUR 214 |
| COMM 2327 | Prin of Advertising | JOUR 260 |
| COMM 2331 | Radio/TV Announcing | RTV 215 |
| COSC 1301 | Intro. Computing | CSCI 126 |
| COSC 1336 | Prog. Fundamentals I | CSCI 151 |
| COSC 1337 | Prog. Fundamentals II | CSCI 152 |
| COSC 2325 | Comp. Org. \& Machine Lang. | CSCI 241 |
| COSC 2336 | Prog. Fundamentals III | CSCI 270 |
| CRIJ 1301 | Intro. to Criminal Justice | CJ 101 |
| CRIJ 2328 | Police System \& Practice | CJ 201 |
| DRAM 1310 | Intro. to Theatre | THE 1310 (US) |
| DRAM 1341 | Makeup | THE 218 |
| DRAM 1351 | Acting I | THE 213 |
| ECON 2301 | Prin. I-Macro | ECO 2301 (US) |
| ECON 2302 | Prin. II-Micro | ECO 2302 (US) |
| EDUC 1301 | Schools and Society | ELED 200 |
| ENGL 1301 | Composition | ENG 1301 (US) |
| ENGL 1302 | Composition | ENG 1302 (US) |
| ENGL 2326 | American Lit | ENG 2326 (US) |


| ENGL 2331 | World Lit | ENG 2331 (US) |
| :---: | :---: | :---: |
| ENGR 1304 | Engineering Graphics I | IT 111 |
| ENGR 1305 | Engineering Graphics II | IT 112 |
| ENGR 2305 | Fundamental Electric Engr | IT 231 |
| ENVR 1301 | Environmental Sci. I | ENVS 204 |
| FREN 1311 | Beg. French I | FRE 131 |
| FREN 1312 | Beg. French II | FRE 132 |
| FREN 2311 | Inter. French I | FRE 231 |
| FREN 2312 | Inter. French II | FRE 232 |
| GEOL 1403 | General Geol. I | ESCI 1403 (US) |
| GOVT 2301 | Am. Govn. I | PSCI 2301 (US) |
| GOVT 2302 | Am. Govn. II | PSCI 2302 (US) |
| HIST 1301 | U.S. History I | HIST 1301 (US) |
| HIST 1302 | U.S. History II | HIST 1302 (US) |
| MATH 1314 | College Alg. | MATH 1314 (US) |
| MATH 1350 | Fundamentals of Math I | MATH 350* |
| MATH 1351 | Fundamentals of Math II | MATH 351* |
| MATH 2312 | Pre-Cal/Elem. Func. | MATH 142 |
| MATH 2413 | Calculus I | MATH 2413 (US) |
| MATH 2414 | Calculus II | MATH 192 |
| MATH 1325 | Business Calculus | MATH 176 |
| MATH 1324 | Math for Business | MATH 1324 (US) |
| MUSI 1308 | Music Lit. I | MUS 1308 (US) |
| MUSI 1309 | Music Lit. II | MUS 111 |
| MUSI 1310 | American Music | MUS 1310 (US) |
| MUSI 1116 | Sight Sing I | MUS 117 |
| MUSI 1117 | Sight Sing II | MUS 127 |
| MUSI 1181 | Class. Piano I | MUS 136 |
| MUSI 1182 | Class. Piano II | MUS 136 |
| MUSI 1311 | Theory I | MUS 115 |
| MUSI 1312 | Theory II | MUS 125 |
| MUSI 2116 | ET and SS III | MUS 217 |
| MUSI 2118 | ET and SS IV | MUS 227 |
| MUSI 2181 | Class. Piano III | MUS 136 |
| MUSI 2311 | Theory III | MUS 215 |
| MUSI 2312 | Theory IV | MUS 225 |
| PHED 1238 | Conc. of Phys. Fitness | HHPK 154 |
| PHED 1306 | First Aid | HHPH 211 |
| PHED 1301 | Int./P.E. | HHPK 144 |
| PHED 2356 | Care \& Prev. Athletic Injuries | HHPK 213 |
| PHIL 1301 | Introduction to Phil | PHIL 1301 (US) |
| PHIL 2303 | Intro. to Logic | Phil 251 |
| PHYS 1412 | Intro. Astronomy II | ASTR 1412 (US) |
| PHYS 1401 | College Phy. I | PHYS 1401 (US) |
| PHYS 1402 | College Phy. II | PHYS 1402 (US) |
| PHYS 1411 | Astronomy of Solar System | ASTR 1411 |
| PHYS 1415 | Physical Sci. I | IS 1415 (US) |
| PHYS 1417 | Physical Sci. II | IS 1417 (US) |
| PHYS 2425 | Univ. Phy I | PHYS 2425 (US) |
| PHYS 2426 | Univ. Phy. II | PHYS 2426 (US) |
| PSYC 2301 | General Psyc. | PSY 2301 (US) |
| PSYC 2306 | Human Sexuality | PSY 2306 (US) |


| PSYC 2315 | Psych. of Human Adjust. | PSY 2315 (US) |
| :---: | :---: | :---: |
| SOCI 1301 | Intro. to Socio. | SOC 1301 (US) |
| SOCI 1306 | Contemp. Soc. Prob. | SOC 1306 (US) |
| SOCW 2361 | Intro to Social Work | SWK 225 |
| SPAN 1311 | Beg. Span. I | SPA 131 |
| SPAN 1312 | Beg. Span. II | SPA 132 |
| SPAN 2311 | Inter. Span. I | SPA 231 |
| SPAN 2312 | Inter. Span. II | SPA 232 |
| SPCH 1315 | Intro. to Speech Comm. | SPC 1315 (US) |
| SPCH 1321 | Bus. \& Public Spkg. | SPC 1321 (US) |
| SPCH 1342 | Voice and Diction I | SPC 112 |
| SPCH 2341 | Oral Interpretation | THE 211 |
| TECA 1303 | Family and Community | ELED 200 |
| TECA 1311 | Intro Early Child Education | ECE 364* |
| TECA 1318 | Nutrition, Health, Safety | Kine 324* |
| TECA 1354 | Child Growth \& Dev | ECE 313* |

* Non-Advance Credit


## Officers and Faculty

Click on any of the following links for information:

- Board of Regents
- Presidents
- Officers of the Administration and Special Administrative Services


## Board of Regents

| Name | Residence | Term Expires |
| :--- | :--- | :--- |
| Hon. Phil Adams | Bryan | 2015 |
| Hon. Anthony G. Buzbee | Houston | 2019 |
| Hon. Morris Edwin Foster | Salado | 2019 |
| Hon. Elaine Mendoza | San Antonio | 2017 |
| Hon. Judy Morgan | Texarkana | 2017 |
| Hon. Charles W. Schwartz | Houston | 2019 |
| Hon. James Schwertner, Jr. | Schwertner | 2015 |
| Hon. Cliff Thomas | Victoria | 2017 |
| Hon. John D. White | Houston | 2015 |
| Hon. Nicholas Madere | College Station | 2014 |

## Presidents

| Name | Dates |
| :--- | :--- |
| W. L. Mayo | $1889-1917$ |
| R. B. Binnion | $1917-1924$ |
| S. H. Whitley | $1924-1946$ |
| A. C. Ferguson | $1946-1947$ |
| James G. Gee | $1947-1966$ |
| D. Whitney Halladay | $1966-1972$ |
| F. Henderson McDowell | $1972-1982$ |
| Charles J. Austin | $1982-1986$ |
| Jerry D. Morris | $1987-1997$ |
| Keith D. McFarland | $1998-2008$ |
| Dan R. Jones | $2008-$ |

## Officers of the Administration and Special Administrative Services

## Name

President of the University and Chief Executive Officer
Chief of Staff
Athletic Director

## Division of Academic Affairs

## Name

Provost and Vice President
Associate Provost and Vice President for Academic Affairs
Dean, College of Humanities, Social Sciences and Arts
Dean, College of Science, Engineering and Agriculture Interim Dean, College of Business and Entrepreneurship Interim Dean, College of Education and Human Services

Associate Vice Provost for Research and Dean of Graduate Studies

## Title

Dan R. Jones, Ph.D.
Alicia Currin, B.B.A.
Ryan Ivey, M.L.A.

## Title

Adolfo Benavides, Ph.D.
Dan Edelman, Ph.D.
Salvatore Attardo, Ph.D.
Grady Price Blount, Ph.D.
Dale Funderburk, Ph.D.
Gail Johnson, Ph.D.
Arlene Horne, Ph.D.

Vice President for Global Initiatives
Director, Library
Division of Business and Administration

## Name

Vice President

## Financial Services

Name
Associate Vice President for Busine
Comptroller
Bursar
Employment Services
Name
Interim Human Resources Officer

Director, Payroll

## Facilities Management and Support Services

## Name

Director, Risk Management
Director, Safety

## Emerging Financial Services

Name

## Division of Information Technology

Name
Chief Information Officer
Director of Infrastructure
Director of Application Solutions
Director, Faculty Center for Teaching with Technology
Assistant Director, IT Support Services
Information Security Officer
IT Communications \& Training Manager
Institutional Effectiveness \& Planning
Name
Associate Provost for Institu
Liaison
Executive Director of Globa
University Police

## Name

Chief, University Police Department

## Division of Institutional Advancement

## Name

Vice President for Institutional Advancement
Director, Alumni Relations

Kenneth Clinton, Ph.D.
Gregory Mitchell, M.L.S, MA

## Title

Bob Brown, M.B.A., C.P.A.

## Title

Paula Hanson, B.A.
Kim Laird, C.P.A.
Charles Robnett, M.B.A.

Title
Barbara Corvey, Ph.D.
Lisa Blackwell, B.B.A.

## Title

Jeffery McMurray, B.B.A.
Derek Preas, B.A.A.S.

## Title

Cheryl Scott, M.B.A., C.P.A.

## Title

Tim Murphy, M.B.A
Jeff Faunce, B.S.
Ray Buehne, M.S.
Julie McElhany, Ed.D.
Jalan Mayes, B.M.E.
Stan Goodman, M.S.
Lydia Harkey, M.Ed.

Title
Marila Palmer, Ph.D.
Shonda Gibson, Ph.D.

## Title

Donna Spinato, B.S.

## Title

Randy VanDeven, P.E.
Derryle Peace, M.S.

Interim, Executive Director
Director, Advancement Services

## Division of Student Access \& Success

| Name | Title |
| :---: | :---: |
| Vice President | Mary W. Hendrix, Ph.D. |
| Associate Vice President | Sharon Johnson, Ph.D. |
| Assistant Vice President and Dean of Campus Life and Student Development | John Kaulfus, M.Ed. |
| Dean, Enrollment Management \& Retention | Stephanie Holley, M.Ed. |
| Director, Undergraduate Admissions | Jody Todhunter, M.S. |
| Director, Office of Financial Aid \& Scholarships | Maria Ramos, B.A. |
| Dean, Honors College | Ray Green, Ph.D. |
| Registrar | Paige Bussell, M.B.A. |
| Director, Student Assessment and Evaluation | Wendy Gruver, M.S. |
| Director, Counseling Center | Linda Clinton, Ed.D. |
| Director, Morris Recreation Center | Rick Rosenstengle, M.S.E. |
| Director, Career Services | Tina Boitnott, M.S., LPC, MCC |
| Director, Residential Living \& Learning | Dennis Koch, M.Ed. |
| Director, Clarence G. Allen Student Health Center |  |
| Director, Children's Learning Center | Lisa Rhoades, M.Ed |
| Assistant Dean of Campus Life and Student Development | Robert Dotson, M.S. |
| Coordinator, New Student Orientation | Kelly Smith, M.S. |
| Coordinator, Academic Success Center | Jodi Oelrich, B.S. |
| Director, Rayburn Student Center | Wendy Morgan, M.S. |
| Coordinator, A\&M-Commerce at Rockwall | Wayne Grabow, M.Ed. |
| Director of Leadership, Engagement \& Development | Danielle Davis, M.Ed. |
| Coordinator, Greek Life | Zachary Shirley, M.S. |
| Director, Trio Programs | Veronica Reed, M.S. |
| Coordinator, Disability Resources and Services | Rebecca Tuerk, M.Ed. |
| Director, Summer Camps \& Conferences, UIL | Sarah White, M.S. |
| Coordinator, Community College Outreach | Brandon Crutchfield, B.A. |
| Director Mesquite Partnership | Russell Blanchett M.B.E |
| Director Navarro College Partnership | Jeanetta Grace, M.Ed |
| Director of Hispanic Outreach \& Student Programs | Luis Franco, M.S. |
| Dean, University College | Ricky Dobbs, Ph.D. |

Regents Professors

| Date(s) | Name |
| :--- | :--- |
| 1995 | Dr. Dev R. Chopra, Professor, Physics |
| 1995 \& 1997 | Dr. James A. Grimshaw, Professor, Literature and Languages |
| 2000 | Dr. Augustine C. Arize, Professor, Business Administration and |
| 2003 | Management Information Systems |
| 2005 | Dr. Kenneth R. Ashley, Professor, Chemistry |
| 2008 | Dr. Wayne Linek, Professor, Curriculum and Instruction |
| 2009 | Dr. Theodore Hansen, Music |
| 2010 | Dr. Stuart Anderson, Professor, Mathematics |
| 2011 | Dr. Edgar J. Manton, Professor, Business Administration \& MIS |
| 2012 | Dr. R. N. Singh, Professor, Sociology \& Criminal Justice |
|  | Dr. Bao-An Li, Professor, Physics and Astronomy |

## Name

Dr. James A. Grimshaw, Professor, Literature and Languages
Dr. Augustine C. Arize, Professor, Business Administration and anagement Information Systems

Dr. Kenneth R. Ashley, Professor, Chemistry

Dr. Theodore Hansen, Music
Dr. Stuart Anderson, Professor, Mathematics
Dr. Edgar J. Manton, Professor, Business Administration \& MIS

Dr. Bao-An Li, Professor, Physics and Astronomy
Lisa Martinez, M.S
Stephanie Fiorisi, B.S.

Sharon Johnson, Ph.D.
John Kaulfus, M.Ed.

Stephanie Holley, M.Ed.
Jody Todhunter, M.S.
Maria Ramos, B.A
Ray Green, Ph.D.
Paige Bussell, M.B.A.
endy Gruver, M.S.

Rick Rosenstengle, M.S.E.
Iina Boitnott, M.S., LPC, MCC

Lisa Rhoades, M.Ed
Robert Dotson, M.S.
Kelly Smith, M.S.
Jodi Oelrich, B.S
Wendy Morgan, M.S.
Wayne Grabow, M.Ed.
Danielle Davis, M.Ed

Veronica Reed, M.S.

Rebecca Tuerk, M.Ed.
Sarah White, M.S.
Brandon Crutchfield, B.A.
Russell Blanchett M.B.E

Luis Franco, M.S.
Ricky Dobbs, Ph.D.

Name

Dr. Bao-An Li, Professor, Physics and Astronomy

## Mayo Professors

Date(s)
2000
2005
2010
2013
Professor Emeriti

| Date(s) | Name |
| :---: | :---: |
| 1984 | Dr. Paul H. Roosevelt, Professor, Speech and Hearing |
| 1984 | Dr. Bradley Stuart Chilton, Professor, Educational Administration |
| 1987 | Dr. William L. Dorries, Professor, Economics |
| 1994 | Dr. Dorys C. Grover, Professor, Literature and Languages |
| 1994 | Dr. Johnye C. Sturcken, Professor, Literature and Languages |
| 1995 | Dr. Roger K. Arnold, Professor, Agricultural Sciences |
| 1995 | Dr. Paul Johnson, Professor, Counseling and Guidance |
| 1995 | Dr. Kenton E. Ross, Professor, Accounting |
| 1996 | Dr. Mamie Hafner, Professor, Literature and Languages |
| 1997 | Dr. Dorothy Ingram, Professor, Health, Kinesiology and Sports Studies |
| 1998 | Dr. Robert M. Noe, Professor, Marketing and Management |
| 1998 | Dr. Dale Bedgood, Professor, Mathematics |
| 1998 | Dr. Frank Lutz, Professor, Educational Administration |
| 1999 | Dr. Donald R. Hakala, Professor, Finance |
| 1999 | Dr. Suzanne McCall, Professor, Marketing and Management |
| 1999 | Dr. Donald Reynolds, Professor, History |
| 1999 | Dr. John Lamb, Jr., Professor, Mathematics |
| 2000 | Dr. Glenn Fournet, Professor, Psychology |
| 2000 | Dr. A. Lynn Turner, Professor, Educational Administration |
| 2000 | Dr. Max E. Jobe, Professor, Educational Administration |
| 2000 | Dr. Harry E. Wade, Professor, History |
| 2000 | Mr. Joe Fred Cox, Assistant Professor, History |
| 2001 | Dr. Maximino Plata, Professor, Psychology and Special Education |
| 2004 | Dr. Fred Tarpley, Professor, Literature and Languages |
| 2004 | Dr. Jerry B. Hutton, Professor, Psychology and Special Education |
| 2004 | Dr. Edward H. Seifert, Professor, Educational Administration |
| 2004 | Dr. Ruth Ann Stephens, Professor, Educational Administration |
| 2005 | Dr. Morag Harris, Associate Professor, Counseling |
| 2006 | Ms. Georgia Anne Bomar, Associate Professor, Theatre |
| 2007 | Dr. James A. Grimshaw, Jr., Professor, Literature and Languages |
| 2007 | Dr. Wendell Edwards, Professor, Accounting |
| 2007 | Dr. Charles Elliott, Professor, Political Science |
| 2007 | Dr. Charles Embry, Professor, Political Science |
| 2008 | Dr. W.R. Ogden, Professor, Educational Leadership |
| 2008 | Dr. Dev Chopra, Professor, Physics |
| 2009 | Dr. Paul Zelhart, Professor, Psychology |
| 2009 | Dr. Maria dos Santos, Professor, Literature and Languages |
| 2009 | Dr. Ann Moseley, Professor, Literature and Languages |
| 2009 | Dr. Jim Reynolds, Professor, Literature and Languages |
| 2009 | Dr. Richard Tuerk, Professor, Literature and Languages |
| 2009 | Dr. Bobby Carmichael, Professor, Accounting |
| 2009 | Dr. Richard Fulkerson, Professor, Literature and Languages |
| 2011 | Dr. Susan Espinoza, Professor, Educational Leadership * |


| 2011 | Dr. James A. (Jim) Vornberg, Professor, Educational Leadership |
| :--- | :--- |
| 2012 | Dr. Jon Jonz, Professor, English |
| 2012 | Dr. Harry Fullwood, Professor, Psychology and Special Education |
| 2012 | Dr. Dayle Yeager, Professor, Engineering and Technology |
| 2012 | Dr. Richard Lampe, Professor, Counseling |
| 2012 | Dr. Ruth Ann White, Professor, Counseling |
| 2013 | Dr. Ben Doughty, Professor, Physics and Astronomy |
| * Posthumous designation |  |

Other Emeriti

| Date(s) | Name |
| :--- | :--- |
| 1995 | Dr. Trezzie A. Pressley, Dean Emeritus, College of Business and <br> Technology |
| 2002 | Dr. Donald R. Coker, Provost Emeritus |
| 2007 | Dr. W. Joseph Webber, Dean of Students Emeritus |
| 2007 | Dr. Vicki T. Davis, Associate Professor of Home Economics and Associate |
| 2008 | Vice President for Academic Affairs Emeritus |
| 2011 | Dr. Keith McFarland, President Emeritus |
|  | Dr. James Conrad, Archivist Emeritus |

## Colleges and Departments

## College of Humanities, Social Sciences, and Arts

Go to information for this school/college. (p. 143)
Art
Go to information for this department. (p. 143)

## History

Go to information for this department. (p. 162)

## Liberal Studies

Go to information for this department. (p. 171)

## Literature and Languages

Go to information for this department. (p. 175)

## Mass Media, Communication and Theatre

Go to information for this department. (p. 186)

## Music

Go to information for this department. (p. 199)

## Political Science

Go to information for this department. (p. 204)

## Sociology and Criminal Justice

Go to information for this department. (p. 216)

## College of Science, Engineering and Agriculture

Go to information for this school/college. (p. 221)

## Agricultural Sciences

Go to information for this department. (p. 221)

## Biological and Environmental Sciences

Go to information for this department. (p. 244)

## Chemistry

Go to information for this department. (p. 262)

## Computer Science and Information Systems

Go to information for this department. (p. 269)

## Engineering and Technology

Go to information for this department. (p. 277)

## Mathematics

Go to information for this department. (p. 285)

## Physics and Astronomy

Go to information for this department. (p. 289)

## College of Business \& Entrepreneurship

## Accounting

Go to information for this department. (p. 74)

## Applied Sciences

Go to information for this department. (p. 76)

## Business Administration and Management Information Systems

Go to information for this department. (p. 79)

## Economics and Finance

Go to information for this department. (p. 86)

## Marketing and Management

Go to information for this department. (p. 89)

## College of Education and Human Services

Go to information for this school/college. (p. 93)

## Curriculum and Instruction

Go to information for this department. (p. 96)
Educational Leadership
Go to information for this department. (p. 125)

## Health and Human Performance

Go to information for this department. (p. 126)

## Psychology, Counseling and Special Education

Go to information for this department. (p. 135)

## School of Social Work

Go to information for this department. (p. 140)

## Nursing Department

Go to information for this department. (p. 132)

## College of Business \& Entrepreneurship

Careers in business offer exciting challenges and opportunities to well-prepared men and women.
The programs offered by the College of Business \& Entrepreneurship (CBE) are designed to provide successful academic experiences and to facilitate students' abilities to perform responsibly and effectively in their chosen professional roles in business, industry, government, and education. Graduates generally may be employed in financial services, manufacturing, sales, advertising and market research, accounting, and information technology, and general management as well as in a wide range of educational, municipal, state and federal government agencies. Many others develop entrepreneurial careers employing their business training and skills.

The CBE curricula are designed to challenge and sustain the student's intellectual curiosity while providing the general and specialized knowledge necessary for professional success, personal growth, and responsible citizenship. Specifically, the various programs have been developed to provide

1. a firm academic base supported by a strong general education foundation;
2. an understanding of the social, ethical, regulatory, global, political, and cultural environments within which American enterprise exists and operates;
3. an understanding of the major functional areas of business and industry;
4. an opportunity for specialized study; and
5. preparation for advanced graduate study.

Students receiving BBA or the BS degree in Business Administration will demonstrate competencies in the common body of knowledge in business areas of financial and managerial accounting, the business environment and strategy, finance, behavior and organizational issues, marketing, management information systems, quantitative analysis, and production/operations management.

As part of the commitment to quality education, the College of Business \& Entrepreneurship programs are designed to meet the needs of society, including the growing need for graduates to be computer literate. Accordingly, the programs offered provide students with an understanding of the capabilities and applications of computing systems as tools for improved decision-making. This understanding is achieved through a fundamental background in computer programming complemented by a variety of discipline-related applications. The College of Business \& Entrepreneurship instructional programs utilize extensive technology, computer and network resources to support all aspects of the academic and research programs.

Academic programs of study in business in the College of Business \& Entrepreneurship at Texas A\&M University-Commerce are accredited by:

- The Association to Advance Collegiate Schools of Business (AACSB International)—undergraduate and graduate programs in business.


## Mission

The mission of the College of Business \& Entrepreneurship (CBE) at Texas A\&M University-Commerce is to provide quality AACSB accredited educational programs, services, and resources that foster the advancement of careers, opportunities, and entrepreneurial activities for our students, faculty, staff, regional business community, and global collaborators.

## Vision

The College of Business \& Entrepreneurship will be a provider of lifelong skills preparing a community of learners for success in a changing world through high quality programs of study.

## Strategic Goals and Principles

Guiding Principles: The following strategic principles built on the University Core Values of Integrity, Innovation, and Imagination, guide the College of Business \& Entrepreneurship. The Guiding Principles are tied to individual objects under each college goal.

- Diversity: Foster a culture of inclusion which attracts to our university highly qualified students, faculty, and staff who represent the diversity of the population we serve, and who will engage with us int he pursuit of our university's vision and mission.
- Service: Promote excellence in service to members of all internal and external communities.
- Student success: Pursue and implement effective, research-based strategies that provide all students the resources, support, and high-quality instruction they need to achieve their goal of earning a college degree.
- Stewardship: Advance the university by demonstrating the quality of our programs and services to an ever-expanding community of supporters. Leverage the value of public, private, and human resources through business practices that are founded in accountability and transparency, and academic practices that are continuously improved through research, assessment, and innovation.
- Globalization: Cultivate an academic environment enlivened by global interconnections that transverse the boundaries of culture, custom, and place.
- Research: Strengthen the nexus between teaching and research in ways that speak to the University's imperative both to create and disseminate knowledge.
- Communication: Develop a consistent authentic, and reliable message that effectively conveys our commitment to extending opportunity, transforming lives, and shaping futures through education.
- Career Readiness: Prepare students for careers in their discipline and to lead in their respective communities
- Ethics: Promote ethical leadership, personal and business integrity, and social responsibility as hallmarks of successful business activates.


## Degree Programs

## Bachelor of Business Administration (BBA) Degree

The following majors are offered: Accounting, Finance, General Business, Management, Management Information Systems, Marketing.
Finance. Major in finance, including minors in personal financial planning, and in real estate.

## Bachelor of Science (BS) Degree

Business Administration. Major in business administration, including a minor in Interdisciplinary Studies.
Bachelor of Applied Arts and Sciences (BAAS) Degree: Applied Arts \& Sciences (AAS)
Bachelor of General Studies (BGS): General Studies
Masters Degrees: The Master of Business Administration; Master of Science in Finance, Master of Science in Management, Master of Science in Marketing and Master of Science in Accounting degrees are offered. Requirements for the Master's degrees are outlined in the Graduate Catalog.

## Business Core Courses

A. Required Courses Suggested to be Completed before Junior Year

| ACCT 221 | Principles of Accounting I | 3 |
| :---: | :---: | :---: |
| ACCT 222 | Principles of Accounting II | 3 |
| ECO 2301 | Principles of Macro Economics | 3 |
| ECO 2302 | Principles of Micro Economics | 3 |
| MIS 128 | Business Computer Systems | 3 |
| MATH 1324 | Mathematics for Business Applications * | 3 |
| MATH 176 | Mathematics for Business Applications II | 3 |
| B. 300 Level-33 semester hours required |  |  |
| BA 301 | Legal Environment of Business | 3 |
| BA 302 | Business and Economic Statistics | 3 |
| Prerequisite: MATH 141 or MATH 175 |  |  |
| BA 303 | Business Communication | 3 |
| FIN 304 | Introduction to Business Finance | 3 |
| Prerequisites: ACCT 222; ECO 231, ECO 232; MATH 175 |  |  |
| MGT 305 | Management and Organizational Behavior | 3 |
| MKT 306 | Marketing | 3 |
| Prerequisite: ECO 232 |  |  |
| MGT 307 | Operations Management | 3 |
| Prerequisite: MATH 141 or MATH 175; BA 128 or IT 111 |  |  |
| MGT 308 | Entrepreneurial Strategy | 3 |
| Prerequisites: MGT 305; MKT 306 |  |  |
| ECO 309 | Economic Forecasting | 3 |
| Prerequisites: ECO 231, ECO 232; MATH 176; BA 302 |  |  |
| FIN 312 | Money, Banking, and Financial Markets | 3 |
| Prerequisites: ECO 231, ECO 232 |  |  |
| ACCT 311 | Financial Statement Analysis for Global Entrepreneurship | 3 |
| Prerequisite: ACCT 222 |  |  |
| C. 400 Level- 9 semester hours required and Senior Standing Required |  |  |
| BA 420 | International Business | 3 |
| MIS 426 | Management Information Systems | 3 |
| MGT 439 | Business Strategy | 3 |
| Prerequisites: FIN 304, BA 302, MGT 305, MGT 307, MKT 306 |  |  |
| Total Hours |  | 63 |

* This course can be used to satisfy the University Studies Requirement


## Requirements for a Minor in a Business Discipline

Students may elect to complete a minor in a business discipline in the College of Business and Entrepreneurship. The business discipline minors offered by the CBE include either

1. a broad-field minor in general business, including courses from several departments within the college; or
2. minors in specialized areas such as accounting, finance, general business, management, marketing, information technology, international business or international studies.

Most business minors require the completion of ACCT 221, ECO 2301 or ECO 2302, and a minimum of four advanced courses as approved by the appropriate department head in the College of Business \& Entrepreneurship. Information Technology, Marketing or Management minors must complete six courses approved by the department head.

## Teacher Certification

Students seeking teacher certification should consult with Donna.Tavener@tamuc.edu

## Center for Excellence (CFE)

Dr. Dale Funderburk, Interim Dean of College of Business \& Entrepreneurship

## Mission

The Center for Excellence (CFE) serves to enhance and strengthen North Texas business and industry in the global marketplace via customized professional consulting, seminars, and workshops with programs in leadership, management development, team building, process and productivity improvement, business and industry development, communication skills, innovation, knowledge management, safety and quality improvement.

## Accounting

The department offers the Bachelor of Business Administration degree with a major in accounting and the Masters of Science in Accounting Degree with a choice of concentration (Forensic Accounting, Taxation, Attestation, Professional Accounting, or Personal Financial Planning). These degrees prepare graduates for careers in all areas of accounting, which include public accounting, private industry, financial institutions, public utility companies, governmental agencies, and other not-for-profit entities.

Students seeking a bachelor's degree in any of the following majors must complete:

1. degree requirements for the specific degree,
2. University Studies Requirements (p. 39), and
3. the College of Business \& Entrepreneurship (p. 71) core course requirements (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown below.

Accounting B.B.A. (p. 74)
Accounting Minor (p. 76)

## Accounting B.B.A.

## Competencies

In addition to those in the common body of knowledge of business, students majoring in accounting will achieve competency in internal control systems, managerial accounting, income tax accounting, financial accounting, and not-for-profit accounting.

## University Studies Courses

See the University Studies Requirements ..... 43
Business Core
See the Business Core Requirements ..... 60
Required courses in the major
ACCT 321 Intermediate Accounting I ..... 3
ACCT 322 Intermediate Accounting II ..... 3
ACCT 326 Accounting Information Systems ..... 3
ACCT 427 Auditing ..... 3
ACCT 437 Government and Non-Profit Accounting ..... 3
ACCT 440 Income Tax Accounting ..... 3
Required support coursesPsy/Soc/Anth Elective
Total Hours121

## Other Requirements

In order to sit for the CPA exam 15 semester hours must be taken in a face to face format. A minimum grade of " $C$ " is required in each course in the College of Business \& Entrepreneurship that is completed for graduation.

## Suggested Curriculum Outline (B.B.A.)

| Freshman | Hours |
| :--- | ---: |
| US Science | 8 |
| US PE Activity | 2 |
| ENG 1301 | 3 |

ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
MATH 1324 ..... 3
MATH 176 ..... 3
MIS 128 ..... 331
Sophomore ..... Hours
US Vis/Perf Arts ..... 3
US Humanities ..... 3
US Anth/Psy/Soc ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
ECO 2301 ..... 3
ECO 2302 ..... 3
ACCT 221 ..... 3
ACCT 222 ..... 3
SPC 1321 ..... 3JuniorHours
ACCT 311 ..... 3
ACCT 321 ..... 3
ACCT 322 ..... 3
ACCT 326 ..... 3
MGT 305 ..... 3
MGT 307 ..... 3
MKT 306 ..... 3
BA 301 ..... 3
BA 302 ..... 3
BA 303 ..... 3
30
Senior ..... Hours
ACCT 427 ..... 3
ACCT 437 ..... 3
ACCT 440 ..... 3
FIN 304 ..... 3
FIN 312 ..... 3
ECO 309 ..... 3
BA 420 ..... 3
MIS 426 ..... 3
MGT 308 ..... 3
MGT 439** ..... 3
30
Total Hours: 121

* This course should be used to fulfill the University Studies Social and Behavioral Sciences requirement.
** MGT 439 Business Strategy should be taken the last semester of the senior year.


## Accounting Minor

## Business Majors

## Requirements

| ACCT 321 | Intermediate Accounting I | 3 |
| :--- | :--- | :---: |
| ACCT 322 | Intermediate Accounting II | 3 |
| ACCT 326 | Accounting Information Systems * | 3 |
| ACCT 427 | Auditing | 3 |
| ACCT 437 | Government and Non-Profit Accounting | 3 |
| ACCT 440 | Income Tax Accounting | 3 |
| Total Hours |  | 18 |

* Computer Science and Management Information Systems majors may substitute: CSCI 359 Systems Analysis and Design


## Non-Business Majors

## Requirements

| ACCT 221 | Principles of Accounting I | 3 |
| :---: | :---: | :---: |
| ACCT 222 | Principles of Accounting II | 3 |
| ACCT 321 | Intermediate Accounting I | 3 |
| ACCT 322 | Intermediate Accounting II | 3 |
| Plus 4 courses from: |  | 12 |
| ACCT 311 | Financial Statement Analysis for Global Entrepreneurship |  |
| ACCT 326 | Accounting Information Systems |  |
| ACCT 437 | Government and Non-Profit Accounting |  |
| ACCT 427 | Auditing |  |
| ACCT 440 | Income Tax Accounting |  |
| Total Hours |  | 24 |

## Applied Sciences

The Department of Applied Sciences offers a program for the completion from an Associate of Applied Science degree to a Bachelor of Applied Arts and Sciences (BAAS). The BAAS degree program prepares students for managerial careers in technical fields. This program offers a seamless transition from an associates of applied arts and sciences degree in technical fields earned from community colleges to a bachelor's degree. Up to 85 semester hours may be transferred into the program, and the remaining courses may be completed online.

Applied Arts and Sciences (BAAS) (p. 76)
General Studies B.G.S (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/business-entrepreneurship/applied-sciences/general-studies-bgs)

## Applied Arts and Sciences (BAAS)

The Bachelor of Applied Arts and Sciences (BAAS) degree at Texas A\&M University-Commerce requires the completion of 121 semester hours. The BAAS degree is designed to meet the following student needs:

- Persons that hold an Associate (college track) degree from a regionally accredited institution.
- Persons that hold an Associate of Applied Arts and Sciences (technical track) degree from a regionally accredited institution.
- Persons that have completed at least 65 semester hours of college credit from a regionally accredited institution with a minimum of 35 semester hours in general education and at least 30 semester hours in a career, technical or vocational discipline. The ideal candidate for the BAAS degree is someone that has completed all of the general education and career courses required ( 85 semester hours) prior to entering the BAAS program at A\&M-Commerce.
- Persons who have an overall GPA of at least 2.6 on a 4.0 scale.
- Persons who have the ability to take courses on-line. Thirty-six (36) upper level semester hours of the BAAS degree are required to be completed through instruction provided by Texas A\&M University-Commerce. The 12 courses comprising the "Professional Development," component of the BAAS degree will be offered on-line.

The BAAS degree program addresses the following educational objectives:

1. To prepare students for leadership roles in business and industry.
2. To prepare students to conduct a comprehensive analysis of individual and group behaviors in organizations.
3. To prepare students to develop a thorough understanding of the basic contents and tools of analysis in microeconomics.
4. To prepare students to apply principles and concepts of marketing.
5. To prepare students to use critical thinking skills and practical knowledge to solve specific business management problems.
6. To prepare students to apply career development strategies in developing individualized educational/career plans.

Students that achieve these educational objectives should:

- Acquire leadership and management positions in their career field.
- Pursue an on-line Master of Science (M.S.) degree in Management with Texas A\&M University-Commerce.


## University Studies Courses

See the University Studies Requirements 43

## Required courses in the major

BAAS $301 \quad$ Principles of Applied Science 3
BAAS 306 Org Change, Creat \& Div ..... 3
BAAS 345 Organizational Leadership ..... 3
BAAS 350 Knowledge Management ..... 3
BAAS 355 Sustainability in Contemporary Enterprises ..... 3
BAAS 409 Global Technology and Society ..... 3
BAAS 444 Strategies for Decision Making ..... 3
BAAS 305 Effective Corporate Communications ..... 3
MGT 305 Management and Organizational Behavior ..... 3
MKT 306 Marketing ..... 3
Advanced Electives
6 sh from the following list or Advisor Approved: ..... 6

| BA 301 | Legal Environment of Business |
| :--- | :--- |
| BA 302 | Business and Economic Statistics |
| BGS 401 | Ceaseless Industry - Globalization |
| BGS 402 | Fearless Investigation - Research |
| BGS 403 | Unfettered Thought - Sustainability |
| FIN 304 | Introduction to Business Finance |
| MIS 426 | Management Information Systems |
| MGT 307 | Operations Management |
| Required support courses with a minimum of grade of "C" |  |
| ECO 2301 | Principles of Macro Economics |
| ECO 2302 | Principles of Micro Economics |

Hours in a career, technical or vocational career
36 sh required ..... 36
Total Hours ..... 121
Suggested Curriculum Outline (B.A.A.S.)
Freshman ..... Hours
US Science ..... 8
US PE Activity ..... 2
US Humanities ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
SPC 1315 or 1321 ..... 3
MATH 1314, 1324, or 179 ..... 3SophomoreHours
US Vis/Perf Arts ..... 3
Career Field ..... 15
PSCI 2301 ..... 3
PSCI 2302 ..... 3
ECO 2301 ..... 3
ECO 2302 ..... 3
30
Junior ..... Hours
Career Field ..... 21
BAAS 301 ..... 3
BAAS 305 ..... 3
MGT 305 ..... 3
Senior ..... Hours
Electives (6 Adv) ..... 9
BAAS 306 ..... 3
BAAS 345 ..... 3
BAAS 350 ..... 3
BAAS 355 ..... 3
BAAS 409 ..... 3
BAAS 444 ..... 3
MKT 306 ..... 330

Total Hours: 121

## General Studies B.G.S.

The Bachelor of General Studies (BGS) is a degree available through the College of Business at Texas A\&M University-Commerce. The degree provides maximum flexibility for students who have well-defined career objectives and wish to determine the content of their degree rather than pursue one of the established majors at A\&M Commerce. The degree program includes general education requirements and an area of concentration but not a specific major.

The specific objectives of the General Studies degree are to provide courses of study, opportunities, and experiences to assist students in the following ways:

- Prepare students to enter a career requiring broad and in-depth knowledge and skills
- Allow students to obtain a flexible, general college education with major and minor emphasis areas.
- Prepare some students to enter professional schools or graduate programs in other disciplines
- Offer a degree option to students with new interests or those changing their majors late in their academic careers.
- Assist students in career planning and in the transition into the workforce.


## University Studies Courses

See the University Studies Requirements 42
Required courses in the major
BGS $401 \quad$ Ceaseless Industry - Globalization 3
BGS 402 Fearless Investigation - Research ..... 3
BGS 403 Unfettered Thought - Sustainability ..... 3
BGS 404 Unselfish Service to Others - Diversity ..... 3
Required Support Course
ECO 2301 Principles of Macro Economics ..... 3
or ECO 2302 Principles of Micro Economics
Advisor Approved Electives ..... 39
Department approved advanced electives ..... 24
Total Hours ..... 120

## * Department approved advanced electives may be from any of the following disciplines (24 sh)

 College of Science, Engineering and Agriculture (COSEA)Agricultural Sciences, Biology and Environmental Sciences, Chemistry, Computer Science and Information Systems, Engineering and Technology, Mathematics, and Physics and Astronomy
College of Humanities, Social Sciences, and Arts (COHSSA)
Art, History, Liberal Studies (program), Literature and Languages, Journalism, Mass Media-Communication and Theatre, Music, Political Science, and Sociology and Criminal Justice.

## College of Business (COB)

Accounting-Economics and Finance, Applied Sciences, Business Administration and Management Information Systems, and Marketing and Management.
College of Education and Human Services (COEHS)
Counseling, Curriculum and Instruction, Educational Leadership, Health and Human Performance, Psychology and Special Education, and Social Work.

## Business Administration and Management Information Systems

The Department of Business Administration and Management Information Systems offers programs leading to the Bachelor of Business Administration (B.B.A.) degree with majors in general business and management information systems. The Bachelor of Science (B.S.) degree with a major in business administration is available with a six course minor in interdisciplinary studies. The following minors are offered by the department:

1. General Business
2. Information Technology
3. International Studies
4. International Business

The B.B.A. degree with a major in general business is intended for those students who desire a broad-based business curriculum. The B.B.A. degree with a major in management information systems offers the student the opportunity to combine the studies of business and computer science in a structured manner and in accordance with industry standards.

The B.S. degree with a major in business administration provides the student with the opportunity to major in business and to minor in an another field. For example, a student may major in business administration and minor in interdisciplinary studies.

Students seeking a bachelor's degree in any of the following majors must complete:

1. degree requirements for a Bachelor of Business Administration or Bachelor of Science degree,
2. University Studies Requirements (p. 39), and
3. the College of Business \& Entrepreneurship core course requirements (refer to those sections of this catalog).

Specific major requirements and electives required for each program are indicated below. Also indicated below are recommended courses for each program for each classification level.

Business Administration B.S./B.A. Major with Minor in Interdisciplinary Studies (p. 80)

General Business B.B.A. (p. 81)

General Business Minor (http://coursecatalog.tamuc.edu/undergrad/colleges-and-departments/business-entrepreneurship/business-administration-management-information-systems/business-education-minor)

Global Studies Minor (p. 83)
Information Technology Minor (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/business-entrepreneurship/business-administration-management-information-systems/information-technology-minor)

International Studies Minor (p. 84)
Management Information Systems B.B.A. (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/business-entrepreneurship/ business-administration-management-information-systems/management-information-systems-bba)

## Business Administration B.S./B.A. Major with Minor in Interdisciplinary Studies

The B.S. degree with a major in business administration provides the student with a broad-based business major and affords the student an opportunity to select elective courses to complete an interdisciplinary studies minor. Graduates of this program would qualify for entry-level management or management trainee positions in marketing, finance, real estate, retailing and wholesaling, as well as positions in government or hospital administration. In addition to the common body of knowledge in business competencies. With an interdisciplinary studies minor, the business administration degree program contains 121 semester hours.

In addition to the completion of the University Studies Program and the CBE core business courses (courses required of all business majors in the CBE) for students majoring in Business Administration an interdisciplinary studies minor of at least 18 semester hours is required.

## University Studies Courses

See the University Studies Requirements 43

## Business Core

See the Business Core Requirements 60
Interdisciplinary Studies Minor Required *
9 sh of $300 / 400$ level courses 9
9 sh of any level courses 9
Total Hours 121
Freshman ..... Hours
US Science ..... 8
US PE Activity ..... 2
MIS 128 ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
MATH 1324 ..... 3
MATH 176 ..... 3
Sophomore ..... Hours
US Humanities ..... 3
US Vis/Perf Arts ..... 3
Psy/Soc/Anth ..... 3
ACCT 221 ..... 3
ACCT 222 ..... 3
ECO 2301 ..... 3
ECO 2302 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1321 ..... 3
Junior ..... Hours
Minor (Adv) ..... 3
BA 301 ..... 3
BA 302 ..... 3
BA 303 ..... 3
MGT 305 ..... 3
MGT 307 ..... 3
MGT 308 ..... 3
MKT 306 ..... 3
FIN 304 ..... 3
FIN 312 ..... 3
30
Senior ..... Hours
Minor ( 6 sh Adv) ..... 15
BA 420 ..... 3
MIS 426 ..... 3
MGT 439** ..... 3
ECO 309 ..... 3
ACCT 311 ..... 3

## Total Hours: 121

## Business Education Concentration

In lieu of a minor, students may take the 27 semester hours professional sequence for teacher certification in basic business. In addition, the student will be required to complete and MIS 128 Business Computer Systems. Those students choosing teacher certification will be eligible to take the TExES exam in basic business and will then be eligible to teach basic business courses in high school and in middle school.

## Requirements

| PSY 300 | Learning Processes and Development | 3 |
| :--- | :--- | :--- |
| ETEC 424 | Integrating Technology into the Middle/Secondary Curriculum |  |
| RDG 370 | Reading and Literacy II |  |
| or RDG 380 | Comprehension and Vocabulary in Middle and High Schools | 3 |
| BA 125 | Elementary Computer Keyboarding |  |
| SED 300 | The Teaching Profession | 3 |
| SED 302 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments | 3 |
| SED 401 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| SED 404 | Internship in Secondary Schools Field-Based | 3 |
| SED 405 | Residency in Secondary Teaching |  |
| Total Hours |  |  |

* BIB (Bible) and BA (Business Administration) courses can not be used in this minor
** MGT 439 Business Strategy Should be taken the last semester of the senior year.


## General Business B.B.A.

The B.B.A. with a major in general business is intended to provide the student with a broad based business program. The program's curriculum is composed of a broad spectrum of courses offered by the College of Business \& Entrepreneurship business departments. A major in general business would prepare the student for a wide variety of employment options in business, industry and government. Graduates can assume entrylevel management or management trainee positions in marketing, finance, real estate, insurance, retailing, and wholesaling, as well as positions in government or hospital administration. In addition to the common body of knowledge in business competencies, majors in general business will demonstrate competencies in insurance concepts, writing, legal organizations, and human resource management.

In addition to the completion of the University Studies Requirements and the College of Business \& Entrepreneurship Business Core courses (see lower and upper division courses required of all business majors in the College of Business \& Entrepreneurship).

## University Studies Courses

See the University Studies Requirements 43
Business Core
See Business Core Requirements 60
Required courses in the major
MGT 394

| BA 357 | Legal Organizations and Business Transactions | 3 |
| :--- | :--- | ---: |
| MIS 315 | IS Security and Risk Management | 3 |
| MIS 326 | Data and Information Management | 3 |
| MIS 328 | IS Project Management | 3 |
| BA 385 | Principles of Risk and Insurance | 3 |
| Total Hours |  | 121 |

## Suggested Curriculum Outline (B.B.A.)

FreshmanS S8
US PE Activity ..... 2
MIS 128 ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
MATH 1324 ..... 3
MATH 176 ..... 3
Sophomore ..... Hours
Psy/Soc/Anth ..... 3
US Humanities ..... 3
US Vis/Perf Arts ..... 3
ACCT 221 ..... 3
ACCT 222 ..... 3
ECO 2301 ..... 3
ECO 2302 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1321 ..... 3JuniorHours
BA 301 ..... 3
BA 302 ..... 3
BA 303 ..... 3
MIS 326 ..... 3
ACCT 311 ..... 3
MGT 305 ..... 3
MGT 307 ..... 3
FIN 304 ..... 3
FIN 312 ..... 3
MKT 306 ..... 3
Senior ..... Hours
BA 357 ..... 3
BA 385 ..... 3
BA 420 ..... 3
MIS 315 ..... 3
MIS 328 ..... 3
MIS 426 ..... 3
MGT 308 ..... 3
MGT 394 ..... 3
MGT $439{ }^{*}$ ..... 3
ECO 309 ..... 3

Total Hours: 121

* MGT 439 Business Strategy should be taken the last semester of the senior year.


## General Business Minor

These provide for broad business topic coverage and are required prerequisites for the MBA program. This minor is not available to business majors.

## Requirements

| ACCT 221 | Principles of Accounting I | 3 |
| :--- | :--- | :--- |
| ECO 2301 | Principles of Macro Economics | 3 |
| Advanced Business Electives |  | 12 |
| The following courses are recommended: |  |  |
| BA 301 | Legal Environment of Business |  |
| BA 302 | Business and Economic Statistics |  |
| MGT 305 | Management and Organizational Behavior |  |
| MKT 306 | Marketing |  |

Total Hours

## Global Studies Minor

Students must complete a total of 18 semester hours in two or more of the areas listed below, and these courses must be outside the student's major.

## Required 18 Semester hours

9 sh must be at the advanced level
Maximum of 6 sh in International Studies

| AG 392 | Applied Ethics: US and World Agriculture |
| :--- | :--- |
| ANTH 2351 | World Cultures: Perspectives from Anthropology |
| ANTH 450 | Gender in Cross-Cultural Perspective |
| BA 420 | International Business |
| ECO 428 | International Economics/Finance |
| ENG 474 | Topics in World Literature |
| HIST 265 | A World Divided: Global History |
| HIST 375 | Colonial Latin America |
| HIST 385 | Latin America in the Modern Period |
| PSCI 333 | Non-European Political Systems |
| PSCI 437 | Foreign Policy |
| PSCI 438 | International Relations |
| SOC 335 | Global Social Issues |
| SPC 408 | Intercultural Communication |
| SPC 418 | Communication and Social Change |

Total Hours

## Information Technology Minor

## Required courses in the Minor

| CSCI 151 | Introduction to Computer Science and Programming | 4 |
| :--- | :--- | :--- |
| MIS 128 | Business Computer Systems | 3 |
| MIS 326 | Data and Information Management | 3 |
| MIS 328 | IS Project Management | 3 |
| MIS 422 | IS Innovation and New Technologies | 3 |

## International Business Minor

The Minor in International Business is an innovative undergraduate program, both interdisciplinary and international in its orientation, offered by the College of Business \& Technology at Texas A\&M University-Commerce. The International Business minor is designed to broaden the scope of traditional business education and, in a broader sense, it seeks to establish a foundation for increasing students' awareness of the global competitiveness of American corporations and industries. International business communities are becoming increasingly intertwined, which creates an atmosphere in which long-term strategies and daily management decisions are heavily influenced by such challenging international factors as exchange rates, trade and foreign investment regulations, cross-cultural differences, and the opening of world markets. The International Business minor offers you the opportunity to establish an international business, culture, and language knowledge base which will prepare you to meet global business challenges.

## Required courses

ACCT $221 \quad$ Principles of Accounting I 3

ECO $2301 \quad$ Principles of Macro Economics 3
BA $420 \quad$ International Business 3
MKT 467 Global Consumer Behavior 3
ECO $428 \quad$ International Economics/Finance 3
Plus 6 sh from 6
up to 6 sh from foreign study programs approved by the major advisor

| SPA 131 | Elementary Spanish I |
| :--- | :--- |
| SPA 132 | Elementary Spanish II |
| PSCI 335 | Political Economy |
| ANTH 2351 | World Cultures: Perspectives from Anthropology |
| Total Hours |  |

## International Studies Minor

| Required courses* |  |  |
| :---: | :---: | :---: |
| HIST 265 | A World Divided: Global History | 3 |
| ANTH 2351 | World Cultures: Perspectives from Anthropology | 3 |
| PSCI 331 | European Political Systems | 3 |
| or PSCI 333 | Non-European Political Systems |  |
| or PSCI 438 | International Relations |  |
| BA 420 | International Business | 3 |
| or ECO 428 | International Economics/Finance |  |
| Plus 3 sh from |  | 3 |
| HIST 333 | Modern Europe, 1848-1991 |  |
| HIST 365 | History of Modern East Asia |  |
| HIST 375 | Colonial Latin America |  |
| HIST 385 | Latin America in the Modern Period |  |
| Plus 3 sh from |  | 3 |
| (1) two Foreign Language courses or |  |  |
| (2) 6 sh from Texas A\&M | U.S. Political Science, and/or, non-US Geograph |  |

## Total Hours

## Management Information Systems B.B.A

The Management Information Systems major is a business degree incorporating in-depth studies in Information Systems. Students in this major qualify for positions in virtually any industry as Information Systems are at the core of most of today's organizations. Information Systems are used to make businesses more productive and therefore, more profitable. Information Systems are comprised of hardware, software, data, procedures, and people. The focus of this major is problem-solving. This includes (1) procedures and methodologies for planning, developing and obtaining data and (2) for analyzing, designing, and implementing management information systems. This major emphasizes the use of organizational information as an efficient
and effective resource that is used for decision-making. This approach relies heavily upon the efficient and effective use and application of computers and computer software. Graduates could assume positions as a systems analyst, business analyst, database analyst, and business application developer, IS development project leader, business intelligence analyst, systems developer, web developer, network administrator, technical support analyst, information systems manager, IS user liaison and more. In addition to the common body of knowledge in business competencies, majors in management information systems will demonstrate competencies in advanced productivity applications, systems analysis, data base management and design, and project management. This program requires 121 semester hours for completion.

| University Studies Courses |  |  |
| :---: | :---: | :---: |
| See the University Studies Requirements |  | 43 |
| Required courses in the major |  |  |
| MIS elective |  | 3 |
| MIS 315 | IS Security and Risk Management | 3 |
| or MIS 422 | IS Innovation and New Technologies |  |
| MIS 326 | Data and Information Management | 3 |
| MIS 328 | IS Project Management | 3 |
| MIS 379 | Business Process Management and ERP Systems | 3 |
| MIS 415 | Principles of Business Process Analysis and Design | 3 |
| MIS 424 | Information Technology Infrastructure and Enterprise Architecture | 3 |
| Required support courses |  |  |
| Business Administration Core |  |  |
| ACCT 221 | Principles of Accounting I | 3 |
| ACCT 222 | Principles of Accounting II | 3 |
| ACCT 311 | Financial Statement Analysis for Global Entrepreneurship | 3 |
| ECO 2301 | Principles of Macro Economics | 3 |
| ECO 2302 | Principles of Micro Economics | 3 |
| MIS 128 | Business Computer Systems | 3 |
| MIS 426 | Management Information Systems | 3 |
| MATH 176 | Mathematics for Business Applications II | 3 |
| BA 301 | Legal Environment of Business | 3 |
| BA 302 | Business and Economic Statistics | 3 |
| BA 303 | Business Communication | 3 |
| BA 420 | International Business | 3 |
| ECO 309 | Economic Forecasting | 3 |
| FIN 304 | Introduction to Business Finance | 3 |
| FIN 312 | Money, Banking, and Financial Markets | 3 |
| MGT 305 | Management and Organizational Behavior | 3 |
| MGT 307 | Operations Management | 3 |
| MGT 308 | Entrepreneurial Strategy | 3 |
| MKT 306 | Marketing | 3 |
| MGT 439 | Business Strategy | 3 |
| Total Hours |  | 124 |

## Suggested Curriculum Outline (B.B.A.)

Freshman ..... Hours
US Science ..... 8
US PE Activity ..... 2
MIS 128 ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
MATH 1324 ..... 3
MATH 176 * ..... 3
Sophomore ..... Hours
US Humanities ..... 3
US Vis/Perf Arts ..... 3
Psy/Soc/Anth ..... 3
ACCT 221 ..... 3
ACCT 222 ..... 3
ECO 2301 ..... 3
ECO 2302 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1321 ..... 3
30
Junior ..... Hours
BA 301 ..... 3
BA 302 ..... 3
BA 303 ..... 3
FIN 304 ..... 3
FIN 312 ..... 3
MGT 305 ..... 3
MGT 307 ..... 3
MKT 306 ..... 3
MIS 326 ..... 3
MIS 328 ..... 3
30
Senior ..... Hours
MIS electives ..... 3
ACCT 311 ..... 3
BA 420 ..... 3
ECO 309 ..... 3
MGT 308 ..... 3
MIS 379 ..... 3
MIS 415 ..... 3
MIS 424 ..... 3
MIS 426 ..... 3
MGT 439** ..... 3

Total Hours: 121

* MATH 176 Mathematics for Business Applications II must be taken before the completion of 60 hours (Junior standing)
** MGT 439 Business Strategy should be taken the last semester of the senior year


## Economics and Finance

The department offers the Bachelor of Business Administration degree with a major in finance. This major prepares graduates for career positions in investment management, financial management, credit, financial services, and related areas. Minors in personal financial planning and finance are offered. The minor in personal financial planning is a registered program by the Board of Examiners of the Certified Financial Planner Board of Standards. In addition to the common body of knowledge in business, a graduate with a major in finance should possess the following competencies with domestic and international dimensions: financial analysis; financial institutions, markets; securities investments and portfolio management; short and long term financial planning.

Students seeking a bachelor's degree in any of the following majors must complete:

1. degree requirements for a Bachelor of Arts, Bachelor of Science, or Bachelor of Business Administration degree,
2. University Studies Requirements (p. 39), and
3. the College of Business \& Entrepreneurship course requirements (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown below.

Economics Minor (p. 87)
Finance B.B.A. (p. 87)
Finance Minor (p. 89)
Personal Financial Planning Minor (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/business-entrepreneurship/economics-finance/financial-planning-minor)

## Economics Minor

## Minor in Economics for the Business Major

| Adv Eco |  | 3 |
| :--- | :--- | :---: |
| ACCT 222 | Principles of Accounting II | 3 |
| ECO 309 | Economic Forecasting | 3 |
| ECO 331 | Intermediate Macroeconomics | 3 |
| ECO 332 | Intermediate Microeconomics | 3 |
| ECO 428 | International Economics/Finance | 3 |
| Total Hours |  | 18 |

## Minor in Economics for the Non-Business Major

| Adv Eco |  | 6 |
| :--- | :--- | :--- |
| ECO 2301 | Principles of Macro Economics | 3 |
| ECO 2302 | Principles of Micro Economics | 3 |
| ECO 331 | Intermediate Macroeconomics | 3 |
| ECO 332 | Intermediate Microeconomics | 3 |
| Total Hours |  | 18 |

## Finance B.B.A.

Finance majors must complete the lower and upper division requirements listed under the College of Business \& Entrepreneurship.

| University Studies Courses |  |
| :---: | :---: |
| See the University Studies Requirements |  |
| Business Core |  |
| See the Business Core Requirements |  |
| In addition, the following 18 semester hours are required in the major: |  |
| FIN 400 | Principles of Investments |
| FIN 404 | Advanced Financial Management |
| FIN 410 | Analysis of Financial Derivatives |
| FIN 429 | Financial Markets and Institutions |
| FIN 471 | International Business Finance |
| Plus 3 from: |  |
| FIN 430 | Financial and Estate Planning |
| or FIN 420 | Entrepreneur Fin \& Venture Cap |
| or FIN 435 | Risk and Insurance Planning |
| or FIN 436 | Retirmnt Plan \& Emp Comp |
| or FIN 450 | Financial Modeling in Excel |

or FIN 499

## Total Hours

## Suggested Curriculum Outline (B.B.A.)

| Freshman | Hours |
| :---: | :---: |
| US Science | 8 |
| US PE Activity | 2 |
| ENG 1301 | 3 |
| ENG 1302 | 3 |
| MATH 1324 | 3 |
| MATH 176 | 3 |
| HIST 1301 | 3 |
| HIST 1302 | 3 |
| MIS 128 | 3 |
|  | 31 |
| Sophomore | Hours |
| US Humanities Elective | 3 |
| US Vis/Perf Arts | 3 |
| Psy or Soc | 3 |
| ACCT 221 | 3 |
| ACCT 222 | 3 |
| ECO 2301 | 3 |
| ECO 2302 | 3 |
| PSCI 2301 | 3 |
| PSCI 2302 | 3 |
| SPC 1321 | 3 |
|  | 30 |
| Junior | Hours |
| FIN 304 | 3 |
| FIN 312 | 3 |
| BA 301 | 3 |
| BA 302 | 3 |
| MGT 305 | 3 |
| MKT 306 | 3 |
| MGT 307 | 3 |
| ACCT 311 | 3 |
| BA 303 | 3 |
| ECO 309 | 3 |
|  | 30 |
| Senior | Hours |
| BA 420 | 3 |
| ECO 428 | 3 |
| FIN 400 | 3 |
| FIN 410 | 3 |
| FIN 404 | 3 |
| FIN 429 | 3 |
| MGT 308 | 3 |
| MGT 439* | 3 |
| MIS 426 | 3 |
| Acct, 3 sh from: |  |


| FIN 430 |  | 3 |
| :---: | :---: | :---: |
|  |  | 30 |
| Total Hours: 121 |  |  |
| MGT 439 Business Strategy should be taken the last semester of the senior year. |  |  |
| Einance Minor |  |  |
| Minor in Finance for the Business major (BFin) |  |  |
| FIN 400 | Principles of Investments | 3 |
| FIN 404 | Advanced Financial Management | 3 |
| FIN 440 | Financial Stat Analy \& Valuati | 3 |
| FIN 429 | Financial Markets and Institutions | 3 |
| Adv Fin |  | 6 |
| Total Hours |  | 18 |
| Minor in Finance for the Non-Business Major |  |  |
| ACCT 221 | Principles of Accounting I | 3 |
| ECO 2301 | Principles of Macro Economics | 3 |
| ECO 2302 | Principles of Micro Economics | 3 |
| FIN 304 | Introduction to Business Finance | 3 |
| FIN 312 | Money, Banking, and Financial Markets | 3 |
| FIN 400 | Principles of Investments | 3 |
| Adv Fin |  | 3 |
| Total Hours |  | 21 |

## Personal Financial Planning Minor

| Required Courses |  |  |
| :--- | :--- | :--- |
| ACCT 221 | Principles of Accounting I | 3 |
| ECO 2301 | Principles of Macro Economics | 3 |
| FIN 400 | Principles of Investments | 3 |
| FIN 430 | Financial and Estate Planning | 3 |
| FIN 436 | Retirmnt Plan \& Emp Comp | 3 |
| ACCT 440 | Income Tax Accounting | 3 |
| BA 385 | Principles of Risk and Insurance | 3 |
| or FIN 435 | Risk and Insurance Planning |  |
| Total Hours |  | 21 |

## Marketing and Management

The Department of Marketing and Management offers the Bachelor of Business Administration (B.B.A.) degree with the option of two majors: Marketing and Management.

To earn a degree in these areas, a student must:

1. meet all University requirements previously specified;
2. satisfy University Studies Requirements (p. 39) and
3. complete courses in the College of Business \& Entrepreneurship core curriculum (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown in each section below. Also, for graduation, a 2.0 (C) grade point average must be achieved overall and in each course in the College of Business \& Entrepreneurship.

Marketing B.B.A. (p. 91)
Marketing Minor (p. 93)
Management Minor (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/business-entrepreneurship/marketing-management/ human-resource-management-minor)

## Management B.B.A.

The management major prepares students for a challenging career in profit and not-for-profit organizations. The program provides exposure to skills and careers in the growing fields of retailing, sales management, and human resources, while providing for flexibility for support in additional areas. This major provides students with backgrounds in policy formulation, decisionmaking, and the organizational activities of managers. In addition to the common body of knowledge in business components, majors in management will demonstrate competencies in supervision, human resource management, sales, retailing, and entrepreneurship.

## University Studies Courses

See the University Studies Requirements** 43
Business Core
See Business Core Requirements 60
Required courses in the major
$\mathrm{Mkt} / \mathrm{Mgt} \mathrm{Adv}$. Elective
MGT 394 Human Resource Management 3
MGT 445 Retail Management 3
or MKT $386 \quad$ Channels of Distribution
MKT $367 \quad$ Professional Selling and Sales Management 3
Total Hours 121
Other requirements
15 semester hours in the "Required Course in the Major" must be taken at A\&M-Commerce.

## Suggested Curriculum Outline (B.B.A.)

Freshman ..... Hours
US Science ..... 8
US PE Activity ..... 2
ENG 1301 ..... 3
ENG 1302 ..... 3
MATH 1324 ..... 3
MATH 176 ..... 3
MIS 128 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
Sophomore ..... 31 ..... Hours
US Humanities ..... 3
US Vis/Perf Arts
US Soc/Behav Sci** ..... 3
ACCT 221 ..... 3
ACCT 222 ..... 3
ECO 2301 ..... 3
ECO 2302 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1321 ..... 3
Junior ..... Hours
MGT 305 ..... 3
MGT 307 ..... 3
MKT 367 ..... 3
MGT 394 ..... 3
BA 301 ..... 3
BA 302 ..... 3
BA 303 ..... 3
ACCT 311 ..... 3
FIN 304 ..... 3
MKT 306 ..... 3
Senior ..... 30 ..... Hours
Mkt/Mgt Electives (Adv) ..... 9
MGT 308 ..... 3
BA 420 ..... 3
MIS 426 ..... 3
ECO 309 ..... 3
FIN 312 ..... 3
MGT 445 or MKT 386 ..... 3
MGT 439* ..... 330
Total Hours: 121

* MGT 439 Business Strategy is taken during the last semester of the senior year.
** The preferred courses to meet the University Studies Social/Behavior Sciences requirement are Psy/Soc/Anth.


## Management Minor

Any student who elects to minor in management should contact the Department of Marketing and Management (http://coursecatalog.tamuc.edu/ undergrad/colleges-and-departments/marketing-management).

## Business Major Requirements

MGT 394
Human Resource Management
Advanced Management Electives
15 sh from any MGT 300/400 courses not already taken 15
Total Hours 18

## Non-Business Major Requirements

| MGT 305 | Management and Organizational Behavior |  |
| :--- | :--- | :--- |
| MGT 394 | Human Resource Management | 3 |

Advanced Management Electives
12 sh from any MGT 300/400 courses not already taken ..... 12
Total Hours ..... 18

## Marketing B.B.A.

The marketing major prepares graduates for careers in consumer or organizational sales and sales management; product management; marketing research; promotion and media planning; retail/wholesale management; buying or purchasing; and customer service management. These careers are found at all levels of distribution (manufacturing, wholesale, and retail both domestically and internationally), as well as in not-for profit organizations and government. In addition to the common body of knowledge in business competencies, majors in marketing will demonstrate competencies in marketing promotion, personal selling and sales management, channels of distribution, research, retailing, consumer behavior, marketing of services, and marketing policy and strategy.
University Studies Courses
See the University Studies Requirements ..... 43
Business Core
See Business Core Requirements ..... 60
Required courses in the majoror MKT 367 Professional Selling and Sales Management
MKT 436 Marketing Research ..... 3
MKT 445 Retail Management ..... 3
or MKT 386 Channels of Distribution
MKT 467 Global Consumer Behavior ..... 3
Marketing Electives Hours (Adv) ..... 6
Total Hours ..... 121
Other Requirements
15 semester hours in the "Required Courses in the major" must be taken at A\&M-Commerce
Suggested Curriculum Outline (B.B.A.)
Freshman ..... Hours
US Science ..... 8
US PE Activity ..... 2
ENG 1301 ..... 3
ENG 1302 ..... 3
MATH 1324 ..... 3
MATH 176 ..... 3
MIS 128 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
31
Sophomore ..... Hours
US Humanities ..... 3
US Vis/Perf Arts ..... 3
US Soc/Behav Sci* ..... 3
ACCT 221 ..... 3
ACCT 222 ..... 3
ECO 2301 ..... 3
ECO 2302 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1321 ..... 330
Junior ..... Hours
MKT 306 ..... 3
MKT 366 or 367 ..... 3
MGT 305 ..... 3
MGT 307 ..... 3
BA 301 ..... 3
BA 302 ..... 3
BA 303 ..... 3
FIN 304 ..... 3
ACCT 311 ..... 3
Marketing Elective ..... 330
Senior ..... Hours
MKT 436 ..... 3
MKT 445 or 386 ..... 3
MKT 467 ..... 3
BA 420 ..... 3
MIS 426 ..... 3
ECO 309 ..... 3
FIN 312 ..... 3
MGT 308 ..... 3
Marketing Elective ..... 3
MGT 439 (Must be taken during the last semester of senior year) ..... 330
Total Hours: 121

* The preferred courses to meet the University Studies Social/Behavior Sciences requirement are Psy/Soc/Anth.


## Marketing Minor

## Business Majors



## College of Education and Human Services

Gail Johnson, Interim Dean, Office 203A

903.886.5180; Young Education North Building

The College of Education and Human Services houses five academic departments, including the Departments of Curriculum and Instruction; Educational Leadership; Health and Human Performance; Nursing; Psychology, Counseling and Special Education; and School of Social Work. The departments offer programs of study that lead to bachelor's, master's, and doctoral degrees.

## College Mission

College of Education and Human Services provides excellence-driven programs that prepare student-scholars to become scientists, teachers, administrators, and practitioners who proactively address the transformational challenges of a complex digital environment and global society. We promote instructional engagement, responsive research, quality service, and active partnerships with external constituencies.

The College of Education and Human Services prepares personnel for elementary, middle and high schools, and for higher education positions. The college also prepares social workers, nurses, and professionals in the field of psychology and counseling. Specifically, the professional personnel for which programs are provided include:

- Nurses which meet the educational requirements of the Texas Board of Nursing to take the licensure examination to become Registered Nurses
- Teachers for certification at all levels and in virtually all subject areas offered in the public and private schools of Texas
- Teachers working toward professional certificates and/or master's degrees or doctoral degrees
- School administrators working toward professional administrator's certificates and master's or doctoral degrees
- School counselors working toward professional certificates and master's or doctoral degrees
- School supervisors working toward professional certificates and master's or doctoral degrees
- Educational diagnosticians
- School psychologists
- Vocational supervisors and counselors
- Educational technology leaders in schools, colleges, businesses, and service industries
- Curriculum directors and supervisors of instruction in public and private schools
- Teachers working toward school library certification or master's degrees with school library certification
- College teachers of education, guidance, and psychology. (Qualifications for these usually require a doctoral degree)
- College and University Administration
- Certified Athletic Trainers
- Social Workers
- Psychological Associates working towards licensure
- Other educational workers to meet the emerging needs of public and private schools, colleges, business and industry

A certificate required for teaching in accredited public and private schools of Texas is issued by the Texas Education Agency upon completion of all Teacher Education Program and University Requirements, and recommendation from the University.

Athletic trainers earn state and national certification through programs accredited by the Commission on Accreditation of Allied Health Education Programs.

Additionally, the College prepares students for generalist social work practice. Upon successful completion of the program, students receive the Bachelor of Social Work degree (BSW) and are eligible for licensure by the State of Texas as a social worker.

## College of Education Mentor Center

Angie Proctor, Coordinator of the College of Education and Human Services Mentor Center, Young Education North Building, Room 205, 903.886 .5622
The college mentor center provides guidance for undergraduate students seeking degrees in our fields. The mentors are in the office Monday through Friday 8:00 to 5:00 to answer students' questions about their academic plans. The office works hand in hand with departmental advisors and the certification office to help students navigate their way to a timely graduation.

## Center for Educator Certification and Academic Services

Jill Woodruff, Director of Educator Preparation, Accountability, and Certification Officer; Young Education North Building, Room 202; 903.886.5182.
A unified system of records for students in teacher education is maintained in the Center for Educator Certification and Academic Services. These records are available to the Teacher Education Admission, Retention, and Appeals Committee members, the Dean of the College of Education and Human Services, and any faculty member participating in teacher education program.

## Mission of the Teacher Education Program

The primary mission of the Texas A\&M University-Commerce teacher education program is to develop a force of high-quality, current, and versatile school personnel sufficiently skilled to educate a diverse population.

## Admission to the Field-Based Teacher Education Program

Students may apply for the Teacher Education Program once pre-requisites for internship are met. The Application to the Teacher Education Program should be completed online at www.tamuc.edu/teacher. The application process is available two semesters prior to the planned internship. No applications will be accepted after the date provided on the application.

## Application Pre-requisites

1. Senior Standing (completion of approximately 80 semester hours of college coursework) or Baccalaureate degree;
2. Required GPA;
3. Completion of all professional development and content teaching/specialization courses required prior to Internship with a required GPA in each area and no grade below a "C". (Refer to content department for individual departmental requirements);
4. Basic Skills Requirements for Reading, Math and Writing (Refer to department or the Office of Educator Certification and Academic Services);
5. "C" or above in a public speaking course as required by baccalaureate degree program;
6. Individual content areas may have internship/residency requirements for the Texas Examination of Educator Standards (TExES). Refer to your department and the Center of Educator Certification and Academic Services.

## Field Experience (Internship) Pre-requisites

1. Completion of all professional development and content teaching/specialization courses required prior to Internship with a required GPA in each area and no grade below a " C ". (Refer to content department for individual departmental requirements);
2. Individual content areas may have internship/residency requirements for the Texas Examination of Educator Standards (TExES). Refer to your department;
3. Log Sheet and public school faculty/ administrator performance evaluation of 30-hour Early Field Experience (Note: An "unacceptable" rating(s) on the evaluation will result in further consultation, remediation, a growth plan, or denial of full admission into the Teacher Education Program).

## Requirements to Interview for Internship Placement

1. Application Portfolio: Application, pay $\$ 40$. non-refundable \& non-transferable application fee autobiography, commitment contract, internship/ residency ethics agreement, and documentation of successful experiences in professional education courses that lead to the acquisition of the five state proficiencies;
2. For undergraduates, substantial evidence of the ability to complete all professional development and content teaching field/specialization courses required prior to internship;
3. (NOTE: A department may prevent a student from interviewing or beginning internship for academic or professional behavioral reasons. In addition, a department may require higher score on Basic Skills Requirements, GPA, and/or course grade requirements than the TEARAC Fieldbased Teacher Education Program requirements listed below. The department is responsible for notifying students of specific departmental concerns preventing them from interviewing or beginning internship.)

## Field Experience (Internship) Semester Coursework (refer to your Degree Audit)

Students must enroll in the appropriate internship coursework (refer to your Degree Audit).
EC-6 and 4-8 students may lack no more than 4 semester hours in addition to the Internship/Residency coursework.
Secondary and All-level students may lack no more than 6 semester hours in the teaching field to begin internship/residency.

## Practicum (Residency) Pre-requisites

1. Maintain admission requirements, i.e. required GPA and minimum grade of " $C$ " or above on professional development and content teaching specialization coursework;
2. Complete coursework required prior to residency with a required GPA and no grade below a"C";
3. Maintain and successfully complete Field Experience (Internship) Requirements including required state teacher examinations;
4. Maintain the required GPA;
5. Individual content areas may have internship/residency requirements for the Texas Examination of Educator Standards (TExES). Please refer to your department.

## Practicum (Residency) Semester Coursework (refer to your Degree Audit)

1. Students must enroll in the appropriate residency coursework for (refer to your Degree Audit)

## Retention in the Field-Based Teacher Education Program

In order to be retained in the Teacher Education Program a student must:

1. Continue to meet all admission standards;
2. Maintain a professional, ethical relationship in the classroom and with the placement school including the Principal, mentor teacher and university supervisor;
3. Remain in good standing with the Instructional Leadership Team (ILT) and school placement Principal;
4. Make satisfactory progress toward teacher certification.

## Certification in the Field-Based Teacher Education Program

After the completion of all degree and/or certification requirements and the fingerprinting process through a Texas Education Agency (TEA) vendor, students must apply for their Texas Teaching Certificate through the TEA: http://www.tea.state.tx.us/. Before TEA issues a certificate, a thorough criminal history background check will be conducted and could result in the denial of certification to a candidate with a felony or misdemeanor conviction.

Maintain requirements of admission, field-based experience, and practicum;
Conferred Bachelor's Degree in the certification area sought;
Successful completion of all required TExES examinations;
Apply for State Standard Teaching Certificate - Pay State processing fee applies;
Apply for Fingerprinting - Pay State processing fee applies.

Note: Refer to www.tamuc.edu/teacher or the Teacher Education Program Handbook for complete program guidelines.

## Curriculum and Instruction

The Department of Curriculum and Instruction at Texas A\&M University-Commerce, in collaboration with the region's public schools, offers students an opportunity to learn the craft of teaching through field-based experiences in K-12 educational settings.

Our faculty is comprised of outstanding educators who have earned doctoral degrees from universities throughout the United States. In addition to publications in academic journals and presentations at professional educational conferences, many faculty have published textbooks and other professional material. But the greatest tribute to the faculty in the Department of Curriculum and Instruction is their continuing involvement, through our field-based programs, with the public schools of Texas.

The department also teaches courses for the alternative teacher certification programs for those with degrees in fields other than education.

## Interdisciplinary Studies Major with Certification in Elementary \& Middle Level Education

The Bachelor of Science in Interdisciplinary Studies (B.S.I.S.) and Bachelor of Arts in Interdisciplinary Studies (B.A.I.S.) degrees with a major in interdisciplinary studies are the state approved degree programs which prepare candidates to meet minimum academic requirements for the Texas Elementary Teaching Certificate. The degree program requires the completion of a minimum of 121 semester hours (number of hours varies by program).

This outstanding program has won the Christa McAuliffe Showcase for Excellence Award from the American Association of State Colleges and Universities and other prestigious recognitions. Students spend the second half of their sophomore year and their junior year in interdisciplinary major courses that prepare teachers in the content of the elementary school curriculum and specializations such as math, science, math/science, social studies, English/language arts (4-8 grades) or EC-6 Generalist or bilingual, as well as English as a Second Language (ESL) and Special Education additions. During the junior year, students begin professional development courses that incorporate 45 hours of field experience in public schools. During the senior year students spend extended time working with a team of public school teachers and university faculty.

Students seeking a bachelor's degree with an interdisciplinary studies major must complete all university requirements for the Bachelor of Science degree or Bachelor of Arts degree listed in the bachelor's degree requirements section of this catalog, and any additional requirements established by the university. These requirements include but are not limited to successfully completing:

1. Initial Admissions Interview
2. University Studies Requirements (refer to that section of this catalog)
3. requirements for admission to professional development coursework
4. 45 hours of observation experience in public schools;
5. interdisciplinary courses and appropriate specialization courses;
6. requirements for admission to teacher education;
7. field experience; and
8. other departmental requirements established to meet the State board for Educator Certification (SBEC) standards for teacher certification.

The university reserves the right to change the curriculum or requirements for degrees or certificates to comply with state laws/regulations. The student assumes full responsibility for meeting all university requirements and for keeping current with all curriculum changes that might affect graduation and/or certification.

## University Studies Requirements

Candidates must complete University Studies Requirements (p. 39). These requirements are located earlier in this catalog.

## Secondary and All-Level Education

The Department of Curriculum and Instruction offers undergraduate professional development courses for students seeking Secondary certification (8th through $12^{\text {th }}$ grades) or All Level certification (Early Childhood through $12^{\text {th }}$ grades). Students major in a content-based teaching field (see list below) while obtaining pedagogy and educational professional development course work through the Curriculum and Instruction Department. The student should obtain advising from both the advisor in his or her major department and from a Curriculum and Instruction faculty mentor. Students with bachelor's degrees who want to teach should consult the Graduate Catalog for requirements leading to certification.

List of Secondary and All-Level Certification Major Areas: For which teaching certification is available:

- Agricultural Sciences and Technology (6-12)
- Art (EC-12)
- Business Education (6-12)
- Chemistry (8-12)
- Computer Science (8-12)
- English/Language Arts/Reading (8-12)
- History (8-12)
- Journalism (8-12)
- Life Science (8-12)
- Mathematics (8-12)
- Music (EC-12)
- Physical Education (EC-12)
- Physical Science (8-12)
- Spanish (EC-12)
- Social Studies (8-12)
- Special Education (EC-12)
- Speech (7-12)
- Theatre (EC-12)


## Degree and Certification

Students seeking a bachelor's degree along with teacher certification at the secondary level must complete all university requirements for the Bachelor of Science degree or Bachelor of Arts degree for the area of your major listed in the bachelor's degree requirements section of this catalog, and any additional requirements established by the university. These requirements include but are not limited to successfully completing:

1. University Studies Requirements ( p .39 ) (refer to that section of this catalog);
2. requirements for admission to professional development coursework;
3. 30 hours of observation experience in public schools;
4. the required reading score in one of the following tests: THEA 250, ACT - English 23 and Composite 23, or SAT Verbal 550 and 1070 Combined/ Total;
5. major coursework with a "C" or better;
6. overall GPA of 2.5 ;
7. all professional development coursework with a "C" or better;
8. all requirements for admission and retention into the teacher certification program;
9. and successful interview and placement with a partnership school district.

Please refer to Center for Educator Certification and Academic Services section of this catalog for more information.
The university reserves the right to change the curriculum or requirements for degrees or certificates to comply with state laws/regulations. The student assumes full responsibility for meeting all university requirements and for keeping current with all curriculum and policy changes that might affect graduation and/or certification.

## Field-Based Teacher Education Program

Students pursuing certification for teaching in the secondary schools are required to participate in various field experiences. In students observe in the schools for thirty clock hours. During the Residency Semester, candidates spend every day in the schools observing, studying, and teaching under the supervision of the university faculty and a public school mentor teacher(s). In addition to coursework, and internship/residency, to be certified, students must successfully complete at least two state administered examinations; one in the content area and one in the area of pedagogy and professional responsibilities. These tests are known as the TExES examinations (Texas Examinations of Educator Standards).

## Secondary and All-level Field-Based Teacher Education Program

Students should check with their content-area department advisor to gain approval to take the TExES content exam for their teaching field.
Students will receive approval to take the TExES Secondary Pedagogy and Professional Responsibility Test from the Department of C\&I.

## Secondary Certification Professional Development Course Requirements

Before participating in the Residency semester, the candidate must have completed the necessary preparatory courses. The required courses may vary slightly depending on major, so consult with an advisor in your major department for confirmation. Most students seeking Secondary Certification will complete the following courses:

| RDG 380 | Comprehension and Vocabulary in Middle and High Schools |  |
| :--- | :--- | ---: |
| ETEC 424 | Integrating Technology into the Middle/Secondary Curriculum |  |
| Residency Semester |  | 3 |
| SED 302 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments | 3 |
| SED 401 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| SED 404 | Internship in Secondary Schools Field-Based | 3 |
| SED 405 | Residency in Secondary Teaching | $3-6$ |

## All-Level Certification Professional Development Course Requirements

Before participating in the Residency semester, the candidate must have the completed the necessary preparatory courses. The required courses may vary slightly depending on major, so consult with an advisor in your major department for confirmation. Most students seeking All-level Certification will complete the following courses:

| SED 300 | The Teaching Profession | 3 |
| :--- | :--- | ---: |
| PSY 300 | Learning Processes and Development | 3 |
| RDG 380 | Comprehension and Vocabulary in Middle and High Schools |  |
| ETEC 424 | Integrating Technology into the Middle/Secondary Curriculum |  |
| Residency Semester |  | 3 |
| SED 302 |  |  |
| SED 401 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments |  |
| SED 404 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| SED 405 | Internship in Secondary Schools Field-Based | 3 |
| ELED 452 | Residency in Secondary Teaching | $3-6$ |

B.A.I.S./B.S.I.S. - Teacher Certification, EC-6 ESL Generalist (p. 101)
B.A.I.S./B.S.I.S. - Teacher Certification, EC-6 Generalist (p. 103)
B.A.I.S./B.S.I.S. - Teacher Certification, EC-6 with Bilingual (p. 105)
B.A.I.S./B.S.I.S. - Teacher Certification, EC-6 with Special Education (p. 108)
B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 ESL English/Language Arts/Reading (p. 110)
B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 ESL Mathematics (p. 112)
B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 ESL Science (p. 114)
B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 English/Language Arts Reading (p. 116)
B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 Math/Science (p. 119)
B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 Mathematics (p. 121)
B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 Science (p. 123)

## B.A.I.S./B.S.I.S. - Teacher Certification, General Information

The major in Interdisciplinary Studies in Elementary Education offers two levels of certification

- The Early Childhood Level EC-6th Grade, options are: EC-6 Generalist
EC-6 Bilingual
EC-6 English as a Second Language (ESL)
EC-6 Special Education
- The Middle Level 4th - 8th Grade, options are:

4-8 Math
4-8 Science
4-8 Math/Science
4-8 English/Language Arts/Reading

4-8 Science with English as a Second Language (ESL)
4-8 Math with English as a Second Language (ESL)
4-8 English/Language Arts/Reading with English as a Second Language (ESL)
4-8 Social Studies (See History Department Advisor)

- If you are a current Educational Aide, see your Academic Advisor
- Students seeking a BAIS will be required to take 12 hours of a Foreign Language.


## Professional Education and Support Courses

Professional education is that component in the program which provides the preservice teacher with:

1. Generic teaching skills required to plan, deliver, and evaluate teaching;
2. Organization and management skills needed for large group, small group, and individual instruction
3. Methods for teaching specific subjects in the elementary curriculum; and
4. Field experiences to practice the theories and methods learned at the university and in public school classrooms.

## Requirements for Professional Development Coursework

(ELED 300,RDG 350, RDG 360, RDG 370 \& RDG 380 (Benchmark \#1)

1. Completion of a minimum of 45 sh of college coursework
2. Texas Success Initiative (TSI) requirements met
3. Reading THEA score of 250 or above, SAT ( 1070 Combined and 550 Critical Reading), or ACT ( 23 Composite and 23 English) are pre-requisites to taking Reading 360, Reading 370 and Reading 380 in the Professional Development Coursework.
4. Overall GPA of 2.5

## Admission to Teacher Education (Benchmark \#2)

(Required Before Placement in an Internship)

1. Prior to beginning an Internship Basic Skills Requirements must be met in Reading, Math, and Writing. The Reading section may be satisfied with the following methods only - THEA 250, ACT 23 Composite \& 23 English, SAT 1070 Combined and 550 Critical Reading
2. Take PPR exam \#160
3. All requirements for Admission to Professional Development Coursework must continue to be met and an official degree plan filed.
4. Completion of a minimum of 80 sh of college coursework. Grade of " $C$ " or better in public speaking course.
5. Completion of all Professional Development, Interdisciplinary Core and Specialization courses that are required before Internship on Degree Evaluation. An overall GPA of 2.5 is required with no grade below "C" in each of these areas.
6. An application for admission into an internship completed prior to the due date. The application will be screened for such things as a public school evaluation of early observation experiences and documented 30 hours of observation, an assessment of standard English usage, C\&I departmental admission requirements, and completion of Basic Skills Requirements, etc.
7. Successful interview and placement in a public school.
8. Complete necessary coursework before admission to teacher education lacking no more than four hours.

## Retention

To be retained in the teacher education program, a student must continue to meet all admission standards. A student may be dismissed from the teacher education program following a review of the student's admission status. This review can be requested by either TAMU-Commerce or public school personnel. A student may be withdrawn from internship or residency upon recommendation of the student's field based instructional leadership team (ILT). This withdrawal from internship or residency will result in the student no longer being retained in the teacher education program.

## Certification

1. Admission and retention in the teacher education program;
2. Upon completion of degree requirements and passing state required certification exams apply for certificate on line through TEA.

## Scheduling of Coursework

1. Contact the Department of Curriculum and Instruction in Sowers Education South for advising.
2. First, read course descriptions in the university catalog. These descriptions will tell you if prerequisites are required for courses, thus helping you as you plan the sequence of courses you will follow. Second, begin with your university studies requirements. Finish the majority before moving to your major. Third, complete your Interdisciplinary Core, Professional Development and Specialization courses. Note which courses have prerequisites and plan accordingly. Plan your coursework so that when you complete your residency you have met all graduation requirements.

## Internship Semester

You must be admitted to the teacher education program before placement in the internship semester (see Admission to Teacher Education). During this semester, you will spend one day a week in seminar and two days a week in public schools.

## Residency Semester

You must be admitted to the teacher education program and successfully complete the internship semester before placement in the residency semester (see Admission to Teacher Education). During this semester, you will spend every day in the schools with the exception of scheduled seminars throughout the semester.

## Secondary and All-Level Education

The Department of Curriculum and Instruction offers undergraduate professional development courses for students seeking Secondary certification (8th through $12^{\text {th }}$ grades) or All Level certification (Early Childhood through $12^{\text {th }}$ grades). Students major in a content-based teaching field (see list below) while obtaining pedagogy and educational professional development course work through the Curriculum and Instruction Department. The student should obtain advising from both the advisor in his or her major department and from a Curriculum and Instruction faculty mentor. Students with bachelor's degrees who want to teach should consult the Graduate Catalog for requirements leading to certification.

List of Secondary and All-Level Certification Major Areas: For which teaching certification is available:

- Agricultural Sciences and Technology (6-12)
- Art (EC-12)
- Business Education (6-12)
- Chemistry (8-12)
- Computer Science (8-12)
- English/Language Arts/Reading (8-12)
- History (8-12)
- Journalism (8-12)
- Life Science (8-12)
- Mathematics (8-12)
- Music (EC-12)
- Physical Education (EC-12)
- Physical Science (8-12)
- Spanish (EC-12)
- Social Studies (8-12)
- Special Education (EC-12)
- Speech (7-12)
- Theatre (EC-12)


## Degree and Certification

Students seeking a bachelor's degree along with teacher certification at the secondary level must complete all university requirements for the Bachelor of Science degree or Bachelor of Arts degree for the area of your major listed in the bachelor's degree requirements section of this catalog, and any additional requirements established by the university. These requirements include but are not limited to successfully completing:

1. University Studies Requirements (refer to that section of this catalog);
2. requirements for admission to professional development coursework;
3. 30 hours of observation experience in public schools;
4. the required reading score in one of the following tests: THEA 250, ACT - English 23 and Composite 23, or SAT Verbal 550 and 1070 Combined/ Total;
5. major coursework with a "C" or better;
6. overall GPA of 2.5 ;
7. all professional development coursework with a "C" or better;
8. all requirements for admission and retention into the teacher certification program;
9. and successful interview and placement with a partnership school district.

Please refer to Center for Educator Certification and Academic Services section of this catalog for more information.

The university reserves the right to change the curriculum or requirements for degrees or certificates to comply with state laws/regulations. The student assumes full responsibility for meeting all university requirements and for keeping current with all curriculum and policy changes that might affect graduation and/or certification.

## Field-Based Teacher Education Program

Students pursuing certification for teaching in the secondary schools are required to participate in various field experiences. In students observe in the schools for thirty clock hours. During the Residency Semester, candidates spend every day in the schools observing, studying, and teaching under the supervision of the university faculty and a public school mentor teacher(s). In addition to coursework, and internship/residency, to be certified, students must successfully complete at least two state administered examinations; one in the content area and one in the area of pedagogy and professional responsibilities. These tests are known as the TExES examinations (Texas Examinations of Educator Standards).

## Secondary and All-level Field-Based Teacher Education Program

Students should check with their content-area department advisor to gain approval to take the TExES content exam for their teaching field.
Students will receive approval to take the TExES Secondary Pedagogy and Professional Responsibility Test from the Department of C\&I.

## Secondary Certification Professional Development Course Requirements

Before participating in the Residency semester, the candidate must have completed the necessary preparatory courses. The required courses may vary slightly depending on major, so consult with an advisor in your major department for confirmation. Most students seeking Secondary Certification will complete the following courses:

| SED 300 | The Teaching Profession | 3 |
| :--- | :--- | ---: |
| PSY 300 | Learning Processes and Development | 3 |
| RDG 380 | Comprehension and Vocabulary in Middle and High Schools | 3 |
| ETEC 424 | Integrating Technology into the Middle/Secondary Curriculum | 3 |
| Residency Semester: |  | 3 |
| SED 302 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments | 3 |
| SED 401 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| SED 404 | Internship in Secondary Schools Field-Based | 3 |
| SED 405 | Residency in Secondary Teaching | $3-6$ |

## All-Level Certification Professional Development Course Requirements

Before participating in the Residency semester, the candidate must have the completed the necessary preparatory courses. The required courses may vary slightly depending on major, so consult with an advisor in your major department for confirmation. Most students seeking All-level Certification will complete the following courses:

| SED 300 | The Teaching Profession | 3 |
| :--- | :--- | ---: |
| PSY 300 | Learning Processes and Development | 3 |
| RDG 380 | Comprehension and Vocabulary in Middle and High Schools | 3 |
| ETEC 424 | Integrating Technology into the Middle/Secondary Curriculum | 3 |
| Residency Semester: |  | 3 |
| SED 302 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments | 3 |
| SED 401 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| SED 404 | Internship in Secondary Schools Field-Based | 3 |
| SED 405 | Residency in Secondary Teaching | $3-6$ |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs | $3-6$ |

## B.A.I.S./B.S.I.S. - Teacher Certification, EC-6 ESL Generalist <br> General Information

B.A.I.S./B.S.I.S. - Teacher Certification, General Information (http://coursecatalog.tamuc.edu/undergrad/bais-bsis-teacher-certification-generalinformation)

## University Studies Courses

See the University Studies Requirements 43
Interdisciplinary Core Courses
Students must maintain a 2.50 GPA with no grade below a " $C$ " in all required Interdisciplinary Core.

The Interdisciplinary Core must include a minimum of 18 advanced hours.

| IS 351 | Inquiry: Knowledge and Skills of Science | 3 |
| :---: | :---: | :---: |
| IS 352 | Science Inquiry II | 3 |
| MATH 350 | Topics in Mathematics for Elementary Teachers I | 3 |
| MATH 351 | Topics in Mathematics for Elementary Teachers II | 3 |
| ECE 313 | Child Development: Early Years | 3 |
| ECE 358 | Language Acquisition and Development in Early Childhood Education | 3 |
| ECE 366 | Learning Environments | 3 |
| ECE 460 | Early Childhood Curriculum | 3 |
| HHPK 324 | Health and Kinesiology for Children | 3 |
| SPED 346 | Introduction to Exceptional Children | 3 |
| Specialization courses |  |  |
| Students must maintain a 2.50 GPA with no grade below a "C" in all required Specialization Courses. |  |  |
| ENG 457 | Teaching English as a Second Language | 3 |
| BLED 401 | Foundations of Bilingual/ESL (English as a Second Language) Education | 3 |
| BLED 412 | Second Language Literacy for English Language Learners | 3 |
| BLED 413 | Sheltered Content Area Instruction for English Language Learners | 3 |
| Professional Development courses |  |  |
| Students must maintain a 2.50 GPA with no grade below a "C" in all required Professional Development Courses. |  |  |
| Students must meet required course prerequisites for specific courses. |  |  |
| PSY 300 | Learning Processes and Development | 3 |
| PSY 310 | Psychology and Sociology of Diverse Populations | 3 |
| ELED 300 | Introduction to Teaching | 3 |
| RDG 350 | Reading and Literacy I | 3 |
| RDG 360 | Word Analysis Skills | 3 |
| RDG 370 | Reading and Literacy II | 3 |
| Internship courses |  |  |
| Students must maintain a 2.50 GPA with no grade below a "C" in all required Internship courses. |  |  |
| Students must apply for internship the Fall/Spring semester prior to their internship semester. |  |  |
| ELED 437 | Integrated Learning: Math, Science and Technology in Field-Based Settings | 3 |
| ELED 438 | Integrated Learning: Social Studies in Field-Based Settings | 3 |
| ELED 443 | Classroom Management for Teacher Candidates in Culturally Diverse Field-Based Settings | 3 |
| RDG 448 | Characteristics of English Language Learners | 3 |
| Residency courses |  |  |
| Students must maintain a 2.50 GPA with no grade below a "C" in all required Residency Courses. |  |  |
| Students must continue to satisfy teacher education admission and departmental requirements. |  |  |
| ELED 447 | Teacher Inquiry Projects and Assessment in Field-Based Settings | 3 |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs (6 hours required) | 6 |
| SPED 480 | Issues for Inclusion | 3 |
| Total Hours |  | 27 |

## Suggested Curriculum Outline (B.S.)

| Freshman | Hours |
| :--- | ---: |
| ENG 1301 | 3 |
| HIST 1301 | 3 |
| MATH 1314 | 3 |
| US Science | 4 |
| US PE Activity | 1 |
| PSCl 2301 | 3 |
| PSCI 2302 | 3 |
| SPC 1315 or 1321 | 3 |
| ENG 1302 | 3 |

HIST 1302 ..... 3
US Science ..... 4
US PE Activity ..... 134
Sophomore ..... Hours
US Vis/Perf Arts ..... 3
US Soc/Behav ..... 3
ECE 313 ..... 3
MATH 350 ..... 3
HHPK 324 ..... 3
SPED 346 ..... 3
US Humanities ..... 3
ECE 358 ..... 3
ECE 366 ..... 3
MATH 351 ..... 3
PSY 300 ..... 3
Junior ..... Hours
ELED 300 ..... 3
RDG 350 ..... 3
IS 351 ..... 3
BLED 401 ..... 3
ENG 457 ..... 3
BLED 412 ..... 3
ECE 460 ..... 3
IS 352 ..... 3
RDG 360 ..... 3
RDG 370 ..... 3
PSY 310 ..... 3
BLED 413 ..... 3
36
Senior ..... HoursInternship
ELED 437 ..... 3
ELED 438 ..... 3
ELED 443 ..... 3
RDG 448 ..... 3ResidencyELED 4473
ELED 452 ..... 6
SPED 480 ..... 3

Total Hours: 127

## B.A.I.S./B.S.I.S. - Teacher Certification, EC-6 Generalist

## General Information

B.A.I.S./B.S.I.S. - Teacher Certification, General Information (http://coursecatalog.tamuc.edu/undergrad/bais-bsis-teacher-certification-generalinformation)

## University Studies Courses

See the University Studies Requirements

Students must maintain a 2.50 GPA with no grade below a " $C$ " in all required Interdisciplinary Core
The Interdisciplinary Core must include a minimum of 18 advanced hours.

| IS 351 | Inquiry: Knowledge and Skills of Science | 3 |
| :--- | :--- | :--- |
| IS 352 | Science Inquiry II | 3 |
| HHPK 324 | Health and Kinesiology for Children |  |
| ART 305 | Integrated Arts for Elementary Teachers |  |
| or MUS 305 | Integrated Arts for Elementary Teachers | 3 |
| or THE 305 | Integrated Arts for Elementary Teachers |  |
| MATH 350 | Topics in Mathematics for Elementary Teachers I | 3 |
| MATH 351 | Topics in Mathematics for Elementary Teachers II | 3 |
| SPED 346 | Introduction to Exceptional Children | 3 |
| Specialization courses |  | 3 |
| Students must maintain a 2.50 GPA with no grade below a "C" in all required Specialization Courses. | 3 |  |
| BLED 412 | Second Language Literacy for English Language Learners | 3 |
| ECE 313 | Child Development: Early Years | 3 |
| ECE 358 | Language Acquisition and Development in Early Childhood Education | 3 |
| ECE 366 | Learning Environments | 3 |
| ECE 460 | Early Childhood Curriculum | 3 |

## Professional Development courses

Students must maintain a 2.50 GPA with no grade below a "C" in all required Professional Development Courses.
Students must meet required course prerequisites for specific courses.
ELED 200 Education in Global Society ..... 3
ELED 300 Introduction to Teaching ..... 3
PSY 300 Learning Processes and Development ..... 3
PSY 310 Psychology and Sociology of Diverse Populations ..... 3
RDG 350 Reading and Literacy I ..... 3
RDG 360 Word Analysis Skills ..... 3
RDG 370 Reading and Literacy II ..... 3
Internship courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Internship Courses.
Students must apply for internship the Fall/Spring semester prior to their internship semester.
ELED 437 Integrated Learning: Math, Science and Technology in Field-Based Settings ..... 3
ELED 438 Integrated Learning: Social Studies in Field-Based Settings ..... 3
ELED 443 Classroom Management for Teacher Candidates in Culturally Diverse Field-Based Settings ..... 3
RDG 448 Characteristics of English Language Learners ..... 3
Residency courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Residency Courses.
Students must continue to satisfy teacher education admission and departmental requirements
ELED 447 Teacher Inquiry Projects and Assessment in Field-Based Settings ..... 3
ELED 452 Student Teaching in Field-Based Teacher Education Programs ..... 6
SPED 480 Issues for Inclusion ..... 3
Total Hours ..... 124
Suggested Curriculum Outline (B.S.)
Freshman ..... Hours
ENG 1301 ..... 3
HIST 1301 ..... 3
MATH 1314 ..... 3
US Science ..... 4
US PE Activity ..... 1
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1315 or 1321 ..... 3
ENG 1302 ..... 3
HIST 1302 ..... 3
US Science ..... 4
US PE Activity ..... 1SophomoreHours
US Vis/Perf Arts ..... 3
US Soc/Behav ..... 3
ELED 200 ..... 3
MATH 350 ..... 3
ECE 366 ..... 3
US Humanities ..... 3
HHPK 324 ..... 3
SPED 346 ..... 3
ECE 313 ..... 3
ART 305, MUS 305, or THE 305 ..... 3
MATH 351 ..... 3
33
Junior ..... Hours
PSY 300 ..... 3
ELED 300 ..... 3
RDG 350 ..... 3
IS 351 ..... 3
BLED 412 ..... 3
ECE 358 ..... 3
IS 352 ..... 3
RDG 360 ..... 3
RDG 370 ..... 3
PSY 310 ..... 3
ECE 460 ..... 333
Senior
Senior ..... HoursInternship
ELED 437 ..... 3
ELED 438 ..... 3
ELED 443 ..... 3
RDG 448 ..... 3ResidencyELED 4473
ELED 452 ..... 6
SPED 480 ..... 3

Total Hours: 124

## B.A.I.S./B.S.I.S. - Teacher Certification, EC-6 with Bilingual

## General Information

B.A.I.S./B.S.I.S. - Teacher Certification, General Information (http://coursecatalog.tamuc.edu/undergrad/bais-bsis-teacher-certification-generalinformation)

## University Studies Courses

See the University Studies Requirements

## Interdisciplinary Core courses

Students must maintain a 2.50 GPA with no grade below a "C" in all required Interdisciplinary Core.
The Interdisciplinary Core must, include a minimum of 18 advanced hours.

| IS 351 | Inquiry: Knowledge and Skills of Science | 3 |
| :--- | :--- | :--- |
| IS 352 | Science Inquiry II | 3 |
| MATH 350 | Topics in Mathematics for Elementary Teachers I | 3 |
| MATH 351 | Topics in Mathematics for Elementary Teachers II | 3 |
| ECE 313 | Child Development: Early Years | 3 |
| ECE 358 | Language Acquisition and Development in Early Childhood Education | 3 |
| ECE 366 | Learning Environments | 3 |
| ECE 460 | Early Childhood Curriculum | 3 |
| HHPK 324 | Health and Kinesiology for Children | 3 |

## Specialization courses *

Students must maintain a 2.50 GPA with no grade below a "C" in all required Specialization Courses. Students must take the Spanish Placement Test upon declaring a Billingual Education concentration. If they are not placed into SPA 331 or SPA 333, SPA 231 and/or SPA 232 must be taken. Students must pass the BTLPT Spanish test for certification. Failure to do so may require taking additional Spanish courses.
SPA $331 \quad$ Spanish Conversation for Oral Proficiency 3
or SPA 333 Spanish for Heritage Speakers I
SPA $332 \quad$ Spanish Composition and Grammar 3
or SPA 334 Spanish for Heritage Speakers II
ENG 457 Teaching English as a Second Language 3
BLED $401 \quad$ Foundations of Bilingual/ESL (English as a Second Language) Education 3
BLED 402 Bilingual Oral Language and Biliteracy Instruction: Methods, Materials, and Assessment 3
BLED $403 \quad$ Bilingual Instruction for the Content Areas: Methods, Materials and Assessment 3
Professional Development courses
Students must maintain a 2.50 GPA with no grade below a " $C$ " in all required Professional Development Courses
Students must meet required course prerequisites for specific courses.
PSY 300 Learning Processes and Development 3

PSY $310 \quad$ Psychology and Sociology of Diverse Populations 3
ELED $300 \quad$ Introduction to Teaching 3
RDG 350 Reading and Literacy I 3
RDG 360 Word Analysis Skills 3
Internship courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Internship Courses.
Students must apply for internship the Fall/Spring semester prior to their internship semester.
ELED 437 Integrated Learning: Math, Science and Technology in Field-Based Settings 3
ELED 438 Integrated Learning: Social Studies in Field-Based Settings 3
ELED 443 Classroom Management for Teacher Candidates in Culturally Diverse Field-Based Settings 3
RDG $448 \quad$ Characteristics of English Language Learners 3
Residency courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Residency Courses.
Students must continue to satisfy teacher education admission and departmental requirements.
ELED $447 \quad$ Teacher Inquiry Projects and Assessment in Field-Based Settings 3

ELED $452 \quad$ Student Teaching in Field-Based Teacher Education Programs 6
SPED $480 \quad$ Issues for Inclusion 3
Total Hours

* Students must take the Spanish Placement Test upon declaring a Bilingual Ed. Concentration. If they are not placed into SPA 331 Spanish Conversation for Oral Proficiency or SPA 333 Spanish for Heritage Speakers I, SPA 231 Intermediate Spanish I and/or SPA 232 Intermediate Spanish II must be taken.
Students must pass the BTLPT Spanish test for certification. Failure to do so may require taking additional Spanish courses.


## Suggested Curriculum Outline (B.S.)

Freshman Hours
ENG 1301 ..... 3
HIST 1301 ..... 3
MATH 1314 ..... 3
US Science ..... 4
US PE Activity ..... 1
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1315 or 1321 ..... 3
ENG 1302 ..... 3
HIST 1302 ..... 3
US Science ..... 4
US PE Activity ..... 134
Sophomore ..... Hours
US Vis/Perf Arts ..... 3
US Soc/Behav ..... 3
MATH 350 ..... 3
ECE 358 ..... 3
ECE 366 ..... 3
SPA 331 or 333 ..... 3
SPA 332 or 334 ..... 3
HHPK 324 ..... 3
US Humanities ..... 3
MATH 351 ..... 3
ECE 313 ..... 3
PSY 300 ..... 3
36
Junior ..... Hours
ELED 300 ..... 3
RDG 350 ..... 3
IS 351 ..... 3
BLED 401 ..... 3
PSY 310 ..... 3
ENG 457 ..... 3
ECE 460 ..... 3
IS 352 ..... 3
BLED 402 ..... 3
RDG 360 ..... 3
BLED 403 ..... 3
33
Senior ..... HoursInternship
ELED 437 ..... 3
ELED 438 ..... 3
ELED 443 ..... 3
RDG 448 ..... 3ResidencyELED 4473
ELED 452 ..... 6

Total Hours: 127

## B.A.I.S./B.S.I.S. - Teacher Certification, EC-6 with Special Education General Information

B.A.I.S./B.S.I.S. - Teacher Certification, General Information (http://coursecatalog.tamuc.edu/undergrad/bais-bsis-teacher-certification-generalinformation)

## University Studies Courses

See the University Studies Requirements
Interdisciplinary Core Courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Interdisciplinary Core.
The Interdisciplinary Core must include a minimum of 18 advanced hours.
IS $351 \quad$ Inquiry: Knowledge and Skills of Science 3
IS 352 Science Inquiry II ..... 3
HHPK 324 Health and Kinesiology for Children ..... 3
MATH 350 Topics in Mathematics for Elementary Teachers I ..... 3
MATH 351 Topics in Mathematics for Elementary Teachers II ..... 3
Specialization courses
Students must maintain a 2.50 GPA with no grade below a " $C$ " in all required Specialization Courses.
ECE $313 \quad$ Child Development: Early Years ..... 3
ECE 358 Language Acquisition and Development in Early Childhood Education ..... 3
ECE 366 Learning Environments ..... 3
ECE 460 Early Childhood Curriculum ..... 3
SPED 346 Introduction to Exceptional Children ..... 3
SPED 420 Meth/Mat Teaching Restrictive ..... 3
SPED 449 Assessment and Evaluation ..... 3
SPED 463 Managing Special Needs Populations ..... 3
Professional Development courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Professional Development Courses.
Students must meet required course prerequisites for specific courses.
ELED 200 Education in Global Society ..... 3
ELED 300 Introduction to Teaching ..... 3
PSY 300 Learning Processes and Development ..... 3
PSY 310 Psychology and Sociology of Diverse Populations ..... 3
RDG 350 Reading and Literacy I ..... 3
RDG 360 Word Analysis Skills ..... 3
RDG 370 Reading and Literacy II ..... 3
Internship courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Internship Courses.
Students must apply for internship the Fall/Spring semester prior to their internship semester.
ELED 437 Integrated Learning: Math, Science and Technology in Field-Based Settings ..... 3
ELED 438 Integrated Learning: Social Studies in Field-Based Settings ..... 3
RDG 448 Characteristics of English Language Learners ..... 3
SPED 466 Practicum with Special Needs Populations ..... 3
Residency courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Residency Courses.
Students must continue to satisfy teacher education admission and departmental requirements.
ELED 447 Teacher Inquiry Projects and Assessment in Field-Based Settings ..... 3
ELED 452 Student Teaching in Field-Based Teacher Education Programs ..... 6
SPED 470

## Suggested Curriculum Outline (B.S.)



## ELED 447 <br> $\square$ <br> SPED 470 <br> Total Hours: 127 <br> B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 ESL English/ Language Arts/Reading

3
## General Information

B.A.I.S./B.S.I.S. - Teacher Certification, General Information (http://coursecatalog.tamuc.edu/undergrad/bais-bsis-teacher-certification-generalinformation)

## University Studies Courses

See the University Studies Requirements 43
Interdisciplinary Core Courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Interdisciplinary Core.
The Interdisciplinary Core must include a minimum of 18 advanced hours.
IS $351 \quad$ Inquiry: Knowledge and Skills of Science 3
S 352 Science Inquiry II
3
MATH 351 Topics in Mathematics for Elementary Teachers II ..... 3
SPED 346 Introduction to Exceptional Children ..... 3

## Specialization Courses

Students must maintain a 2.500 GPA with no grade below a "C" in all required Specialization Courses.
ENG 202 Multi-Ethnic American Literature (can also satisfy the humanities option of University Studies ..... 3
Requirements)
ENG 300 Reading, Analyzing, Teaching Literature ..... 3
ENG 301 Modern Grammar ..... 3
ENG 305 Children's Literature ..... 3
ENG 406 Adolescent Literature ..... 3
ENG 434 Literature and Film (can also satisfy visual and performing arts option of University Studies Requirements) ..... 3
or ENG 323 Mythologyor ENG 432 History and Aesthetics of FilmENG 333 Advanced Writing: Non-Fiction3
ESL Specialization coursesStudents must maintain a 2.50 GPA with no grade below a " C " in all required Specialization Courses.
ENG 457 Teaching English as a Second Language ..... 3
BLED 401 Foundations of Bilingual/ESL (English as a Second Language) Education ..... 3
BLED 412 Second Language Literacy for English Language Learners ..... 3
Professional Development courses
Students must maintain a 2.50 GPA with no grade below a " C " in all required Professional Development Courses.
Students must meet required prerequisites for specific courses.
ELED 200 Education in Global Society ..... 3
ELED 300 Introduction to Teaching ..... 3
MLED 314 Young Adolescent Development ..... 3
PSY 300 Learning Processes and Development ..... 3
PSY 310 Psychology and Sociology of Diverse Populations ..... 3
RDG 380 Comprehension and Vocabulary in Middle and High Schools ..... 3

## Internship courses

Students must maintain a 2.50 GPA with no grade below a "C" in all required Internship Courses.
Students must apply for internship the Fall/spring semester prior to their internship semester.

| MLED 402 | Best Practices in Pedagogy and Assessment | 3 |
| :--- | :--- | :--- |
| MLED 403 | Organization, Motivation and Management in Middle Level Classrooms | 3 |
| MLED 435 | Integrating Instruction: Science, Mathematics and Technology | 3 |
| RDG 450 | Middle School Reading: Theory \& Practice | 3 |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs |  |
| Residency courses |  | 3 |
| Students must maintain a 2.50 GPA with no grade below a "C" in all required Residency Courses. |  |  |
| Students must continue to satisfy teacher education admission and departmental requirements. |  |  |
| MLED 404 | Developing Communication Skills | 3 |
| MLED 410 | Fostering School, Family, and Community Relationships | 3 |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs | 3 |
| SPED 480 | Issues for Inclusion | 3 |
| Total Hours |  | 133 |

## Suggested Curriculum Outline (B.S.)

| Freshman | Hours |
| :---: | :---: |
| ENG 1301 | 3 |
| HIST 1301 | 3 |
| MATH 1314 | 3 |
| US Science | 4 |
| US PE Activity | 1 |
| PSCI 2301 | 3 |
| PSCI 2302 | 3 |
| SPC 1315 or 1321 | 3 |
| ENG 1302 | 3 |
| HIST 1302 | 3 |
| MATH 350 | 3 |
| US PE Activity | 1 |
|  | 33 |
| Sophomore | Hours |
| US Vis/Perf Arts* | 3 |
| US Soc/Behav | 3 |
| US Science | 4 |
| US Humanities** | 3 |
| ENG 301 | 3 |
| ELED 200 | 3 |
| MLED 314 | 3 |
| SPED 346 | 3 |
| MATH 351 | 3 |
| ENG 202 | 3 |
| ENG 333 | 3 |
| BLED 401 | 3 |
|  | 37 |
| Junior | Hours |
| PSY 300 | 3 |
| ELED 300 | 3 |
| IS 351 | 3 |
| ENG 305 | 3 |
| ENG 457 | 3 |
| ENG 323, 432, or ENG 434 | 3 |
| RDG 380 | 3 |

PSY 310 ..... 3
IS 352 ..... 3
BLED 412 ..... 3
ENG 300 ..... 3
ENG 406 ..... 336
Senior ..... Hours
InternshipMLED 4023
MLED 403 ..... 3
MLED 435 ..... 3
RDG 450 ..... 3
ELED 452 ..... 3ResidencyMLED 4043
MLED 410 ..... 3
ELED 452 ..... 3
SPED 480 ..... 3

Total Hours: 133

* Recommended ENG 434 Literature and Film or ENG 432 History and Aesthetics of Film.
** Recommended ENG 202 Multi-Ethnic American Literature.


## B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 ESL Mathematics

## General Information

B.A.I.S./B.S.I.S. - Teacher Certification, General Information (http://coursecatalog.tamuc.edu/undergrad/bais-bsis-teacher-certification-generalinformation)

## University Studies Courses

See the University Studies Requirements

## Interdisciplinary Core Courses

Students must maintain a 2.50 GPA with no grade below a " C " in all required Interdisciplinary Core.
The Interdisciplinary Core must include a minimum of 18 advanced hours.
IS $351 \quad$ Inquiry: Knowledge and Skills of Science
AND 3 sh from the following: 3
IS 352 Science Inquiry II

BSC 461 Biology for Middle School Teachers
ESCI $461 \quad$ Earth Science for Teachers
IS $451 \quad$ Historical Development of Great Ideas in Science
MATH $350 \quad$ Topics in Mathematics for Elementary Teachers I
MATH $351 \quad$ Topics in Mathematics for Elementary Teachers II
SPED $346 \quad$ Introduction to Exceptional Children 3

## Specialization Courses

Students must maintain a 2.50 GPA with no grade below a "C" in all required Specialization Courses.
MATH $301 \quad$ Introductory Geometry
MATH $361 \quad$ Mathematical Modeling of Science for Middle School I 3
MATH $362 \quad$ Mathematical Modeling of Science for Middle School II 3
MATH $372 \quad$ Mathematics Structures and Applications
MATH $380 \quad$ Mathematics History (Fall only) 3
MATH $453 \quad$ Essentials of Statistics 3

ESL Specialization Courses
Students must maintain a 2.50 GPA with no grade below a " C " in all required Specialization Courses.
ENG $457 \quad$ Teaching English as a Second Language 3
BLED 401 Foundations of Bilingual/ESL (English as a Second Language) Education ..... 3
BLED 412 Second Language Literacy for English Language Learners ..... 3
BLED 413 Sheltered Content Area Instruction for English Language Learners ..... 3
Professional Development CoursesStudents must maintain a 2.50 GPA with no grade below a " C " in all required Professional Development courses.Students must meet required course prerequisites for specific courses.
ELED 300 Introduction to Teaching ..... 3
MLED 314 Young Adolescent Development ..... 3
PSY 300 Learning Processes and Development ..... 3
PSY 310 Psychology and Sociology of Diverse Populations ..... 3
RDG 380 Comprehension and Vocabulary in Middle and High Schools ..... 3
Internship Courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Internship Courses.
Students must apply for internship the Fall/Spring semester prior to their internship semester.
MLED 402 Best Practices in Pedagogy and Assessment ..... 3
MLED 403 Organization, Motivation and Management in Middle Level Classrooms ..... 3
MLED 435 Integrating Instruction: Science, Mathematics and Technology ..... 3
RDG 450 Middle School Reading: Theory \& Practice ..... 3
ELED 452 Student Teaching in Field-Based Teacher Education Programs ..... 3
Residency Courses
Students must maintain a 2.50 GPA with no grade below a " C " in all required Residency Courses.
Students must continue to satisfy teacher education admission and departmental requirements.
MLED $410 \quad$ Fostering School, Family, and Community Relationships ..... 3
ELED 452 Student Teaching in Field-Based Teacher Education Programs ..... 3
SPED 480 Issues for Inclusion ..... 3
Total Hours ..... 127
Suggested Curriculum Outline (B.S.)
Freshman ..... Hours
ENG 1301 ..... 3
HIST 1301 ..... 3
MATH 1314 ..... 3
US Science ..... 4
US PE Activity ..... 1
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1315 or 1321 ..... 3
ENG 1302 ..... 3
HIST 1302 ..... 3
US Science ..... 4
US PE Activity ..... 1
Sophomore ..... Hours
US Soc/Behav ..... 3
US Humanities ..... 3
US Visual/Performing Arts ..... 3
MATH 350 ..... 3
RDG 380 ..... 3
MLED 314 ..... 3
SPED 346 ..... 3
MATH 351 ..... 3
PSY 300 ..... 3
MATH 372 ..... 3
BLED 401 ..... 3JuniorHours
ELED 300 ..... 3
IS 351 ..... 3
MATH 361 ..... 3
MATH 301 ..... 3
BLED 412 ..... 3
ENG 457 ..... 3
MATH 362 ..... 3
MATH 453 ..... 3
IS 352, BSC 461, ESCI 461, or IS 451 ..... 3
PSY 310 ..... 3
BLED 413 ..... 3
33
Senior ..... Hours
MATH 380 (Fall Only) ..... 3
Internship
MLED 402 ..... 3
MLED 403 ..... 3
MLED 435 ..... 3
RDG 450 ..... 3
ELED 452 ..... 3ResidencyMLED 4103
ELED 452 ..... 3
SPED 480 ..... 3

Total Hours: 127

## B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 ESL Science

## General Information

B.A.I.S./B.S.I.S. - Teacher Certification, General Information (http://coursecatalog.tamuc.edu/undergrad/bais-bsis-teacher-certification-generalinformation)

## University Studies Courses

See the University Studies Requirements ..... 43
Interdisciplinary Core CoursesStudents must maintain a 2.50 GPA with no grade below a " C " in all required Interdisciplinary Core.The Interdisciplinary Core must include a minimum of 18 advanced hours.
IS $351 \quad$ Inquiry: Knowledge and Skills of Science ..... 3
IS 352 Science Inquiry II ..... 3
MATH 350 Topics in Mathematics for Elementary Teachers I ..... 3
MATH 351 Topics in Mathematics for Elementary Teachers II ..... 3
SPED 346 Introduction to Exceptional Children ..... 3
Specialization courses
Students must maintain a 2.50 GPA with no grade below a " C " in all required Specialization Courses.
IS 451 Historical Development of Great Ideas in Science ..... 3
BSC 461 Biology for Middle School Teachers ..... 3

| ESCI 461 | Earth Science for Teachers | 3 |
| :---: | :---: | :---: |
| CHEM 1405 | Survey of General Chemistry | 4 |
| or CHEM 1411 | General and Quantitative Chemistry I |  |
| PHYS 1401 | College Physics | 4 |
| or PHYS 1402 | College Physics |  |
| Science Elective |  | 3-4 |
| ESL Specialization courses |  |  |
| Students must maintain a 2.50 GPA with no grade below a "C" in all required Specialization Courses. |  |  |
| ENG 457 | Teaching English as a Second Language | 3 |
| BLED 401 | Foundations of Bilingual/ESL (English as a Second Language) Education | 3 |
| BLED 412 | Second Language Literacy for English Language Learners | 3 |
| BLED 413 | Sheltered Content Area Instruction for English Language Learners | 3 |
| Professional Development courses |  |  |
| Students must maintain a 2.50 GPA with no grade below a "C" in all required Professional Development Courses. |  |  |
| Students must meet required course prerequisites for specific courses. |  |  |
| ELED 300 | Introduction to Teaching | 3 |
| MLED 314 | Young Adolescent Development | 3 |
| PSY 300 | Learning Processes and Development | 3 |
| PSY 310 | Psychology and Sociology of Diverse Populations | 3 |
| RDG 380 | Comprehension and Vocabulary in Middle and High Schools | 3 |
| Internship courses |  |  |
| Students must maintain a 2.50 GPA with no grade below a "C" in all required Internship Courses. |  |  |
| Students must apply for internship the Fall/Spring semester prior to their internship semester. |  |  |
| MLED 402 | Best Practices in Pedagogy and Assessment | 3 |
| MLED 403 | Organization, Motivation and Management in Middle Level Classrooms | 3 |
| MLED 435 | Integrating Instruction: Science, Mathematics and Technology | 3 |
| RDG 450 | Middle School Reading: Theory \& Practice | 3 |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs | 3 |
| Residency courses |  |  |
| Students must maintain a 2.50 GPA with no grade below a "C" in all required Residency Courses. |  |  |
| Students must continue to satisfy teacher education admission and departmental requirements. |  |  |
| MLED 410 | Fostering School, Family, and Community Relationships | 3 |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs | 3 |
| SPED 480 | Issues for Inclusion | 3 |

## Suggested Curriculum Outline (B.S.)

| Freshman | Hours |
| :--- | ---: |
| ENG 1301 | 3 |
| HIST 1301 | 3 |
| MATH 1314 | 3 |
| US Science | 4 |
| US PE Activity | 1 |
| PSCl 2301 | 3 |
| PSCI 2302 | 3 |
| SPC 1315 or 1321 | 3 |
| ENG 1302 | 3 |
| HIST 1302 | 3 |
| US Science | 4 |
| US PE Activity | 1 |3

MATH 1314,
PE Activity ..... 1PSCI 23023
SPC 1315 or 13213US4
US PE Activity34
Sophomore Hours
US Vis/Perf Arts ..... 3
US Soc/Behav ..... 3
US Humanities ..... 3
MATH 350 ..... 3
CHEM 1405 or 1411 ..... 4
BLED 401 ..... 3
SPED 346 ..... 3
MATH 351 ..... 3
PSY 300 ..... 3
PHYS 1401 or 1402 ..... 4
32
Junior ..... Hours
ELED 300 ..... 3
IS 351 ..... 3
IS 451 ..... 3
BLED 412 ..... 3
ENG 457 ..... 3
IS 352 ..... 3
MLED 314 ..... 3
RDG 380 ..... 3
PSY 310 ..... 3
BLED 413 ..... 3
BSC 461 ..... 3
ESCI 461 ..... 3SeniorHours
Science elective ..... 3-4
Internship
MLED 402 ..... 3
MLED 403 ..... 3
MLED 435 ..... 3
RDG 450 ..... 3
ELED 452 ..... 3
Residency
MLED 410 ..... 3
ELED 452 ..... 3
SPED 480 ..... 3

## B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 English/Language Arts Reading

## General Information

B.A.I.S./B.S.I.S. - Teacher Certification, General Information (http://coursecatalog.tamuc.edu/undergrad/bais-bsis-teacher-certification-generalinformation)

## University Studies Courses

See the University Studies Requirements
Interdisciplinary Core Courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Interdisciplinary Core.

The Interdisciplinary Core must include a minimum of 18 advanced hours.

| IS 351 | Inquiry: Knowledge and Skills of Science | 3 |
| :---: | :---: | :---: |
| IS 352 | Science Inquiry II | 3 |
| MATH 350 | Topics in Mathematics for Elementary Teachers I | 3 |
| MATH 351 | Topics in Mathematics for Elementary Teachers II | 3 |
| SPED 346 | Introduction to Exceptional Children | 3 |
| Specialization Courses |  |  |
| Students must maintain a 2.50 GPA with no grade below a "C" in all required Specialization Courses. |  |  |
| ENG 202 | Multi-Ethnic American Literature (Can also satisfy humanities option of University Studies Requirements) | 3 |
| ENG 300 | Reading, Analyzing, Teaching Literature | 3 |
| ENG 301 | Modern Grammar | 3 |
| ENG 305 | Children's Literature | 3 |
| ENG 434 | Literature and Film (can also satisfy visual and performing arts option of University Studies requirement) | 3 |
| or ENG 323 | Mythology |  |
| or ENG 432 | History and Aesthetics of Film |  |
| ENG 406 | Adolescent Literature | 3 |
| ENG 331 | Introduction to Linguistics | 3 |
| or ENG 317 | Word Building |  |
| ENG 333 | Advanced Writing: Non-Fiction | 3 |

## Professional Development courses

Students must maintain a 2.50 GPA with no grade below a " C " in all required Professional Development Courses.
Students must meet required course prerequisites for specific courses.
ELED $200 \quad$ Education in Global Society 3
ELED 300 Introduction to Teaching 3

MLED $314 \quad$ Young Adolescent Development 3
PSY 300 Learning Processes and Development 3
PSY $310 \quad$ Psychology and Sociology of Diverse Populations 3
RDG $380 \quad$ Comprehension and Vocabulary in Middle and High Schools 3
Internship courses
Students must maintain a 2.50 GPA with no grade below a " C " in all required Internship Courses.
Students must apply for internship the Fall/Spring semester prior to their internship semester.
MLED $402 \quad$ Best Practices in Pedagogy and Assessment 3

MLED $403 \quad$ Organization, Motivation and Management in Middle Level Classrooms 3
MLED 435 Integrating Instruction: Science, Mathematics and Technology 3
RDG $450 \quad$ Middle School Reading: Theory \& Practice 3
ELED $452 \quad$ Student Teaching in Field-Based Teacher Education Programs 3
Residency courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Residency Courses.
Students must continue to satisfy teacher education admission and departmental requirements.

| MLED 404 | Developing Communication Skills | 3 |
| :--- | :--- | ---: |
| MLED 410 | Fostering School, Family, and Community Relationships | 3 |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs | 3 |
| SPED 480 | Issues for Inclusion | 3 |
| Total Hours |  | 127 |

## Suggested Curriculum Outline (B.S.)

Freshman
ENG 1301 ..... 3
HIST 1301 ..... 3
MATH 1314 ..... 3
US Science ..... 4
US PE Activity ..... 1
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1315 or 1321 ..... 3
ENG 1302 ..... 3
HIST 1302 ..... 3
MATH 350 ..... 3
US PE Activity ..... 1
33
Sophomore ..... Hours
US Vis/Perf Arts ..... 3
US Soc/Behav ..... 3
US Science ..... 4
US Humanities* ..... 3
ENG 333 ..... 3
ELED 200 ..... 3
MLED 314 ..... 3
SPED 346 ..... 3
MATH 351 ..... 3
ENG 202 ..... 3
ENG 317 or 331 ..... 334
Junior ..... Hours
PSY 300 ..... 3
ELED 300 ..... 3
IS 351 ..... 3
ENG 305 ..... 3
ENG 301 ..... 3
ENG 323, 432, or ENG 434 ..... 3
RDG 380 ..... 3
PSY 310 ..... 3
IS 352 ..... 3
ENG 300 ..... 3
ENG 406 ..... 3
Senior33
Internship
MLED 402 ..... 3
MLED 403 ..... 3
MLED 435 ..... 3
RDG 450 ..... 3
ELED 452 ..... 3
Residency
MLED 404 ..... 3
MLED 410 ..... 3
ELED 452 ..... 3
SPED 480 ..... 3

## Total Hours: 127

* Recommended ENG 434 Literature and Film or ENG 432 History and Aesthetics of Film
** Recommended ENG 202 Multi-Ethnic American Literature.


## B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 Math/Science General Information

B.A.I.S./B.S.I.S. - Teacher Certification, General Information (http://coursecatalog.tamuc.edu/undergrad/bais-bsis-teacher-certification-generalinformation)

## University Studies Courses

See the University Studies Requirements 43
Interdisciplinary Core Courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Interdisciplinary Core.
The Interdisciplinary Core must include a minimum of 18 advanced hours.
IS $351 \quad$ Inquiry: Knowledge and Skills of Science 3

IS 352 Science Inquiry II 3
MATH 350 Topics in Mathematics for Elementary Teachers I 3
MATH 351 Topics in Mathematics for Elementary Teachers II 3
SPED 346 Introduction to Exceptional Children 3

## Specialization courses

Students must maintain a 2.50 GPA with no grade below a " $C$ " in all required Specialization Courses.
MATH $301 \quad$ Introductory Geometry 3

MATH 361 Mathematical Modeling of Science for Middle School I 3
MATH 362 Mathematical Modeling of Science for Middle School II 3
MATH $372 \quad$ Mathematics Structures and Applications 3
MATH $380 \quad$ Mathematics History 3
MATH $453 \quad$ Essentials of Statistics 3
CHEM 1405 Survey of General Chemistry 4
or CHEM 1411 General and Quantitative Chemistry I
PHYS 1401
or PHYS 1402
College Physics 4
College Physics
Biology for Middle School Teachers 3
Earth Science for Teachers 3
Historical Development of Great Ideas in Science 3
IS 451 Historical Development of Great Ideas in Science
Take two more four hour labs sciences if CHEM and PHYS are taken in the core
Professional Development courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Professional Development Courses.
Students must meet required course prerequisites for specific courses.
ELED 300 Introduction to Teaching 3

MLED 314 Young Adolescent Development 3
PSY 300 Learning Processes and Development 3
PSY $310 \quad$ Psychology and Sociology of Diverse Populations 3
RDG $380 \quad$ Comprehension and Vocabulary in Middle and High Schools 3

## Internship courses

Students must maintain a 2.50 GPA with no grade below a "C" in all required Internship Courses.
Students must apply for internship the Fall/Spring semester prior to their internship semester.
MLED $402 \quad$ Best Practices in Pedagogy and Assessment 3
MLED $403 \quad$ Organization, Motivation and Management in Middle Level Classrooms 3
MLED $435 \quad$ Integrating Instruction: Science, Mathematics and Technology 3
RDG $450 \quad$ Middle School Reading: Theory \& Practice 3
ELED $452 \quad$ Student Teaching in Field-Based Teacher Education Programs 3

## Residency courses

Students must maintain a 2.50 GPA with no grade below a "C" in all required Residency Courses.
Students must continue to satisfy teacher education admission and departmental requirements.
MLED 410
Fostering School, Family, and Community Relationships

| ELED 452 | Student Teaching in Field-Based Teacher Education Programs |
| :--- | :--- |
| SPED 480 | Issues for Inclusion |

## Suggested Curriculum Outline (B.S.)

Freshman Hours
ENG 1301 ..... 3
HIST 1301 ..... 3
MATH 1314 ..... 3
US Science ..... 4
US PE Activity ..... 1
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1315 or 1321 ..... 3
ENG 1302 ..... 3
HIST 1302 ..... 3
MATH 350 ..... 3
US PE Activity ..... 1
Sophomore ..... Hours
US Vis/Perf Arts ..... 3
US Soc/Behav ..... 3
US Humanities ..... 3
PSY 300 ..... 3
US Science ..... 4
CHEM 1405 or 1411 ..... 4
MLED 314 ..... 3
SPED 346 ..... 3
MATH 351 ..... 3
MATH 372 ..... 3
PHYS 1401 or 1402 ..... 4JuniorHours
ELED 300 ..... 3
IS 351 ..... 3
MATH 361 ..... 3
IS 451 ..... 3
MATH 301 ..... 3
MATH 362 ..... 3
MATH 453 ..... 3
RDG 380 ..... 3
IS 352 ..... 3
PSY 310 ..... 3
BSC 461 ..... 3
ESCI 461 ..... 3
Senior ..... Hours
MATH 380 ..... 3
Internship
MLED 402 ..... 3
MLED 403 ..... 3
MLED 435 ..... 3
RDG 450 ..... 3
ELED 452 ..... 3
Residency
MLED 410 ..... 3
ELED 452 ..... 3
SPED 480 ..... 3

Total Hours: 132

## B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 Mathematics General Information

B.A.I.S./B.S.I.S. - Teacher Certification, General Information (http://coursecatalog.tamuc.edu/undergrad/bais-bsis-teacher-certification-generalinformation)

University Studies Courses
See the University Studies Requirements
Interdisciplinary Core Courses
Students must maintain a 2.50 GPA with no grade below a " C " in all required Interdisciplinary Core.
The Interdisciplinary Core must include a minimum of 18 advanced hours.
IS $351 \quad$ Inquiry: Knowledge and Skills of Science 3
and 3 sh from the following: 3
IS 352 Science Inquiry II
BSC 461 Biology for Middle School Teachers
ESCI 461 Earth Science for Teachers
IS 451 Historical Development of Great Ideas in Science
$\begin{array}{lll}\text { MATH } 350 & \text { Topics in Mathematics for Elementary Teachers I } & 3 \\ \text { MATH } 351 & \text { Topics in Mathematics for Elementary Teachers II } & 3\end{array}$
SPED 346 Introduction to Exceptional Children 3

## Specialization Courses

Students must maintain a 2.50 GPA with no grade below a " $C$ " in all required Specialization Courses.
MATH $301 \quad$ Introductory Geometry 3

MATH $361 \quad$ Mathematical Modeling of Science for Middle School I 3
MATH $362 \quad$ Mathematical Modeling of Science for Middle School II 3
MATH $372 \quad$ Mathematics Structures and Applications 3
MATH $380 \quad$ Mathematics History 3
MATH $453 \quad$ Essentials of Statistics 3
Professional Development courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Professional Development Courses.
Students must meet required course prerequisites for specific courses.
ELED $200 \quad$ Education in Global Society 3
ELED $300 \quad$ Introduction to Teaching 3
MLED $314 \quad$ Young Adolescent Development 3
PSY 300 Learning Processes and Development 3
PSY $310 \quad$ Psychology and Sociology of Diverse Populations
RDG 380 Comprehension and Vocabulary in Middle and High Schools 3
Internship courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Internship Courses.
Students must apply for internship the Fall/Spring semester prior to their internship semester.
MLED $402 \quad$ Best Practices in Pedagogy and Assessment 3

MLED $403 \quad$ Organization, Motivation and Management in Middle Level Classrooms 3
MLED 435 Integrating Instruction: Science, Mathematics and Technology 3
RDG $450 \quad$ Middle School Reading: Theory \& Practice 3

## Residency courses

Students must maintain a 2.50 GPA with no grade below a "C" in all required Residency Courses.
Students must continue to satisfy teacher education admission and departmental requirements.

| MLED 404 | Developing Communication Skills | 3 |
| :--- | :--- | :--- |
| MLED 410 | Fostering School, Family, and Community Relationships | 3 |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs | 3 |
| SPED 480 | Issues for Inclusion | 3 |
| Total Hours |  | 121 |

## Suggested Curriculum Outline (B.S.)

| Freshman | Hours |
| :---: | :---: |
| ENG 1301 | 3 |
| HIST 1301 | 3 |
| MATH 1314 | 3 |
| US Science | 4 |
| US PE Activity | 1 |
| PSCI 2301 | 3 |
| PSCI 2302 | 3 |
| SPC 1315 or 1321 | 3 |
| ENG 1302 | 3 |
| HIST 1302 | 3 |
| MATH 350 | 3 |
| US PE Activity | 1 |
|  | 33 |
| Sophomore | Hours |
| US Vis/Perf Arts | 3 |
| US Soc/Behav | 3 |
| US Science | 4 |
| ELED 200 | 3 |
| US Humanities | 3 |
| MLED 314 | 3 |
| SPED 346 | 3 |
| MATH 351 | 3 |
| MATH 372 (spring only) | 3 |
|  | 28 |
| Junior | Hours |
| PSY 300 | 3 |
| ELED 300 | 3 |
| IS 351 | 3 |
| MATH 301 | 3 |
| MATH 361 (Fall only) | 3 |
| MATH 362 (Spring Only) | 3 |
| MATH 453 (Spring \& Summer Only) | 3 |
| IS 352, BSC 461, ESCI 461, or IS 451 | 3 |
| RDG 380 | 3 |
| PSY 310 | 3 |
|  | 30 |
| Senior | Hours |
| MATH 380 (Fall Only) | 3 |
| Internship |  |
| MLED 402 | 3 |

MLED 403 ..... 3
MLED 435 ..... 3
RDG 450 ..... 3
ELED 452 ..... 3
Residency
MLED 404 ..... 3
MLED 410 ..... 3
ELED 452 ..... 3
SPED 480 ..... 3

Total Hours: 121

## B.A.I.S./B.S.I.S. - Teacher Certification, MLED, 4-8 Science

## General Information

B.A.I.S./B.S.I.S. - Teacher Certification, General Information (http://coursecatalog.tamuc.edu/undergrad/bais-bsis-teacher-certification-generalinformation)

## University Studies Courses

See the University Studies Requirements ..... 43
Interdisciplinary Core Courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Interdisciplinary Core.
The Interdisciplinary Core must include a minimum of 18 advanced hours.
IS 351 Inquiry: Knowledge and Skills of Science ..... 3
IS 352 Science Inquiry II ..... 3
MATH 350 Topics in Mathematics for Elementary Teachers I ..... 3
MATH 351 Topics in Mathematics for Elementary Teachers II ..... 3
SPED 346 Introduction to Exceptional Children ..... 3
Specialization courses
Students must maintain a 2.50 GPA with no grade below a " C " in all required Specialization Courses.
IS $451 \quad$ Historical Development of Great Ideas in Science ..... 3
ESCI $461 \quad$ Earth Science for Teachers ..... 3
BSC 461 Biology for Middle School Teachers ..... 3
CHEM 1405 Survey of General Chemistry ..... 4
or CHEM 1411 General and Quantitative Chemistry IPHYS 1401College Physics4
or PHYS 1402 College Physics
Science Elective. Take two more four hour lab science courses, if CHEM and PHYS are taken in core. ..... 3-4
Professional Development courses
Students must maintain a 2.50 GPA with no grade below a "C" in all required Professional Development Courses.
Students must meet required course prerequisites for specific courses.
ELED 200 Education in Global Society ..... 3
ELED 300 Introduction to Teaching ..... 3
MLED 314 Young Adolescent Development ..... 3
PSY 300 Learning Processes and Development ..... 3
PSY 310 Psychology and Sociology of Diverse Populations ..... 3
RDG 380 Comprehension and Vocabulary in Middle and High Schools ..... 3
Internship courses
Students must maintain a 2.50 GPA with no grade below a " C " in all required Internship Courses.
Students must apply for internship the Fall/Spring semester prior to their internship semester.
MLED 402 Best Practices in Pedagogy and Assessment ..... 3
MLED 403 Organization, Motivation and Management in Middle Level Classrooms ..... 3
MLED 435 Integrating Instruction: Science, Mathematics and Technology ..... 3

| RDG 450 | Middle School Reading: Theory \& Practice | 3 |
| :--- | :--- | :--- |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs |  |
| Residency courses |  |  |
| Students must maintain a 2.50 GPA with no grade below a "C" in all required Residency Courses. |  |  |
| Students must continue to satisfy teacher education admission and departmental requirements. |  |  |
| MLED 404 | Developing Communication Skills | 3 |
| MLED 410 | Fostering School, Family, and Community Relationships | 3 |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs | 3 |
| SPED 480 | Issues for Inclusion | 3 |
| Total Hours |  | $123-124$ |

## Suggested Curriculum Outline (B.S.)

| Freshman | Hours |
| :---: | :---: |
| ENG 1301 | 3 |
| HIST 1301 | 3 |
| MATH 1314 | 3 |
| US Science | 4 |
| US PE Activity | 1 |
| PSCI 2301 | 3 |
| PSCI 2302 | 3 |
| SPC 1315 or 1321 | 3 |
| ENG 1302 | 3 |
| HIST 1302 | 3 |
| US Science | 4 |
| US PE Activity | 1 |
|  | 34 |
| Sophomore | Hours |
| US Vis/Perf Arts | 3 |
| US Soc/Behav | 3 |
| US Humanities | 3 |
| MATH 350 | 3 |
| ELED 200 | 3 |
| MLED 314 | 3 |
| SPED 346 | 3 |
| MATH 351 | 3 |
| PSY 300 | 3 |
| CHEM 1405 or 1411 | 4 |
|  | 31 |
| Junior | Hours |
| Science Elective | 3-4 |
| ELED 300 | 3 |
| RDG 380 | 3 |
| IS 351 | 3 |
| PHYS 1401 or 1402 | 4 |
| PSY 310 | 3 |
| IS 352 | 3 |
| IS 451 | 3 |
| BSC 461 | 3 |
| ESCI 461 | 3 |
|  | 31-32 |
| Senior | Hours |
| Internship |  |

MLED 402 ..... 3
MLED 403 ..... 3
MLED 435 ..... 3
RDG 450 ..... 3
ELED 452 ..... 3Residency
MLED 404 ..... 3
MLED 410 ..... 3
ELED 452 ..... 3
SPED 480 ..... 3

Total Hours: 123-124

## Educational Leadership

The Department of Educational Leadership offers undergraduate and graduate programs preparing specialists for advanced practice in public/ private educational, business/industry, non-profit, and governmental settings. The Department also offers graduate programs leading to principal and superintendent certification. For a description of these programs and graduate courses, please refer to the Graduate Catalog.

## Educational Technology

A major in educational technology on the master's level is offered. For undergraduate students, courses are offered enabling those preparing for professional education to acquire competencies needed for teacher certification. Course offerings are appropriate for students majoring in business and industry to help them acquire skills in technology-related studies.

Global E-Learning B.S. (p. 125)

## Global E-Learning B.S.

An undergraduate degree program leading to the Bachelor of Science degree with a major in Global e-Learning is available.
The Global e-Learning program is designed to prepare entry level personnel into the field of training and development from a global perspective.
The major is composed of a minimum of thirty-six (36) semester hours incorporating elements of professional education and digital content, plus eightyfour (84) hours of career field coursework, university studies requirements, and electives which maybe transferred in from another institution.

The Bachelor of Science in Global eLearning equips entry-level personnel in the field of eLearning (adult training and development) for practice in public education, private education, business, industry, and non-profit organizations. Learning and technology are intertwined to develop next generation trainers and leaders to implement technology and learning strategies across curricula and classrooms of all kinds.
University Studies Courses
See the University Studies Requirements ..... 43
Required courses in major
EDUC 401 Metacognition ..... 6
EDUC 402 Communication in a Global Context ..... 6
EDUC 403 Digital Fluency ..... 6
EDUC $404 \quad$ Cultural Fluency ..... 6
EDUC 405 Global Fluency ..... 6
EDUC 406 Servant Leadership ..... 6
Career Field
21 semester hours of courses focused on the desired career field ..... 21
Electives
20 semester hours of course electives ..... 20
Total Hours ..... 120

## Health and Human Performance

The Department of Health and Human Performance offers the Bachelor of Science and the Bachelor of Arts degrees with majors in athletic training (not accepting new students at this time), health, health promotion, human performance, sport and recreation management, and kinesiology and sports studies. Health and human performance majors are offered with or without teacher certification. The Bachelor of Arts degree requires twelve semester hours of a foreign language.

## Teacher Education Programs

Students seeking a bachelor's degree in any of the following teacher education majors must complete:

1. degree requirements for a Bachelor of Arts or Science degree (refer to the bachelor's degree requirements section of this catalog);
2. University Studies Requirements (refer to University Studies Requirements (p.39) page of this catalog);
3. requirements for admission to and retention in the Teacher Education Program (refer to Center for Educator Certification and Academic Services section of this catalog); and
4. professional development courses (refer to the Curriculum and Instruction section of this catalog).

In addition, courses in the major must be completed as shown below.

## TExES Approval

Students seeking teacher certification in the areas of Health Education or Physical Education must meet certain requirements before permission is granted by the Department of Health and Human Performance to take the Texas Examination of Educator Standards (TExES).

These requirements include:

1. admission into the Teacher Education Program, and
2. completion of three-fourths of major professional courses.

## Non-Teacher Education Programs

The non-teaching majors in health and kinesiology prepare individuals for careers in athletic training, health promotion, human performance, sport and recreation management, private and public agencies and/or related fields.

Students seeking a bachelor's degree in any of the following majors must complete:

1. degree requirements for a Bachelor of Science degree and
2. University Studies requirements (p.39) (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown below.

Coaching Athletics Minor (p. 126)
Health Minor (p. 127)

Health Promotion B.S. (p. 127)

Human Performance Minor (p. 128)
Kinesiology and Sports Studies B.A./B.S. - All-Level Teacher Certification (p. 129)

Human Performances B.S. (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/education-human-services/health-human-performance/human-performance-bs)

Sport and Recreation Management B.S. (p. 131)

Sport and Recreation Management Minor (p. 132)

## Coaching Athletics Minor

## Required Courses in the Minor

Students must have and maintain a 2.5 overall GPA in order to take 300 - and 400 - level classes in the program.

| HHPS 210 | Sport Psychology |  |
| :--- | :--- | ---: |
| HHPH 331 | Nutrition | 3 |
| Plus 2 courses from: |  |  |
| HHPK 414 | Theory of Coaching Football and Soccer |  |
| HHPK 416 | Theory of Coaching Baseball and Softball |  |
| HHPK 444 | Administration of Kinesiology and Sports Programs |  |
| HHPK 454 | Theory of Coaching Track and Field and Cross Country |  |
| HHPK 455 | Theory of Coaching Basketball and Volleyball |  |

Total Hours

* Refer to prerequisite.


## Health Minor

## Required courses in the minor

| Students must have and maintain a 2.5 overall GPA in order to take 300 - and 400 - level classes in the program. |  |  |
| :--- | :--- | ---: |
| HHPH 130 | Introduction to Personal and Community Health | 3 |
| HHPH 172 | Exer Body Systems | 3 |
| HHPH 265 | Substance Use and Abuse | 3 |
| HHPH 331 | Nutrition * | 3 |
| HHPH 362 | Human Diseases * | 3 |
| HHPK 211 | First Aid and Safety | 3 |
| Total Hours |  | 18 |

* Refer to prerequisite.


## Health Promotion B.S.

The graduate should possess the following competencies: (1) knowledge and skills that promote individual and community health and safety; (2) awareness of forces which support and inhibit a well environment; (3) life saving skills and accident prevention principles; (4) knowledge of appropriate guidelines for food selection, intake and utilization which improve the dietary habits of groups and individuals and; (5) knowledge of methods for evaluating and promoting both individual and community health.

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
Students must have and maintain a 2.5 overall GPA in order to take 300- and 400- level classes in the program.
HHPH $130 \quad$ Introduction to Personal and Community Health 3

HHPH $210 \quad$ Environmental Health 3
HHPH 220 Emotional Health 3
HHPH 250 Consumer Health 3
HHPH 265 Substance Use and Abuse 3
HHPH 331 Nutrition * 3
HHPH 362 Human Diseases * 3
HHPH 385 Current Issues in Health 3
HHPH $410 \quad$ Planning and Organization of Health Promotion * 3
HHPH $420 \quad$ Program Implementation and Evaluation of Health Promotion * 3
HHPH 430 Health Promotion with Special Populations 3
HHPH 495 Internship and Seminar in Health Promotion * 3
HHPK 211
First Aid and Safety 3
Required support courses

| BSC 2401 | Human Anatomy and Physiology I |
| :--- | :--- |
| BSC 2402 | Human Anatomy and Physiology II |


| PSY 443 | Psychology of Death and Dying | 3 |
| :--- | :--- | ---: |
| MKT 306 | Marketing | 3 |
| SOC 370 | Minority Groups | 3 |
| Electives |  | 11 |
| Minor Required | 18 |  |
| 18 semester hours (9 hours must be 300 or 400 level) | 120 |  |

* Refer to prerequisites.


## Human Performance B.S.

The undergraduate student seeking a degree in Human Performance may choose the Exercise Physiology Track of the Motor Behavior/Biomechanics Track. The graduate should possess the following competencies: (1) knowledge basic and relative to human body function and movement; (2) knowledge of the concepts of exercise science (3) knowledge of concepts of fitness; (4) skill in a variety of physical activities; and (5) an acceptable level of physical fitness.
University Studies Courses ..... 43See the University Studies Requirements
Required courses in the major
Students must have and maintain a 2.5 overall GPA in order to take 300- and 400-level classes in the program.
HHPK 144 Foundations of Kinesiology ..... 3
HHPK $211 \quad$ First Aid and Safety ..... 3
HHPK 213 Prevention and Care of Athletic Injuries ..... 3
HHPK $250 \quad$ Physical Activity Skills I: Conditioning, Individual and Dual Sports ..... 3
HHPK $251 \quad$ Physical Activity Skills II: Team Sports ..... 3
HHPK 335 Kinesiology and Biomechanics * ..... 4
HHPK 350 Motor Learning and Motor Control * ..... 3
HHPK 417 Measurement and Evaluation ..... 3
HHPK 450 Exercise Physiology * ..... 4
HHPK 451 Topics in Exercise Science * ..... 4
HHPH 331 Nutrition ..... 3
Required support courses in the Exercise Physiology Track
CHEM 1405 Survey of General Chemistry ..... 4
CHEM 1407 Survey of Organic and Biochemistry ..... 4
Required support courses in the Motor Behavior/Biomechanics Track
CHEM 1405 Survey of General Chemistry ..... 4
PHYS 1401 College Physics ..... 4
Required US Science for both Tracks
BSC 2401 Human Anatomy and Physiology I ..... 4
BSC 2402 Human Anatomy and Physiology II ..... 4
MATH 1314 College Algebra ..... 3
Electives: ..... 14
Minor Required
18 semester hours (9 must be upper level hours)
Total Hours120

* Refer to prerequisite.


## Human Performance Minor

## Required courses in the minor

Students must have and maintain a 2.5 overall GPA in order to take 300- and 400-level classes in the program.

| HHPK 154 | Concepts of Physical Activity | 3 |
| :---: | :---: | :---: |
| HHPK 213 | Prevention and Care of Athletic Injuries | 3 |
| Plus 3 courses from: |  | 9-11 |
| HHPH 331 | Nutrition * |  |
| HHPH 430 | Health Promotion with Special Populations * |  |
| HHPK 335 | Kinesiology and Biomechanics * |  |
| HHPK 350 | Motor Learning and Motor Control * |  |
| HHPK 417 | Measurement and Evaluation * |  |
| HHPK 444 | Administration of Kinesiology and Sports Programs |  |
| HHPK 450 | Exercise Physiology * |  |

## Total Hours

* Refer to prerequisites


## Kinesiology and Sports Studies B.A./B.S. - All-Level Teacher Certification

The purpose of the major in kinesiology all-level certification (47 semester hours) is to prepare teachers for early childhood through grade twelve in physical education. A graduate should possess the following competencies:

1. knowledge basic and relative to human body function and movement;
2. knowledge in program planning, essential knowledge and skills, teaching methods, and evaluation;
3. knowledge of concepts of fitness;
4. skill in a variety of physical activities; and
5. an acceptable level of physical fitness.

## Secondary and All-Level Education

See for information: Secondary and All-Level Education (http://coursecatalog.tamuc.edu/undergrad/secondary-and-all-level-education)

## All-Level Teacher Certification in Physical Education

Students must have and maintain a 2.5 overall and major GPA in order to take 300 - and 400 - level classes in the program.

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
HHPK $144 \quad$ Foundations of Kinesiology 3

HHPK $154 \quad$ Concepts of Physical Activity 3
HHPK $211 \quad$ First Aid and Safety 3
HHPK $213 \quad$ Prevention and Care of Athletic Injuries
HHPK $250 \quad$ Physical Activity Skills I: Conditioning, Individual and Dual Sports 3
HHPK $251 \quad$ Physical Activity Skills II: Team Sports * 3
HHPK $274 \quad$ Adapted Physical Education 3
HHPK 304 Motor Development 3
HHPK 314 Teaching Methods in Physical Education I 3
HHPK $315 \quad$ Teaching Methods in Physical Education II 3
HHPK 335 Kinesiology and Biomechanics* 4
HHPK $350 \quad$ Motor Learning and Motor Control * 3
HHPK $417 \quad$ Measurement and Evaluation 3
HHPK $444 \quad$ Administration of Kinesiology and Sports Programs 3
HHPK $450 \quad$ Exercise Physiology ${ }^{*} 4$
Pre-Internship classes
ETEC 424
Integrating Technology into the Middle/Secondary Curriculum

| PSY 300 | Learning Processes and Development | 3 |
| :---: | :---: | :---: |
| RDG 380 | Comprehension and Vocabulary in Middle and High Schools | 3 |
| SED 300 | The Teaching Profession | 3 |
| Internship semester |  |  |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs | 3 |
| SED 302 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments | 3 |
| SED 401 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| SED 404 | Internship in Secondary Schools Field-Based | 3 |
| SED 405 | Residency in Secondary Teaching | 3 |
| Other required course |  |  |
| CED 111 | Critical Thinking | 1 |
| Required support courses |  |  |
| HHPH 331 | Nutrition | 3 |
| Required US Science Courses |  |  |
| BSC 2401 | Human Anatomy and Physiology I |  |
| BSC 2402 | Human Anatomy and Physiology II |  |
| Total Hours |  | 121 |
| * Refer to prerequis |  |  |
| Total Semester Hours: 121 |  |  |
| Suggested Curriculum Outline (B.S.) |  |  |
| Freshman |  | Hours |
| US Soc/Behav Sci |  | 3 |
| HHPK 144 |  | 3 |
| HHPK 154 |  | 3 |
| HHPK 250 |  | 3 |
| ENG 1301 |  | 3 |
| ENG 1302 |  | 3 |
| HIST 1301 |  | 3 |
| HIST 1302 |  | 3 |
| MATH 1314, 1324, or 179 |  | 3 |
| CED 111 |  | 1 |
|  |  | 28 |
| Sophomore |  | Hours |
| US Humanities |  | 3 |
| US Vis/Perf Arts |  | 3 |
| HHPK 211 |  | 3 |
| HHPK 213 |  | 3 |
| HHPK 251 |  | 3 |
| HHPK 274 |  | 3 |
| SPC 1315 or 1321 |  | 3 |
| PSCI 2301 |  | 3 |
| PSCI 2302 |  | 3 |
| BSC 2401 |  | 4 |
| BSC 2402 |  | 4 |
|  |  | 35 |
| Junior |  | Hours |
| US FRA (physical activity) |  | 1 |
| HHPK 304 |  | 3 |
| HHPK 314 |  | 3 |
| HHPK 315 |  | 3 |

HHPK 335 ..... 4
HHPK 350 ..... 3
HHPK 417 ..... 3
HHPH 331 ..... 3
ETEC 424 ..... 3
PSY 300 ..... 329
Senior ..... Hours
US FRA (physical activity) ..... 1
HHPK 444 ..... 3
HHPK 450 ..... 4
RDG 380 ..... 3
ELED 452 ..... 3
SED 300 ..... 3
SED 302 ..... 3
SED 401 ..... 3
SED 404 ..... 3
SED 405 ..... 3

Total Hours: 121

## Sport and Recreation Management B.S.

The graduate should possess the following competencies: (1) knowledge and skills that promote sport and recreation; (2) knowledge of the core concepts for the management of sport and recreation; (3) knowledge of economics and finance in the sport industry; (4) knowledge of concepts for developing for sport and recreation, and (5) knowledge of methods for administration and evaluation of sport and recreation programs.

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
Students must have and maintain a 2.5 overall GPA in order to take 300- and 400-level classes in the program.
HHPS $100 \quad$ Foundations of Sport and Recreation 3

HHPS $110 \quad$ Principles of Leadership in Sport and Recreation
HHPS $200 \quad$ Programming in Sport and Recreation 3
HHPS $210 \quad$ Sport Psychology 3
HHPS $300 \quad$ Field Experience in Sport and Recreation * 3
HHPS $310 \quad$ Event and Facility Management * 3
HHPS 320 Legal and Social Issues in Sports * 3
HHPS $400 \quad$ Management of Sport and Recreation Organizations * 3
HHPS $410 \quad$ Economics and Finance of Sport * 3
HHPS $420 \quad$ Marketing for Sport and Recreation * 3
HHPS $450 \quad$ Internship in Sport and Recreation Management * 6
Suggested minor in General Business
ACCT $221 \quad$ Principles of Accounting I 3
BA $301 \quad$ Legal Environment of Business 3
BA $302 \quad$ Business and Economic Statistics 3
ECO $2301 \quad$ Principles of Macro Economics 3
MGT $305 \quad$ Management and Organizational Behavior 3
MKT $306 \quad$ Marketing 3
Electives: 23
Total Hours 120

* Refer to prerequisite.


## Sport and Recreation Management Minor

| Required Courses |  |  |
| :---: | :---: | :---: |
| HHPS 100 | Foundations of Sport and Recreation | 3 |
| HHPS 320 | Legal and Social Issues in Sports | 3 |
| HHPS 350 | Social Issues in a Global Sport Economy | 3 |
| Plus one course from the following: |  | 3 |
| HHPS 110 | Principles of Leadership in Sport and Recreation |  |
| HHPS 200 | Programming in Sport and Recreation |  |
| HHPS 210 | Sport Psychology |  |
| Required Support Courses |  |  |
| Plus two courses from the following: |  | 6 |
| HHPS 310 | Event and Facility Management |  |
| HHPS 317 | Individual and Group Exercise Instruction Techniques and Methodologies |  |
| HHPS 400 | Management of Sport and Recreation Organizations |  |
| HHPS 410 | Economics and Finance of Sport |  |
| HHPS 420 | Marketing for Sport and Recreation |  |

## Nursing

The Nursing Department offers a generic Bachelor of Science in Nursing (BSN) program, designed to prepare students for licensure and professional practice. General education courses comprise a liberal education foundation upon which professional education builds to prepare students as broadly educated citizens capable of critical thinking. Nursing is an integrative profession, which is built upon supporting arts and sciences and uses concepts, models, and theories from the humanities, natural sciences, and social sciences as foundation for specialized nursing knowledge and the practice of nursing science.

Nursing courses provide knowledge in physical and emotional assessment, theoretical foundations of human behavior, health promotion, illness prevention, and health restoration. Skill in utilizing this knowledge is taught through high fidelity simulation laboratory experiences as well as facultyplanned learning experiences in clinical facilities. BSN graduates are eligible to apply to the Texas Board of Nursing to take the National Council Licensure Examination. After successfully completing this examination, the graduate is issued a license to practice as a Registered Nurse in the state of Texas.

The Nursing Department subscribes to the mission of Texas A\&M University-Commerce to "discover and disseminate knowledge for leadership and service." The mission and philosophy for the Nursing Department serve as a foundation for the development, administration, and implementation of the nursing program, integrating the concepts of caring, critical thinking, life-long learning, and professionalism throughout the curriculum. The Nursing Department facilitates the development of competent practitioners with critical thinking skills to meet the diverse and evolving health care needs of individuals, families, groups, and communities. The leadership and services provided by baccalaureate-prepared Registered Nurses is an essential component of health care for vulnerable, underserved, and culturally diverse groups in rural Northeast Texas. The BSN program provides a foundation for graduate study.

## Nursing Department Vision

Texas A\&M University-Commerce Nursing Department will be recognized as a center of excellence in nursing education that prepares professionals to practice in a dynamic healthcare environment and serve a diverse community.

BSN Nursing (p. 132)

## Nursing

The Nursing Department offers a generic Bachelor of Science in Nursing (BSN) program, designed to prepare students for licensure and professional practice. General education courses comprise a liberal education foundation upon which professional education builds to prepare students as broadly educated citizens capable of critical thinking. Nursing is an integrative profession, which is built upon supporting arts and sciences and uses concepts, models, and theories from the humanities, natural sciences, and social sciences as foundation for specialized nursing knowledge and the practice of nursing science.

Nursing courses provide knowledge in physical and emotional assessment, theoretical foundations of human behavior, health promotion, illness prevention, and health restoration. Skill in utilizing this knowledge is taught through high fidelity simulation laboratory experiences as well as facultyplanned learning experiences in clinical facilities. BSN graduates are eligible to apply to the Texas Board of Nursing to take the National Council Licensure Examination. After successfully completing this examination, the graduate is issued a license to practice as a Registered Nurse in the state of Texas.

The Nursing Department subscribes to the mission of Texas A\&M University-Commerce to "discover and disseminate knowledge for leadership and service." The mission and philosophy for the Nursing Department serve as a foundation for the development, administration, and implementation of the nursing program, integrating the concepts of caring, critical thinking, life-long learning, and professionalism throughout the curriculum. The Nursing Department facilitates the development of competent practitioners with critical thinking skills to meet the diverse and evolving health care needs of individuals, families, groups, and communities. The leadership and services provided by baccalaureate-prepared Registered Nurses is an essential component of health care for vulnerable, underserved, and culturally diverse groups in rural Northeast Texas. The BSN program provides a foundation for graduate study.

## Nursing Department Mission

The mission of the Nursing Department subscribes to the mission of the University and the College of Education and Health Services. The Nursing Department facilitates the development of competent practitioners prepared for leadership and service to meet the diverse and evolving health care needs of rural Northeast Texas.

## Nursing Department Vision

Texas A\&M University-Commerce Nursing Department will be recognized as a center of excellence in nursing education that prepares professionals to practice in a dynamic healthcare environment and serve a diverse community.

## The BSN program graduate will be able to:

1. Perform health protection and promotion, risk reduction, disease prevention, illness care, rehabilitation, and end of life care as an advocate and advisor within an evidence based framework in a variety of rural settings.
2. Synthesize knowledge, skills, and technology from the established practice and science of nursing, the biological sciences, and the humanities in the care of clients.
3. Demonstrate sensitivity to clients with diverse personal, socio-cultural, and environmental characteristics.
4. Use effective communication skills and information technology to convey interpersonal and health care information.
5. Demonstrate activities that promote self-awareness, self-growth, professional role development, ethical accountability, and legal responsibility in the practice of nursing.

## Admission Criteria and Essential Eligibility Requirements

## Admission Criteria

1. Meet A\&M-Commerce admission requirements and Nursing Department essential eligibility requirements.
2. Have a minimum 2.5 overall grade point average (GPA) on a 4.0 scale.
3. Complete all support courses with a grade of "C" or better in each course.
4. Have a 3.0 GPA on support courses: Anatomy \& Physiology I and II, Chemistry, Microbiology, Statistics, and Human Development (Life Span).
5. Take the HESI Admission Assessment Exam (A2) with the following components: Reading Comprehension, Vocabulary and General Knowledge, Grammar, Basic Math Skills, Anatomy and Physiology, Learning Style, Personality Profile, and Decision-Making Skills.

The Learning Style, Personality Profile, and Decision-Making Skills components must be taken, but are not included in application scoring. The HESI A2 is available through the A\&M-Commerce Student Testing Center and may be repeated only one time for each admission cycle. The most recent score will be utilized.
6. International students whose primary language is other than English will be required have a score of 550 on the TOEFL or 6.5 on the IELTS in order to apply for admission. Scores should not be more than two years old, but may be reviewed on an individual basis.
7. Submit application by the published deadline.

## Once a student has been notified of conditional admission, the student must:

8. Provide proof of current certification in Cardiopulmonary Resuscitation (CPR) for Health Care Providers through the American Heart Association.
9. Provide documentation verifying absence of active tuberculosis.
10. Provide documentation verifying current immunization or immunity status for hepatitis $B$, measles, mumps, rubella, tetanus/diphtheria/pertussis, and varicella.
11. Obtain a criminal background check through The Texas Board of Nursing.

Successful completion of these activities will allow the student to be given full admission status by the Student Development Committee.

## Essential Eligibility Requirements

The following table illustrates the essential eligibility requirements for participation in the Nursing Department and examples of necessary activities (not all inclusive) which should be used to assist each applicant in determining whether accommodations or modifications are necessary.

## Essential Functions

Critical thinking abilities sufficient for clinical judgment.

Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds
Communication abilities sufficient for interaction with others in verbal and written form.
Abilities sufficient to move from room to room and to maneuver in small places.
Abilities sufficient to provide safe and effective nursing care.
Abilities sufficient to monitor and assess health needs.

Abilities sufficient for observation and assessment necessary in nursing care.
Abilities sufficient for physical assessment.

## Examples of Necessary Activities

Identify cause/effect relationships in clinical situations; develop nursing care plans.
Establish rapport with patients/clients and colleagues.

Explain treatment procedures, initiate health teaching, document and interpret nursing actions and patient/client responses.
Move around in patients' rooms, work spaces, treatment areas, and administer cardio-pulmonary procedures
Calibrate and use equipment; position patient/clients.
Ability to hear monitor alarms, emergency signals, all ausculatory sounds, and cries for help.
Observe patient/client responses.

Perform palpitation;, auscultation, percussion and observational functions of physical examination and/or those related to therapeutic intervention, e.g. insertion of a catheter.

ADA guidelines apply to all qualified disabled persons. A qualified disabled person is a person with a disability who, with or without reasonable modifications to rules, policies, or practices, the removal of architectural, communication, or transportation barriers, or the provision of auxiliary aids and services, meets the essential eligibility requirements for the receipt of services, or the participation in programs or activities provided by a public entity and who can perform the "essential functions" of the position. For further information, contact the Office of Student Disability Resources and Services.

## University Studies Courses

See the University Studies Requirements
Required Prerequisite Courses
Visual/Performing Arts
Fitness and recreational activity courses

| ENG 1301 | College Reading and Writing |
| :--- | :--- |
| ENG 1302 | Written Argument and Research |
| HIST 1301 | US History to 1877 |
| HIST 1302 | US History from 1865 |
| PSCI 2301 | Principles of United States and Texas Government |
| PSCI 2302 | United States and Texas Government: Institutions and Policies |
| PSY 2301 | Introduction to Psychology |
| SPC 1315 | Fundamentals of Public Speaking |
| BSC 2401 | Human Anatomy and Physiology I |
| BSC 2402 | Human Anatomy and Physiology II |
| MATH 1314 | College Algebra* |
| PHIL 360 | General Ethics |

## Required Support Courses

PSY 322 Lifespan Development 3
CHEM $1405 \quad$ Survey of General Chemistry ** 4
BSC $254 \quad$ General Microbiology 4
MATH $453 \quad$ Essentials of Statistics 3

Required courses in the major

NURS 3232

Professional Nursing Issues
NURS $3311 \quad$ Health Alterations 3
NURS $3312 \quad$ Principles of Pharmacology 3
NURS $3313 \quad$ Nurse as Therapeutic Communicator 3

| NURS 3414 | Health Assessment | 4 |
| :--- | :--- | :--- |
| NURS 3531 | Nursing Care of Parents and Newborns | 5 |
| NURS 3620 | Fundamentals of Nursing Care | 6 |
| NURS 3630 | Nursing Care of Adults I | 6 |
| NURS 4342 | Nurse as Research Consumer | 3 |
| NURS 4540 | Nursing Care of Mental Health Clients | 5 |
| NURS 4541 | Nursing Care of Children/Families | 5 |
| NURS 4650 | Nursing Care of Adults II | 6 |
| NURS 4660 | Rural and Community Health Nursing | 6 |
| NURS 4661 | Leadership in Professional Nursing | 6 |
| Total Hours |  | 120 |

* Or any approved University Studies math course.
** Or any approved University Studies Chemistry course.


## Psychology, Counseling and Special Education

## Psychology

The Department of Psychology, Counseling, and Special Education offers the Bachelor of Science degree with a major in psychology. This major prepares students for graduate study in psychology and for careers in psychology-related fields. A graduate with a major in psychology should possess the following competencies:

1. understanding of basic psychological principles within the sub-disciplines of psychology,
2. knowledge of research design and statistics and their application in the study of human behavior and
3. promotion of the scientific method to solve problems and enhancement of critical thinking skills.

The department offers master's degrees and a doctorate degree in psychology. For information about all graduate programs, refer to the Graduate Catalog.

## Special Education

The Department of Psychology, Counseling, and Special Education offers an all-level generic special education certification program. Students pursuing teaching careers at the Elementary (EC-4), intermediate/middle school (4-8) and high school levels (8-12) may also select special education as a supplemental certification area. The certificate in special education provides the teacher with a knowledge of disabling conditions and their effects on learning, as well as adaptations, accommodations and modifications for providing instruction in the least restrictive setting. The generic special education program prepares graduates for careers as special education teachers or related service personnel.

A graduate with all-level Generic Special Education certification should possess the following competencies: knowledge of disabling conditions; knowledge of professional roles, strategies for promoting learning and development; and techniques to promote achievement in English language arts, reading and math. Academic advisement for programs in Special Education teacher education should be obtained from the Mentor Center located in Education North Room 205.

The department offers the following master's degrees and majors: the Master of Education, Master of Science or Master of Arts degree with a major in generic special education; or special education with the educational diagnostician professional certification. For further information about graduate programs, refer to the Graduate Catalog.

Students seeking a bachelor's degree with generic special education as either a supplemental area or an interdisciplinary studies major must complete:

1. general requirements for a Bachelor of Arts or Science degree (refer to the bachelor's degree requirements section of this catalog);
2. University Studies requirements (p. 39) (refer to that section of this catalog);
3. requirements for admission to and retention in the Teacher Education Program (refer to Center for Educator Certification and Academic Services section of this catalog); and
4. professional development courses (refer to the Secondary Education section or interdisciplinary studies major of this catalog).

In addition, courses in the major must be completed as shown below.
Students interested in special education should seek early academic advisement for developing degree plans. Some courses in the undergraduate curriculum are offered on a schedule rather than every term.

## Counseling

The Department of Psychology, Counseling, and Special Education offers an undergraduate minor in counseling. The minor offers the undergraduates an overview of the profession of counseling and can be used as part of a more comprehensive education as one prepares for graduate studies and training in counseling. The graduate should possess listening skills, as well as knowledge of standardized and non-standardized appraisal techniques, of group and individual counseling theory, and of career development theory.

The department offers the master's degrees for those planning careers in school, community, mental health and student affairs counseling positions. In Texas students intending to become school counselors must first have two years of teaching experience before becoming certified as a school counselor. Therefore, the undergraduate degree, whether or not it includes counseling as an undergraduate minor, must include courses that qualify the student to first become a teacher.

The department also offers the Ph.D. in counseling. For further information about graduate programs, refer to the Graduate Catalog.

Counseling Minor (p. 136)
Psychology Major B.A./B.S. (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/education-human-services/psychology-counseling-special-education/psychology-major-bs)

Psychology Minor (p. 139)
Generic Special Education: All-Level Special Education (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/education-human-services/psychology-counseling-special-education/generic-special-education-all-level-special-education)

Generic Special Education: Supplemental Certification (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/education-human-services/psychology-counseling-special-education/generic-special-education-supplemental-certification)

## Counseling Minor

A minor in counseling consists of the following five courses:

| COUN 301 | Orientation to the Counseling Profession | 3 |
| :--- | :--- | :--- |
| COUN 315 | Philosophy of the Helping Relationship | 3 |
| COUN 317 | Introduction to Assessment | 3 |
| COUN 409 | Group Leadership | 3 |
| COUN 410 | Introduction to Counseling Theory and Methods | 6 |
| Plus 2 courses from: |  | 6 |
| COUN 316 | Parent and Family Dynamics |  |
| COUN 412 | Career Development |  |
| COUN 414 | Home and Family Living | Special Topics |

Total Hours

## Generic Special Education: All-Level Special Education

## University Studies Courses

See the University Studies Requirements 43
Major Courses
IS $351 \quad$ Inquiry: Knowledge and Skills of Science 3
IS 352 Science Inquiry II 3
MATH 350 Topics in Mathematics for Elementary Teachers I 3
MATH 351 Topics in Mathematics for Elementary Teachers II 3
PSY $310 \quad$ Psychology and Sociology of Diverse Populations 3
PSY 316 Abnormal Psychology 3
RDG 350 Reading and Literacy I 3
RDG 360 Word Analysis Skills
Choose Two Courses from: 6

Reading and Literacy II
RDG 380
Comprehension and Vocabulary in Middle and High Schools

| RDG 417 | Reading and Learning in the Content Area |  |
| :---: | :---: | :---: |
| Specialization |  |  |
| SPED 346 | Introduction to Exceptional Children | 3 |
| SPED 420 | Meth/Mat Teaching Restrictive | 3 |
| SPED 449 | Assessment and Evaluation | 3 |
| SPED 463 | Managing Special Needs Populations | 3 |
| SPED 464 | Special Populations in the Community | 3 |
| SPED 475 | Collaboration, Accommodation and Modification | 3 |
| SPED 478 | Physical and Medical Management | 3 |
| Professional Development |  |  |
| ELED 200 | Education in Global Society | 3 |
| or SED 200 | Education in a Global Society |  |
| ELED 300 | Introduction to Teaching | 3 |
| or SED 300 | The Teaching Profession |  |
| ETEC 424 | Integrating Technology into the Middle/Secondary Curriculum | 3 |
| HHPK 274 | Adapted Physical Education | 3 |
| PSY 300 | Learning Processes and Development | 3 |
| Residency |  |  |
| SPED 472 | Delivery Services in Special Education | 6 |
| SED 302 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments | 3 |
| SED 401 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| Total Hours |  | 21 |

## Suggested Curriculum Outline (B.S.)

| Freshman | Hours |
| :--- | ---: |
| US Humanities | 3 |
| US Vis/Perf Arts | 3 |
| US PE Activity | 2 |
| ENG 1301 | 3 |
| ENG 1302 | 3 |
| HIST 1301 | 3 |
| HIST 1302 | 3 |
| MATH 1314 | 3 |
| SPC 1315 or 1321 | 3 |
| PSCI 2301 | 3 |
| PSCI 2302 | 3 |
|  | 3 |
| Sophomore | 3 |
| US Science | 3 |
| US Soc/Behav Sci | 3 |
| SPED 346 | 3 |
| SPED 420 | 3 |
| HHPK 274 | 3 |
| MATH 350 | 3 |
| PSY 300 | 3 |
| ELED 200 or SED 200 | 3 |
| IS 351 | 3 |
| Junior | 3 |
| SPED 449 | 3 |
| SPED 463 | 3 |
| SPED 464 | 3 |

PSY 310 ..... 3
ELED 300 or SED 300 ..... 3
ETEC 424 ..... 3
IS 352 ..... 3
MATH 351 ..... 3
RDG 350 ..... 3
RDG 360 ..... 3
30
Senior ..... Hours
SPED 478 ..... 3
SPED 475 ..... 3
SPED 472 ..... 6
PSY 316 ..... 3
SED 302 ..... 3
SED 401 ..... 3
Two from: RDG 370 - Reading and Literacy II Hours: 3 or RDG 380 - ..... 6Comprehension and Vocabulary in Middle and High Schools Hours: 3 orRDG 417 - Reading and Learning in the Content Area Hours

Total Hours: 121

## Generic Special Education: Supplemental Certification

Students seeking certification at the 4-8 or 8-12 levels may also choose to seek supplemental certification in generic special education (18 hours).
Required courses for supplemental certification in generic special education
SPED $346 \quad$ Introduction to Exceptional Children 3
SPED 420 Meth/Mat Teaching Restrictive ..... 3
SPED 449 Assessment and Evaluation ..... 3
SPED 463 Managing Special Needs Populations ..... 3
SPED 475 Collaboration, Accommodation and Modification ..... 3
Depending on the major area of certification, students would also be required to take
or SPED 478 Physical and Medical Management
Special Needs Populations in Least Restrictive SettingsTotal Hours18

## Psychology Major B.S.

Students seeking a bachelor's degree in the following programs must complete:

1. degree requirements for a Bachelor of Science degree, and
2. University Studies requirements (p. 39) (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown below.

## University Studies Courses

See the University Studies Requirements ..... 43

## Required courses in the major

## Core Courses

Complete each of the core courses listed below. These core courses must be taken by ALL Psychology majors (14 sh).
PSY $2301 \quad$ Introduction to Psychology 3
PSY 302 Psychological Statistics: Descriptive and Inferential ..... 4
PSY 305 Experimental Psychology ..... 4
PSY 403 Development of Modern Psychology ..... 3

## Natural Science Core

| Complete 6 sh from the courses listed below. |  |
| :--- | :--- |
| PSY 315 | Physiological Psychology |
| PSY 341 | Learning and Motivation |
| PSY 350 | Cognition Psychology |
| Social Science Core |  |
| Complete 6 sh from the courses listed below. |  |
| PSY 2306 | Psychology of Sexual Behavior |
| PSY 310 | Psychology and Sociology of Diverse Populations |
| PSY 316 | Abnormal Psychology |
| PSY 317 | Psychology of Personality |
| PSY 327 | Cognitive Social Psychology |
| PSY 409 |  |
| Development Core |  |
| Complete 3 sh from the courses listed below. |  |
| PSY 319 | Child and Adolescent Development |
| PSY 321 | Psychology of Adolescence |
| PSY 322 | Lifespan Development |
| Applied Core |  |
| Complete 5 sh from the courses listed below. |  |
| PSY 214 | Aspects of Psychology |
| PSY 339 | Forensic Psychology |
| PSY 404 | Organizational Psychology |
| PSY 411 | Research Apprenticeship |
| PSY 412 | Research Apprenticeship |
| PSY 413 | Research Apprenticeship |
| PSY 492 | Health Psychology |

Electives
Choose 6 sh from the following:

| PSY 210 | Sport Psychology |
| :--- | :--- |
| PSY 325 | Evolutionary Psychology |
| PSY 414 | Introduction to Human-Computer Interaction Design |
| PSY 443 | Psychology of Death and Dying |

To be substituted as seen fit by advisor:
PSY 397 Special Topics
PSY $489 \quad$ Independent Study

## Required Minor

Minimum 18 hours required in the Minor
Additional Electives Required
Electives required to meet minimum program hours 19
Total Hours

* Any Psychology course between 100-499 (except PSY 300 Learning Processes and Development and courses used in any of the core sections above). (No repeat or reuse of PSY , PSY 302 Psychological Statistics: Descriptive and Inferential, PSY 305 Experimental Psychology, PSY 403 Development of Modern Psychology, allowed.)


## Psychology Minor

## Required courses

PSY 2301 Introduction to Psychology 3

| PSY 403 | Development of Modern Psychology |
| :--- | :--- |
| Plus 9 sh from: |  |
| PSY 214 | Aspects of Psychology |
| PSY 2306 | Psychology of Sexual Behavior |
| PSY 302 | Psychological Statistics: Descriptive and Inferential |
| PSY 305 | Experimental Psychology |
| PSY 315 | Physiological Psychology |
| PSY 319 | Child and Adolescent Development |
| PSY 321 | Psychology of Adolescence |
| PSY 327 | Cognitive Social Psychology |
| PSY 350 | Cognition Psychology |
| PSY 404 | Organizational Psychology |
| PSY 409 |  |
| Total Hours |  |

## School of Social Work

The school offers a broadfield major in social work, which is accredited by the Council on Social Work Education, and leads to the Bachelor of Social Work (BSW) degree. The School of Social Work offers a graduate degree (MSW) for advanced social work practice.

An undergraduate major in this field prepares a student for entry level generalist social work practice and for entry into a graduate school of social work. Graduates are educationally prepared and eligible to sit for an exam to become licensed to practice professional generalist social work in Texas and many other states.

Social Workers significantly affect the lives of many people. Members of the profession provide services to people of all ages, races, creeds, and educational levels. The undergraduate professional curriculum is built upon and integrated with a liberal arts perspective. The required courses are planned to enable graduates to attain a beginning professional level of proficiency in generalist social work practice. The graduate curriculum provides students with advanced competencies to work autonomously, to supervise others, and to serve in administrative roles.

## Admission to the Undergraduate Social Work Program

Students may register for the three lower division courses (SWK 225, SWK 250 and SWK 275) without declaring the social work major and before admission to the Program. However, enrollment in most upper division social work courses is restricted to social work majors. Students will usually apply for admission to the Program late in the second semester of their sophomore year, and will be notified of their admission status prior to the beginning of the junior year.

For unconditional admission to the Program, students must have completed the three lower division social work courses and their prerequisites, and all University Studies Requirements ( p .39 ) except PE courses. The student must have an overall GPA of at least 2.5 on a 4.0 scale, a grade of " C " or higher must have been earned in the three sophomore level social work courses for continued enrollment in the program, and the student must earn at least a "C" in all required social work courses, SOC 1301 and PSY 2301.

Social Welfare Minor (p. 140)
Social Work B.S.W (p. 141)

## Social Welfare Minor

A minor in social welfare is a good choice for persons majoring in related disciplines who may wish to work in health or human services settings. This minor does not qualify a person to practice social work, or become licensed as a social worker.

## Required courses in the minor

SWK 225 Introduction to Social Work 3
SWK $250 \quad$ Foundations of Social Work Practice 3

SWK $275 \quad$ Human Behavior and the Social Environment I
SWK $322 \quad$ Human Behavior and the Social Environment II
SWK $328 \quad$ Social Welfare Policy and Services 3
Plus 3 sh from: 3

SWK 360
Human Service Careers with Children

| SWK 361 | Issues in Family Treatment |
| :--- | :--- |
| SWK 362 | Child Welfare |
| SWK 497 | Special Topics |
| Total Hours |  |

## Social Work B.S.W.

The major consists of $60 \mathrm{sh}, 54$ sh of which are in social work. The remainder are supporting disciplines of psychology and sociology. A second major or a minor is not required for social work majors.

Students seeking a bachelor's degree as Social Work major must complete:

1. degree requirements for a Bachelor of Social Work degree and
2. University Studies requirements (p.39) (refer to those sections of this catalog).

The Social Work Program requires that the social/behavioral science course be ANTH ; and that students take one course in human biology (BSC ) or two semesters of human anatomy and physiology, or HHPK 172 Systems of the Human Body may be substituted if the student has previously completed two 4hr labs sciences.

The professional foundation in social work education is built on a liberal arts perspective. Students will be expected to have finished most University Studies coursework before admission to the Social Work Program.

To ensure that the knowledge, skills, and values necessary for beginning generalist social work practice are acquired and integrated by the student in an orderly progression, the curriculum is carefully sequenced. Prerequisites and concurrent enrollment requirements are strictly observed.

Due to the complexity of the curriculum, students are expected to obtain advisement by a social work faculty member prior to registration each semester.

## University Studies courses

See the University Studies Requirements *
Required courses in the major

| SWK 225 | Introduction to Social Work | 3 |
| :---: | :---: | :---: |
| SWK 250 | Foundations of Social Work Practice | 3 |
| SWK 275 | Human Behavior and the Social Environment I | 3 |
| SWK 322 | Human Behavior and the Social Environment II | 3 |
| SWK 325 | Social Work Practice with Mezzo Systems | 3 |
| SWK 328 | Social Welfare Policy and Services | 3 |
| SWK 329 | Social Work Practice with Micro Systems | 3 |
| SWK 331 | Social Work Practice with Macro Systems | 3 |
| SWK 340 | Global Perspectives of Human Welfare | 3 |
| SWK 348 | Promoting Mental Health Across Populations | 3 |
| SWK 350 | Social Work Research Methods | 3 |
| SWK 370 | Writing and Technology Skills in Social Work | 3 |
| SWK 422 | Integration of Practice | 3 |
| SWK 424 | Generalist Practice in the Field | 3 |
| SWK 425 | Field Instruction I | 3 |
| SWK 426 | Field Instruction II | 6 |
| PSY 2301 | Introduction to Psychology | 3 |
| SOC 1301 | Introduction to Sociology | 3 |
| Social Work Elective Required |  |  |
| Choose 3 hours from: |  | 3 |
| SWK 362 | Child Welfare |  |
| SWK 361 | Issues in Family Treatment |  |
| SWK 360 | Human Service Careers with Children |  |
| SWK 497 | Special Topics |  |

Electives Required
$\frac{18 \text { hours of electives are required }}{}$ Total Hours 18

* Required from options: ANTH 2351 World Cultures: Perspectives from Anthropology, BSC 1409 Human Biology: Structure and Function.


## Other Requirements

A grade of "C" or higher must be earned in all Social Work courses, PSY 2301 and SOC 1301. A three or four semester hour course in Human Biology or eight semester hours of Human Anatomy and Physiology are required, or HHPH/HHPK 172 may be substituted if the student has previously completed two 4 hr labs sciences. A GPA of 2.5 or greater is required for admissions to this major and graduation with a BSW degree.

## Suggested Curriculum Outline

Freshman ..... Hours
US Humanities ..... 3
US Vis/Perf Arts ..... 3
US PE Activity ..... 2
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
ANTH 2351 ..... 3
MATH 1314, 1324, or 179 ..... 3
PSCI 2301 ..... 3
Sophomore ..... Hours29
US Science ..... 4
Elective
SWK 225 ..... 3
SWK 250 ..... 3
SWK 275 ..... 3
SOC 1301 ..... 3
BSC 1409 ..... 4
SPC 1315 or 1321 ..... 3
PSCI 2302 ..... 3
PSY 2301 ..... 3
32
Junior ..... Hours
SWK Elective ..... 3
Elective ..... 6
SWK 322 ..... 3
SWK 325 ..... 3
SWK 328 ..... 3
SWK 329 ..... 3
SWK 331 ..... 3
SWK 348 ..... 3
SWK 350 ..... 3
SWK 370 ..... 3
SWK 340 ..... 3
Senior ..... Hours36ElectivesSWK 4229
3SWK 422
SWK 424 ..... 3
SWK 425 ..... 3

Total Hours: 121

* A second major or a minor are not required for students selecting this major.


# College of Humanities, Social Sciences, and Arts 


#### Abstract

Salvatore Attardo, Dean The College of Humanities, Social Sciences, and Arts consists of the departments of Art, History, Literature and Languages, Music, Mass Media, Communications and Theatre, Political Science, and Sociology and Criminal Justice. The college also houses the popular Liberal Studies and Paralegal Studies degree programs, the Communication Skills Center, and the English Language Institute.

Curricular goals and learning outcomes promoted in these programs assure a well-rounded education in the humanities, social sciences and liberal arts tradition. We provide a strong emphasis on discipline-based scholarship, plus challenging opportunities to consider and construct solutions to issues facing our increasingly complex, multidisciplinary world. University Studies courses offered by the college form the academic foundation for undergraduate students across the university. The undergraduate degree programs are designed to prepare students for entry-level careers or admission to graduate or professional schools as well as supporting the College of Education and Human Services by providing content areas for the teacher education certification programs. Advanced degrees at the master's level are offered in each of the departments with a Ph.D. in English offered through the Department of Literature and Languages. We serve our students, communities, and region by providing and promoting academic programs characterized by innovation, vision, multiple scales of excellence, and a commitment to literacy, justice, and civic responsibility.

The general requirements for admission to the programs of the College of Humanities, Social Sciences, and Arts are the same as those for Texas A\&M University-Commerce as a whole.


## Art

Mission Statement: The Department of Art inspires and prepares students to excel in the art profession, including the fine and applied arts, art history, and art teaching fields and also expands the educational experiences of nonmajors.

The Department of Art offers a comprehensive undergraduate curriculum in the visual arts leading to the degrees of Bachelor of Arts and Bachelor of Fine Arts. Subsequent acceptance into the graduate program allows students to pursue the degrees of Master of Arts, and Master of Fine Arts. Majors receive broad-based instruction in the foundation areas and proceed through increasingly specialized programs of study that emphasize personal concepts and technical refinement.

The Bachelor of Arts degree is offered in Art. Bachelor of Fine Arts degrees are offered in Studio Arts with emphasis areas in Ceramics, Experimental Studies, Painting, Photography or Sculpture. The BFA is also offered in Visual Communication with Emphasis in Art Direction, Design, New Media, Photography or Copywriting.

The Bachelor of Fine Arts degree in Visual Communication prepares students for careers in the advertising industry. Advanced courses in these areas are offered at the Universities Center at Dallas, where new facilities, field trips and internships keep students abreast of the latest trends and technologies in the rapidly-growing field of Communication Arts.

The Department of Art utilizes several buildings on campus for its many different programs and courses, including the University Gallery which hosts an annual series of exhibits of interest to the University and the surrounding area.

## Transfer of Art Credits from Other Institutions

Students wishing to transfer art credits to A\&M-Commerce will have their transcripts evaluated by the Office of Admissions and the Department of Art. Courses taken at other institutions that have no exact equivalents at A\&M-Commerce may still be transferrable by a portfolio review into the Department of Art. Transfer courses counted towards a major at A\&M-Commerce must have a grade of "C" or higher. A\&M-Commerce has established a 2-plus-2 program with Collin College in Photography facilitating the evaluation of course credits and ease of transfer for students from that institution. Students seeking a bachelor's degree in any of the following majors must complete:

1. Degree requirements for a Bachelor of Arts, or Bachelor of Fine Arts and
2. University Studies requirements (p.39) (refer to those sections of this catalog).

In addition, majors must earn a grade of " C " or better in all Art and Photography courses counted towards graduation requirements.

## Teacher Education Programs

Students seeking a bachelor's degree in any of the following teacher education programs must complete:

1. degree requirements for a Bachelor of Arts or BFA Degree with all Level Certification (refer to the bachelor's degree requirements section of this catalog),
2. University Studies Requirements (p. 39) (refer to that section of this catalog),
3. requirements for admission to and retention in the Teacher Education Program (refer to the information on Educator Certification and Academic Services in this catalog), and
4. professional development courses (refer to the appropriate departmental section in this catalog, i.e. Department of Elementary Education or Department of Secondary and Higher Education).

In addition, courses in the major must be completed.

Art B.A. (p. 144)
Art B.A.: Emphasis in Art History (p. 145)
Art Minor (p. 144)
BFA Studio Art with All-Level Certification (p. 146)
BFA Studio Art: Emphasis in Ceramics (p. 148)
BFA Studio Art: Emphasis in Experimental Studies (p. 149)
BFA Studio Art: Emphasis in Painting (p. 151)
BFA Studio Art: Emphasis in Photography (p. 152)
BFA Studio Art: Emphasis in Sculpture (p. 154)
BFA Visual Communication: Emphasis in Art Direction (p. 155)
BFA Visual Communication: Emphasis in Copywriting (p. 156)
BFA Visual Communication: Emphasis in Design (p. 158)
BFA Visual Communication: Emphasis in New Media (p. 159)
BFA Visual Communication: Emphasis in Photography (p. 160)
Photography Minor (p. 162)

## Art Minor

A minor in Art may be taken with emphases in Art History, Fine Arts, or Photography. The minor degree plan will be drawn up in consultation with the department head. A minor in Art consists of at least 18 semester hours, including at least 6 advanced hours.

## BA Art Emphasis in Studio Art

The Bachelor of Art (BA) in Art is a one hundred twenty (120) hour degree program. The BA in Art is the perfect degree for students whose educational goals include broader exploration of the University's academic resources as well as their desire for a rigorous program in art and design.

The BA program does not emphasize the usual disciplinary distinctions but focuses on the creative skills that are common to all of these practices. The goal is not to train masters of particular materials (paint, clay, computers, etc), but to provide a broad base of technical and conceptual skills that can be applied to a wide range of creative activities. Creative process, critical thinking, project development, community engagement and collaboration are as important as technical skill development.

The BA degree is well-suited to students who plan to complete two undergraduate degrees; to students who anticipate graduate or professional school not directly related to art and design; to students whose interests in art and design and other educational pursuits are equally strong; or to those students who wish to integrate other educational pursuits with their visually creative work.

## University Studies Courses

See the University Studies Requirements 43
Required Courses
ART 111 Two-Dimensional Design and Color Theory 3


## BA Art:Emphasis in Arts History

## University Studies Courses

See the University Studies Requirements 43
Required Courses

| ART 1303 | History of Art I | 3 |
| :--- | :--- | :--- |
| ART 1304 | History of Art II | 3 |
| ART 110 | Drawing I | 3 |
| PHO 111 | Introduction to Digital Media | 3 |
| Plus 3sh from: |  |  |
| ART 111 | Two-Dimensional Design and Color Theory |  |
| ART 112 | Three-Dimensional Design and Color Theory |  |
| ART 140 |  | 3 |
| Art History Courses | History of Ancient Art | 3 |
| ART 306 | History of Medieval Art | 3 |
| ART 318 | Topics in Renaissance Art | 3 |
| ART 334 | Topics in Baroque Art | 3 |
| ART 336 | Topics in Non-Western Art | 3 |
| ART 338 | Contemporary Issues | 3 |
| ART 404 | History of Modern Art | 3 |
| ART 405 | Theories and Methods | 3 |
| ART 482 |  | 3 |

## Art History Electives

Select 9sh from the following:

** Completion of at least 12 semester hours (4 courses) in one foreign language, or 6 sh above the elementary courses if 2 units of high school credit in the language have been submitted as a part of the regular university admission requirements, or complete 3 semester hours if he presents 3 or 4 high school credits.

## BFA Studio Art with All-Level Certification

## BFA in Studio Art

The Bachelor of Fine Arts (BFA) in Studio Art with All-level Teacher Certification is a one hundred-twenty-five to one hundred-thirty-seven (125-137) credit hour limited access program that provides an intensive background in theoretical knowledge and professional skills. BFA students will develop a personal vision, a high level of competence in technique, and harness the ability to make sound artistic decisions. The BFA in Studio Art is a proficiencybased program, characterized by continuous assessment. Graduating BFA seniors exhibit their work at the Texas A\&M University-Commerce University Gallery in their last semester.

To receive a degree in BFA Studio Art with All-level Teacher Certification, students must successfully complete a minimum of one hundred-twenty five (125) credit hours and meet all certification criteria listed below. Students must also remain in the program for a minimum of three long semesters. Students must apply for admission into the "Practicum" course, culminating in an advancement review and graduation exhibition. The Practicum course is offered each spring with reviews scheduled each fall.

Students admitted to the BFA program are exempt from any foreign language requirement. Students in the BFA major are not required to select a minor. The BFA advisor can provide additional guidance with regard to entrance and degree requirements.

## Program Information

Students are required to have a C or above in all foundation requirements to maintain good standing in the program. Students will present a portfolio for review at the end of their sophomore year or when they have met at least $80 \%$ of the art foundation requirements. Faculty will assess the portfolio and make recommendations to the student.

## Academic Performance and Retention

Students must present a portfolio for placement review at the end of their sophomore year or when they have met at least $80 \%$ of the art foundation requirements. Faculty will assess the portfolio for progress and make advising recommendations to the student. These recommendations could include: advancement to upper-division coursework selected area of emphasis, taking additional coursework to correct deficiencies before advancement or separation from the program.

The Department of Art reserves the right to discontinue enrollment of art major students at any time if satisfactory academic progress is not being made. Students who have accumulated three unsatisfactory grades (U, F or D,) in studio art or design courses taken for college credit at Texas A\&M University Commerce or elsewhere will not be permitted to continue, be readmitted, or graduate with a major in studio art or design. Courses in which a grade below the minimum is received may only be repeated once.

After completion of ALL degree and certification requirements, students must apply for the teaching certificate on-line at the SBEC web page https:// secure.sbec.state.tx.us/SBECOnline/login.asp. Requirements that must be met prior to filing for certification:

- Continued admission and retention in the Teacher Education Program.
- Successful completion of all requirements listed on the degree or deficiency plan, including required GPA's and appropriate tests (i.e., ExCET/TExES and TOPT).
NOTE: Degree must be conferred by the university.


## Certification Application Procedures:

1. Go to SBEC website at https://secure.sbec.state.tx.us/SBECOnline/login.asp. (Click on "New User? Create New Account" if you are a first-time user.)
2. Follow directions on web page to apply for certificate. You are applying for your "Standard" teaching certificate. You have completed a "UniversityBased" program.
3. Send appropriate fees to SBEC.
4. Complete all requirements of the National criminal history background check.

* You will receive an email confirmation from SBEC after the university has completed its recommendation. Please DO NOT call to check status. This can be checked on-line. Once all activities have successfully been performed, SBEC will process the issuing of the certificate. The certificate will be issued and placed on the SBEC website under the "Official Record for Educator Certificates," and a paper certificate will be printed and mailed to the student at the address provided.

Note: Records that are not fully processed within 60 days will be deleted. If deleted, you will be required to file again through SBEC Online.

## BFA Studio Art with All-Level Certification



3 sh from:

| ART 350 | Ceramics I |  |
| :---: | :---: | :---: |
| ART 450 | Ceramics II |  |
| ART 451 | Ceramics III |  |
| 12 additional semester hours in advanced Art, Art History, or Photography courses. |  | 12 |
| Required Support Courses |  |  |
| One semester Field-Based Teacher Education Program: |  |  |
| ETEC 424 | Integrating Technology into the Middle/Secondary Curriculum | 3 |
| PSY 300 | Learning Processes and Development | 3 |
| RDG 380 | Comprehension and Vocabulary in Middle and High Schools | 3 |
| SED 302 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments | 3 |
| SED 300 | The Teaching Profession | 3 |
| SED 401 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| SED 404 | Internship in Secondary Schools Field-Based | 3 |
| SED 405 | Residency in Secondary Teaching | 6 |
| Total Hours |  | 137 |

## BFA Studio Art: Emphasis in Ceramics

## BFA in Studio Art

The Bachelor of Fine Arts (BFA) in Studio Art is a one hundred-twenty-five to one hundred-thirty-seven (125-137) credit hour limited access program that provides an intensive background in theoretical knowledge and professional skills. BFA students will develop a personal vision, a high level of competence in technique, and harness the ability to make sound artistic decisions. The BFA in Studio Art is a proficiency-based program, characterized by continuous assessment. Graduating BFA seniors exhibit their work at the Texas A\&M University-Commerce University Gallery in their last semester.

To receive a degree in BFA Studio Art, students must successfully complete a minimum of one hundred-twenty five (125) credit hours. Students must also remain in the program for a minimum of three long semesters. Students must apply for admission into the "Practicum" course, culminating in an advancement review and graduation exhibition. The Practicum course is offered each spring with reviews scheduled each fall.

Students admitted to the BFA program are exempt from any foreign language requirement. Students in the BFA major are not required to select a minor. The BFA advisor can provide additional guidance with regard to entrance and degree requirements.

## Program Information

Students are required to have a C or above in all foundation requirements to maintain good standing in the program. Students will present a portfolio for review at the end of their sophomore year or when they have met at least $80 \%$ of the art foundation requirements. Faculty will assess the portfolio and make recommendations to the student.

## Academic Performance and Retention

Students must present a portfolio for placement review at the end of their sophomore year or when they have met at least $80 \%$ of the art foundation requirements. Faculty will assess the portfolio for progress and make advising recommendations to the student. These recommendations could include: advancement to upper-division coursework selected area of emphasis, taking additional coursework to correct deficiencies before advancement or separation from the program.

The Department of Art reserves the right to discontinue enrollment of art major students at any time if satisfactory academic progress is not being made. Students who have accumulated three unsatisfactory grades (U, F or D,) in studio art or design courses taken for college credit at Texas A\&M University Commerce or elsewhere will not be permitted to continue, be readmitted, or graduate with a major in studio art or design. Courses in which a grade below the minimum is received may only be repeated once.

## BFA Studio Art with Emphasis in Ceramics

## University Studies Courses

See the University Studies Requirements 43
Foundations Art courses required
ART 110 Drawing I 3

ART $111 \quad$ Two-Dimensional Design and Color Theory 3
ART $112 \quad$ Drawing II 3
ART $140 \quad$ Three-Dimensional Design and Color Theory 3
ART $141 \quad$ Intro to Shop Safety 1

| ART 1303 | History of Art I * | 3 |
| :---: | :---: | :---: |
| ART 1304 | History of Art II | 3 |
| ART 213 | Figure Drawing | 3 |
| PHO 111 | Introduction to Digital Media | 3 |
| Required Support Courses |  |  |
| ART 316 | Advanced Drawing | 3 |
| ART 340 | Sculpture I A: Introduction to Fabric, Video, Performance and Public Art | 3 |
| ART 380 | Experimental Concepts | 3 |
| ART 403 | Practicum in Art | 3 |
| ART 404 | Contemporary Issues | 3 |
| ART 405 | History of Modern Art | 3 |
| 3 hours from any upper division Art H | istory course | 3 |
| Sophomore Studio Courses |  |  |
| ART 240 | Sophomore Studio: Introduction to Sculpture | 3 |
| ART 340 | Sculpture I A: Introduction to Fabric, Video, Performance and Public Art | 3 |
| 6 semester hours from the following: |  | 6 |
| ART 227 | Sophomore Studio: Introduction to Painting |  |
| ART 240 | Sophomore Studio: Introduction to Sculpture |  |
| PHO 209 | Basic Photography II |  |
| ART 211 | Introduction to Visual Communication |  |
| Emphasis Area courses |  |  |
| Ceramics area courses |  |  |
| ART 350 | Ceramics I | 3 |
| ART 450 | Ceramics II | 3 |
| ART 451 | Ceramics III | 3 |
| Plus 9 semester hours from: ** |  | 9 |
| ART 350 | Ceramics I |  |
| ART 450 | Ceramics II |  |
| ART 451 | Ceramics III |  |
| 6 sh from any ART/PHO advanced ( 300 or 400-level course) |  | 6 |
| Total Hours |  | 25 |

* Also counts as University Studies-Visual and Performing Arts requirement.
** Courses are repeatable.


## BFA Studio Art: Emphasis in Experimental Studies

## BFA in Studio Art

The Bachelor of Fine Arts (BFA) in Studio Art is a one hundred-twenty-five to one hundred-thirty-seven (125-137) credit hour limited access program that provides an intensive background in theoretical knowledge and professional skills. BFA students will develop a personal vision, a high level of competence in technique, and harness the ability to make sound artistic decisions. The BFA in Studio Art is a proficiency-based program, characterized by continuous assessment. Graduating BFA seniors exhibit their work at the Texas A\&M University-Commerce University Gallery in their last semester.

To receive a degree in BFA Studio Art, students must successfully complete a minimum of one hundred-twenty five (125) credit hours. Students must also remain in the program for a minimum of three long semesters. Students must apply for admission into the "Practicum" course, culminating in an advancement review and graduation exhibition. The Practicum course is offered each spring with reviews scheduled each fall.

Students admitted to the BFA program are exempt from any foreign language requirement. Students in the BFA major are not required to select a minor. The BFA Advisor can provide additional guidance with regard to entrance and degree requirements.

## Program Information

Students are required to have a C or above in all foundation requirements to maintain good standing in the program. Students will present a portfolio for review at the end of their sophomore year or when they have met at least $80 \%$ of the art foundation requirements. Faculty will assess the portfolio and make recommendations to the student.

## Academic Performance and Retention

Students must present a portfolio for placement review at the end of their sophomore year or when they have met at least $80 \%$ of the art foundation requirements. Faculty will assess the portfolio for progress and make advising recommendations to the student. These recommendations could include: advancement to upper-division coursework selected area of emphasis, taking additional coursework to correct deficiencies before advancement or separation from the program.

The Department of Art reserves the right to discontinue enrollment of art major students at any time if satisfactory academic progress is not being made. Students who have accumulated three unsatisfactory grades (U, F or D,) in studio art or design courses taken for college credit at Texas A\&M University Commerce or elsewhere will not be permitted to continue, be readmitted, or graduate with a major in studio art or design. Courses in which a grade below the minimum is received may only be repeated once.

## BFA Studio Art with Emphasis in Experimental Studies

## University Studies Courses

See the University Studies Requirements 43
Foundations Art courses required
ART 110 Drawing I 3
ART 111 Two-Dimensional Design and Color Theory ..... 3
ART 112 Drawing II ..... 3
ART 140 Three-Dimensional Design and Color Theory ..... 3
ART 141 Intro to Shop Safety ..... 1
ART 1303 History of Art I * ..... 3
ART 1304 History of Art II ..... 3
ART 213 Figure Drawing ..... 3
PHO 111 Introduction to Digital Media ..... 3
Required Support Courses
ART 316 Advanced Drawing ..... 3
ART 380 Experimental Concepts ..... 3
ART 403 Practicum in Art ..... 3
ART 404 Contemporary Issues ..... 3
ART 405 History of Modern Art ..... 3
3 semester hours from any upper division Art History course ..... 3
Sophomore Studio Courses
ART 227 Sophomore Studio: Introduction to Painting ..... 3
ART 240 Sophomore Studio: Introduction to Sculpture ..... 3
ART 250 Sophomore Studio: Introduction to Ceramics ..... 3
3 semester hours from the following: ..... 3
PHO 209 Basic Photography IIART 211
Introduction to Visual Communication
Emphasis Area course
Experimental Studies area courses6 semester hours from:6

| ART 340 | Sculpture I A: Introduction to Fabric, Video, Performance and Public Art |
| :--- | :--- |
| ART 341 | Sculpture I B: Introduction to Metals and Mechanical Systems |
| ART 440 | Sculpture II A |
| ART 441 | Sculpture II B |
| 6 semester hours from: |  |
| ART 330 | Printmaking |
| ART 331 | Screenprinting |
| ART 433 | Screenprinting II |
| 6 semester hours from: |  |
| ART 320 | Airbrush Painting |
| ART 321 | Watercolor I |
| ART 422 | Painting IV: Advanced Concepts in Painting |


| 6 semester hours from: |  |
| :--- | :--- |
| ART 350 | Ceramics I |
| ART 450 | Ceramics II |
| ART 451 | Ceramics III |
| Advanced Art, Art History or Photography Electives |  |
| 3 semester hours in advanced (300 or 400-level) art, art history, or photography course | 3 |
| Total Hours | 125 |

* Also counts as University Studies-Visual and Performing Arts requirement.


## BFA Studio Art: Emphasis in Painting

## BFA in Studio Art

The Bachelor of Fine Arts (BFA) in Studio Art is a one hundred-twenty-five to one hundred-thirty-seven (125-137) credit hour limited access program that provides an intensive background in theoretical knowledge and professional skills. BFA students will develop a personal vision, a high level of competence in technique, and harness the ability to make sound artistic decisions. The BFA in Studio Art is a proficiency-based program, characterized by continuous assessment. Graduating BFA seniors exhibit their work at the Texas A\&M University-Commerce University Gallery in their last semester.

To receive a degree in BFA Studio Art, students must successfully complete a minimum of one hundred-twenty five (125) credit hours. Students must also remain in the program for a minimum of three long semesters. Students must apply for admission into the "Practicum" course, culminating in an advancement review and graduation exhibition. The Practicum course is offered each spring with reviews scheduled each fall.

Students admitted to the BFA program are exempt from any foreign language requirement. Students in the BFA major are not required to select a minor. The BFA Advisor can provide additional guidance with regard to entrance and degree requirements.

## Program Information

Students are required to have a C or above in all foundation requirements to maintain good standing in the program. Students will present a portfolio for review at the end of their sophomore year or when they have met at least $80 \%$ of the art foundation requirements. Faculty will assess the portfolio and make recommendations to the student.

## Academic Performance and Retention

Students must present a portfolio for placement review at the end of their sophomore year or when they have met at least $80 \%$ of the art foundation requirements. Faculty will assess the portfolio for progress and make advising recommendations to the student. These recommendations could include: advancement to upper-division coursework selected area of emphasis, taking additional coursework to correct deficiencies before advancement or separation from the program.

The Department of Art reserves the right to discontinue enrollment of art major students at any time if satisfactory academic progress is not being made. Students who have accumulated three unsatisfactory grades (U, F or D, ) in studio art or design courses taken for college credit at Texas A\&M University Commerce or elsewhere will not be permitted to continue, be readmitted, or graduate with a major in studio art or design. Courses in which a grade below the minimum is received may only be repeated once.

## BFA Studio Art with Emphasis in Painting

## University Studies Courses

See the University Studies Requirements 43

## Foundations Art courses required

ART $110 \quad$ Drawing I 3

ART 111 Two-Dimensional Design and Color Theory 3
ART $112 \quad$ Drawing II 3
ART $140 \quad$ Three-Dimensional Design and Color Theory 3
ART 141 Intro to Shop Safety 1
ART 1303 History of Art I* 3
ART 1304 History of Art II 3
ART $213 \quad$ Figure Drawing 3
PHO $111 \quad$ Introduction to Digital Media 3
Required Support Courses
ART 316 Advanced Drawing

| ART 380 | Experimental Concepts | 3 |
| :---: | :---: | :---: |
| ART 403 | Practicum in Art | 3 |
| ART 404 | Contemporary Issues | 3 |
| ART 405 | History of Modern Art | 3 |
| 3 semester hours from any upper division Art History course |  | 3 |
| Sophomore Studio Courses |  |  |
| ART 227 | Sophomore Studio: Introduction to Painting | 3 |
| 9 semester hours from the following: |  | 9 |
| PHO 209 | Basic Photography II |  |
| ART 211 | Introduction to Visual Communication |  |
| ART 240 | Sophomore Studio: Introduction to Sculpture |  |
| ART 250 | Sophomore Studio: Introduction to Ceramics |  |
| Emphasis Area courses |  |  |
| Painting Courses: |  |  |
| ART 320 | Airbrush Painting | 3 |
| ART 326 | Painting II: Introduction to Basic Concept in Painting | 3 |
| ART 420 | Painting III: Intermediate Concepts in Painting | 3 |
| ART 422 | Painting IV: Advanced Concepts in Painting | 3 |
| Plus 9 semester hours from: ** |  | 9 |
| ART 320 | Airbrush Painting |  |
| ART 326 | Painting II: Introduction to Basic Concept in Painting |  |
| ART 422 | Painting IV: Advanced Concepts in Painting |  |
| Advanced Art, Art History or Photography Electives |  |  |
| 6 semester hours in advanced (300 or 400-level) art, art history or photography courses |  | 6 |
| Total Hours |  | 125 |
| Also count as University Studi Courses are repeatable. | es - Visual and Performing Arts requirement. |  |

## BFA Studio Art: Emphasis in Photography

## BFA in Studio Art

The Bachelor of Fine Arts (BFA) in Studio Art is a one hundred-twenty-five to one hundred-thirty-seven (125-137) credit hour limited access program that provides an intensive background in theoretical knowledge and professional skills. BFA students will develop a personal vision, a high level of competence in technique, and harness the ability to make sound artistic decisions. The BFA in Studio Art is a proficiency-based program, characterized by continuous assessment. Graduating BFA seniors exhibit their work at the Texas A\&M University-Commerce University Gallery in their last semester.

To receive a degree in BFA Studio Art, students must successfully complete a minimum of one hundred-twenty five (125) credit hours. Students must also remain in the program for a minimum of three long semesters. Students must apply for admission into the "Practicum" course, culminating in an advancement review and graduation exhibition. The Practicum course is offered each spring with reviews scheduled each fall.

Students admitted to the BFA program are exempt from any foreign language requirement. Students in the BFA major are not required to select a minor. The BFA Advisor can provide additional guidance with regard to entrance and degree requirements.

## Program Information

Students are required to have a C or above in all foundation requirements to maintain good standing in the program. Students will present a portfolio for review at the end of their sophomore year or when they have met at least $80 \%$ of the art foundation requirements. Faculty will assess the portfolio and make recommendations to the student.

## Academic Performance and Retention

Students must present a portfolio for placement review at the end of their sophomore year or when they have met at least $80 \%$ of the art foundation requirements. Faculty will assess the portfolio for progress and make advising recommendations to the student. These recommendations could include: advancement to upper-division coursework selected area of emphasis, taking additional coursework to correct deficiencies before advancement or separation from the program.

The Department of Art reserves the right to discontinue enrollment of art major students at any time if satisfactory academic progress is not being made. Students who have accumulated three unsatisfactory grades ( $\mathrm{U}, \mathrm{F}$ or D, in studio art or design courses taken for college credit at Texas A\&M University Commerce or elsewhere will not be permitted to continue, be readmitted, or graduate with a major in studio art or design. Courses in which a grade below the minimum is received may only be repeated once.

## BFA Studio Art with Emphasis in Photography

## University Studies Courses

See the University Studies Requirements 43
Foundations Art courses required
ART 110 Drawing I 3

ART 111 Two-Dimensional Design and Color Theory 3
ART 112 Drawing II 3
ART 140 Three-Dimensional Design and Color Theory 3
ART 141 Intro to Shop Safety 1
ART 1303 History of Art I * 3
ART 1304 History of Art II 3
ART 213 Figure Drawing 3
PHO 111
Introduction to Digital Media 3
Required Support Courses
ART 316 Advanced Drawing 3
ART 380 Experimental Concepts 3
ART 403 Practicum in Art 3
ART 404 Contemporary Issues 3
ART 405 History of Modern Art 3
PHO 379
Survey of Photographic History 3
Sophomore Studio Courses
6 semester hours from: 6

| ART 211 | Introduction to Visual Communication |
| :--- | :--- |
| ART 227 | Sophomore Studio: Introduction to Painting |
| ART 240 | Sophomore Studio: Introduction to Sculpture |
| ART 250 | Sophomore Studio: Introduction to Ceramics |

$\begin{array}{ll}\text { Emphasis Area courses } & \\ \text { Photography Emphasis } & \text { Basic Photography I } \\ \text { PHO } 112 & \text { Bas }\end{array}$
PHO 209 Basic Photography II 3
PHO $210 \quad$ Introduction to Studio Lighting 3
PHO $350 \quad$ Advanced Digital Photography 3
PHO 359 Junior Photography Seminar 3
PHO $495 \quad$ Photography Internship 3
15 sh from: 15

| PHO 339 | Environmental Portraiture |
| :--- | :--- |
| PHO 341 | Advertising and Commercial Photography |
| PHO 349 | Nature and Wildlife Photography |
| PHO 351 | Introduction to Photojournalism |
| PHO 352 | Advanced Photojournalism |
| PHO 353 | Sports Photography |
| PHO 357 | Documentary Photography |
| PHO 359 | Junior Photography Seminar |
| PHO 369 | Alternative Print Making |
| PHO 403 | Business Practices in Photography |
| PHO 360 | B \& W Darkroom Technique |
| PHO 397 | Special Topics |

* Also counts as University Studies-Visual and Performing Arts requirement.


## BFA Studio Art: Emphasis in Sculpture

## BFA in Studio Art

The Bachelor of Fine Arts (BFA) in Studio Art is a one hundred-twenty-five to one hundred-thirty-seven (125-137) credit hour limited access program that provides an intensive background in theoretical knowledge and professional skills. BFA students will develop a personal vision, a high level of competence in technique, and harness the ability to make sound artistic decisions. The BFA in Studio Art is a proficiency-based program, characterized by continuous assessment. Graduating BFA seniors exhibit their work at the Texas A\&M University-Commerce University Gallery in their last semester.

To receive a degree in BFA Studio Art, students must successfully complete a minimum of one hundred-twenty five (125) credit hours. Students must also remain in the program for a minimum of three long semesters. Students must apply for admission into the "Practicum" course, culminating in an advancement review and graduation exhibition. The Practicum course is offered each spring with reviews scheduled each fall.

Students admitted to the BFA program are exempt from any foreign language requirement. Students in the BFA major are not required to select a minor. The BFA Advisor can provide additional guidance with regard to entrance and degree requirements.

## Program Information

Students are required to have a C or above in all foundation requirements to maintain good standing in the program. Students will present a portfolio for review at the end of their sophomore year or when they have met at least $80 \%$ of the art foundation requirements. Faculty will assess the portfolio and make recommendations to the student.

## Academic Performance and Retention

Students must present a portfolio for placement review at the end of their sophomore year or when they have met at least $80 \%$ of the art foundation requirements. Faculty will assess the portfolio for progress and make advising recommendations to the student. These recommendations could include: advancement to upper-division coursework selected area of emphasis, taking additional coursework to correct deficiencies before advancement or separation from the program.

The Department of Art reserves the right to discontinue enrollment of art major students at any time if satisfactory academic progress is not being made. Students who have accumulated three unsatisfactory grades (U, F or D,) in studio art or design courses taken for college credit at Texas A\&M University Commerce or elsewhere will not be permitted to continue, be readmitted, or graduate with a major in studio art or design. Courses in which a grade below the minimum is received may only be repeated once.

## BFA Studio Art with Emphasis in Sculpture



| ART 403 | Practicum in Art | 3 |
| :---: | :---: | :---: |
| ART 404 | Contemporary Issues | 3 |
| ART 405 | History of Modern Art | 3 |
| 3 semester hours from any upper division Art History course |  | 3 |
| Sophomore Studio Courses |  |  |
| ART 240 | Sophomore Studio: Introduction to Sculpture | 3 |
| ART 250 | Sophomore Studio: Introduction to Ceramics | 3 |
| 6 semester hours from the following: |  | 6 |
| PHO 209 | Basic Photography II |  |
| ART 211 | Introduction to Visual Communication |  |
| ART 227 | Sophomore Studio: Introduction to Painting |  |
| Emphasis Area courses |  |  |
| Sculpture area courses |  |  |
| ART 340 | Sculpture I A: Introduction to Fabric, Video, Performance and Public Art | 3 |
| ART 341 | Sculpture I B: Introduction to Metals and Mechanical Systems | 3 |
| ART 440 | Sculpture II A | 3 |
| Plus 9 semester hours from: ** |  | 9 |
| ART 340 | Sculpture I A: Introduction to Fabric, Video, Performance and Public Art |  |
| ART 341 | Sculpture I B: Introduction to Metals and Mechanical Systems |  |
| ART 440 | Sculpture II A |  |
| Advanced Art, Art History or Photography Electives |  |  |
| 6 semester hours in advanced (300 or 400-level) art, art history or photography courses. |  | 6 |
| Total Hours |  | 125 |

* Also counts as University Studies-Visual and Performing Arts requirement.
** Courses are repeatable.


## BFA Visual Communication: Emphasis in Art Direction

Students seeking a major in Visual Communication will pursue a BFA degree. The emphasis in Art Direction prepares students for professional positions as creative team leaders who target specific market audiences and produce client branding, single ads or campaigns in printed, broadcast and interactive media. Courses in art direction and advertising emphasize the development of concepts from infancy through the finished product/. The Art Direction student gains proficiency in creating headlines, copy, layout and storyboarding, partnering with copywriting students, as well as in directing the work of designers, photographers, illustrators and other contributions. The BFA degree is a five-year program with emphasis options in Art Direction, Copywriting, Design Communications, New Media, or Photography. Each of these areas has a common core of Foundation Art/Visual Communication courses and specific classes in the major or emphasis area. All program emphasis require the student to complete University Studies courses. Students in the BFA major are not required to select a minor.

Entry into Visual Communication is by portfolio review. As a prerequisite to entering Visual Communication classes taught at the Universities Center at Dallas (UCD), students need to complete the art core foundation courses as prescribed in the undergraduate catalog and the student will have completed the University Studies requirements of A\&M-Commerce. The student must have an overall GPA of at least 2.5 and an art core foundations GPA of at least 3.0. The following web site should be consulted for deadlines and specific requirements of portfolio contents. Students having completed University Studies and art foundation requirements, who fail to present work according to the stated guidelines, will not be considered for entry into Visual Communication classes at the UCD. Web site: www.tamuc.edu/viscom

All Visual Communication majors have an assessment system that students must pass in order to proceed in their emphasis: a basic assessment will be administered after the third year and a concentration assessment will be administered after the fourth year. Students who do not pass their assessments will be required to correct deficiencies before continuing their program. Students will be advised of the most expedient way to correct deficiencies by faculty and may be required to repeat courses to strengthen and further develop their skills areas. All majors must pass their senior exit review prior to graduation. During the fourth and fifth years, all majors will be required to enter their work in various student shows and competitions. As with other university programs, students must pass their courses in their major with a minimum grade of "C."

Transfer work for students from other institutions may be accepted for courses that are not directly compatible with the common course numbering system; the faculty reserves the right to delay accepting these courses until reviewing the student's portfolio. Portfolio reviews for transfer students will generally occur late in the spring semester for students wishing to enter the program during the fall semester and late during the fall semester for students wishing to enter the program during the spring semester.

## BFA-Visual Communication with Emphasis in Art Direction

## University Studies courses

See the University Studies Requirements ..... 43
Required courses in the major
Core Studio
Art Core/Sophomore Studio
ART 110 Drawing I ..... 3
ART 111 Two-Dimensional Design and Color Theory ..... 3
ART 140 Three-Dimensional Design and Color Theory ..... 3
PHO 112 Basic Photography I ..... 3
ART 211 Introduction to Visual Communication ..... 3
ART 213 Figure Drawing ..... 3
Visual Communication Core ..... ART 300
Typography ..... 4
ART 309 Digital Imaging for Communication Art ..... 4
ART 310 Electronic Media ..... 4
ART 365 Design Communications I ..... 4
ART 466 Design Communications II ..... 4
ART 472 Art Direction ..... 4
ART 475 Visual Communication Senior Studio ..... 4
Required/Emphasis StudioAdvanced Electronic Media4
ART 473 Advertising Art Concepts and Copywriting I ..... 4
ART 474 Advertising Art Concepts and Copywriting II ..... 4
12 semester hours from the following: ..... 12

| ART 311 | Multimedia I |
| :--- | :--- |
| ART 312 | Internet Development I |
| ART 313 | Interactive Vector Graphics and Animation |
| ART 411 | Multimedia II |
| ART 412 | Video in Visual Communications |
| ART 462 | Visual Communication Branding |
| ART 463 | Advanced Typography |
| ART 464 | Advanced Processes |
| ART 467 | Design Communications III |
| ART 468 | Design Communications IV |
| ART 465 | Letterpress |
| ART 473 | Advertising Art Concepts and Copywriting I |
| ART 474 | Advertising Art Concepts and Copywriting II |
| ART 495 | Internship |
| ART 497 | Special Topics |

Required Support Courses
Art/Design History
ART 1304 History of Art II (Will also satisfy University Studies) ..... 3
ART 408 History of Advertising and Consumerism ..... 3
6 semester hours from any upper division Art History ..... 6
Total Hours ..... 125

## BFA Visual Communication: Emphasis in Copywriting

Students seeking a major in Visual Communication will pursue a BFA degree.
Copywriting majors combine art and writing in order to prepare themselves for positions as writers and creative directors who take advertising concepts and develop them through headlines and body copy in printed, broadcast and interactive media. Copywriting students take a select sequence of courses
in the Department of Literature and Languages, where they focus on creative and technical writing. To augment this sequence, and to prepare them for collaboration with professionals in the visual arts, they also pursue a limited curriculum in art that stresses visual organizations, typography, graphic design and art direction. The BFA degree is a five-year program with emphasis options in Art Direction, Copywriting, Design Communications, New Media, or Photography. Each of these areas has a common core of Foundation Art/Visual Communication courses and specific classes in the major or emphasis area. All program emphasis require the student to complete University Studies courses. Students in the BFA major are not required to select a minor.

Entry into Visual Communication is by portfolio review. As a prerequisite to entering Visual Communication classes taught at the Universities Center at Dallas (UCD), students need to complete the art core foundation courses as prescribed in the undergraduate catalog and the student will have completed the University Studies requirements of A\&M-Commerce. The student must have an overall GPA of at least 2.5 and an art core foundations GPA of at least 3.0. The following web site should be consulted for deadlines and specific requirements of portfolio contents. Students having completed University Studies and art foundation requirements, who fail to present work according to the stated guidelines, will not be considered for entry into Visual Communication classes at the UCD. Web site: www.tamuc.edu/viscom

All Visual Communication majors have an assessment system that students must pass in order to proceed in their emphasis: a basic assessment will be administered after the third year and a concentration assessment will be administered after the fourth year. Students who do not pass their assessments will be required to correct deficiencies before continuing their program. Students will be advised of the most expedient way to correct deficiencies by faculty and may be required to repeat courses to strengthen and further develop their skills areas. All majors must pass their senior exit review prior to graduation. During the fourth and fifth years, all majors will be required to enter their work in various student shows and competitions. As with other university programs, students must pass their courses in their major with a minimum grade of "C."

Transfer work for students from other institutions may be accepted for courses that are not directly compatible with the common course numbering system; the faculty reserves the right to delay accepting these courses until reviewing the student's portfolio. Portfolio reviews for transfer students will generally occur late in the spring semester for students wishing to enter the program during the fall semester and late during the fall semester for students wishing to enter the program during the spring semester.

## BFA-Visual Communication with Emphasis in Copywriting

## University Studies courses

See the University Studies Requirements $\quad 43$

## Required courses in the major

## Studio Art Core

| ART 110 | Drawing I | 3 |
| :---: | :---: | :---: |
| ART 111 | Two-Dimensional Design and Color Theory | 3 |
| ART 140 | Three-Dimensional Design and Color Theory | 3 |
| PHO 112 | Basic Photography I | 3 |
| ART 211 | Introduction to Visual Communication | 3 |
| ART 213 | Figure Drawing | 3 |
| Visual Communication Core |  |  |
| ART 300 | Typography | 4 |
| ART 309 | Digital Imaging for Communication Art | 4 |
| ART 310 | Electronic Media | 4 |
| ART 472 | Art Direction | 4 |
| ART 473 | Advertising Art Concepts and Copywriting I | 4 |
| ART 474 | Advertising Art Concepts and Copywriting II | 4 |
| ART 475 | Visual Communication Senior Studio | 4 |
| Emphasis in Copywriting Courses |  |  |
| ART 473 | Advertising Art Concepts and Copywriting I | 4 |
| or ART 474 | Advertising Art Concepts and Copywriting II |  |
| ENG 315 | Advanced Writing: Creative Writing | 3 |
| or ENG 333 | Advanced Writing: Non-Fiction |  |
| 12 semester hours from the following: |  | 12 |
| ENG 351 | American Novel Before World War I |  |
| ENG 352 | American Novel After World War I |  |
| ENG 425 | Development of the Novel |  |
| ENG 441 | A Survey of American Literature I |  |
| ENG 442 | A Survey of American Literature II |  |


| ENG 471 | Survey of English Literature I |  |
| :---: | :---: | :---: |
| ENG 472 | Survey of English Literature II |  |
| JOUR 315 | Editing and Production |  |
| RTV 320 | Radio and Television Writing |  |
| 6 semester hours from the following: |  | 6 |
| ENG 315 | Advanced Writing: Creative Writing |  |
| ENG 333 | Advanced Writing: Non-Fiction |  |
| Art/Design History |  |  |
| ART 1304 | History of Art II | 3 |
| ART 408 | History of Advertising and Consumerism | 3 |
| 6 semester hours from any upper division Art History |  | 6 |
| Total Hours |  | 126 |

## BFA Visual Communication: Emphasis in Design

Students seeking a major in Visual Communication will pursue a BFA degree.
The emphasis in Design prepares students choosing to pursue a career as a design professional. Instruction focuses on a applied conceptual skill set through the development and application of creative process, conceptual thinking and visual problem solving. Courses focus on client driven projects such as packaging, paper systems and client visual branding development. The BFA degree is a five-year program with emphasis options in Art Direction, Copywriting, Design Communications, New Media, or Photography. Each of these areas has a common core of Foundation Art/Visual Communication courses and specific classes in the major or emphasis area. All program emphasis require the student to complete University Studies courses. Students in the BFA major are not required to select a minor.

Entry into Visual Communication is by portfolio review. As a prerequisite to entering Visual Communication classes taught at the Universities Center at Dallas (UCD), students need to complete the art core foundation courses as prescribed in the undergraduate catalog and the student will have completed the University Studies requirements of A\&M-Commerce. The student must have an overall GPA of at least 2.5 and an art core foundations GPA of at least 3.0. The following web site should be consulted for deadlines and specific requirements of portfolio contents. Students having completed University Studies and art foundation requirements, who fail to present work according to the stated guidelines, will not be considered for entry into Visual Communication classes at the UCD. Web site: www.tamuc.edu/viscom

All Visual Communication majors have an assessment system that students must pass in order to proceed in their emphasis: a basic assessment will be administered after the third year and a concentration assessment will be administered after the fourth year. Students who do not pass their assessments will be required to correct deficiencies before continuing their program. Students will be advised of the most expedient way to correct deficiencies by faculty and may be required to repeat courses to strengthen and further develop their skills areas. All majors must pass their senior exit review prior to graduation. During the fourth and fifth years, all majors will be required to enter their work in various student shows and competitions. As with other university programs, students must pass their courses in their major with a minimum grade of "C."

Transfer work for students from other institutions may be accepted for courses that are not directly compatible with the common course numbering system; the faculty reserves the right to delay accepting these courses until reviewing the student's portfolio. Portfolio reviews for transfer students will generally occur late in the spring semester for students wishing to enter the program during the fall semester and late during the fall semester for students wishing to enter the program during the spring semester.

## BFA - Visual Communication Art, with Emphasis in Design

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
Core Studio
Art Core/Sophomore Studio
ART 110 Drawing I 3
ART $111 \quad$ Two-Dimensional Design and Color Theory 3
ART $140 \quad$ Three-Dimensional Design and Color Theory 3
PHO $112 \quad$ Basic Photography I 3

ART $211 \quad$ Introduction to Visual Communication 3
ART
Figure Drawing
Visual Communication Core
ART 300
Typography

| ART 309 | Digital Imaging for Communication Art | 4 |
| :---: | :---: | :---: |
| ART 310 | Electronic Media | 4 |
| ART 365 | Design Communications I | 4 |
| ART 466 | Design Communications II | 4 |
| ART 472 | Art Direction | 4 |
| ART 475 | Visual Communication Senior Studio | 4 |
| Required/Emphasis Studio |  |  |
| ART 416 | Advanced Electronic Media | 4 |
| ART 467 | Design Communications III | 4 |
| ART 468 | Design Communications IV | 4 |
| 12 semester hours from: |  | 12 |
| ART 311 | Multimedia I |  |
| ART 312 | Internet Development I |  |
| ART 313 | Interactive Vector Graphics and Animation |  |
| ART 411 | Multimedia II |  |
| ART 412 | Video in Visual Communications |  |
| ART 414 | Motion Graphics |  |
| ART 462 | Visual Communication Branding |  |
| ART 463 | Advanced Typography |  |
| ART 464 | Advanced Processes |  |
| ART 465 | Letterpress |  |
| ART 467 | Design Communications III |  |
| ART 468 | Design Communications IV |  |
| ART 473 | Advertising Art Concepts and Copywriting I |  |
| ART 474 | Advertising Art Concepts and Copywriting II |  |
| ART 495 | Internship |  |
| ART 497 | Special Topics |  |
| Required Support Courses |  |  |
| Art/Design History |  |  |
| ART 1304 | History of Art II | 3 |
| ART 407 | History of Graphic Design | 3 |
| 6 semester hours from any upper division Art History |  | 6 |
| Total Hours |  | 125 |

## BFA Visual Communication: Emphasis in New Media

Students seeking a major in Visual Communication will pursue a BFA degree. The emphasis in New Media provides a visual education based in computer application with requirement of strong conceptual design. Upon completion of design, storyboarding and conceptual courses, students choose either an interactive or high-end animation track of study. Specialized courses in interactive design, advanced web application, or modeling, rigging, and animation complete the student's education and provide specialized skill ni animation, visualization, interactive and multimedia design. The BFA degree is a five-year program with emphasis options in Art Direction, Copywriting, Design Communications, New Media, or Photography. Each of these areas has a common core of Foundation Art/Visual Communication courses and specific classes in the major or emphasis area. All program emphasis require the student to complete University Studies courses. Students in the BFA major are not required to select a minor.

Entry into Visual Communication is by portfolio review. As a prerequisite to entering Visual Communication classes taught at the Universities Center at Dallas (UCD), students need to complete the art core foundation courses as prescribed in the undergraduate catalog and the student will have completed the University Studies requirements of A\&M-Commerce. The student must have an overall GPA of at least 2.5 and an art core foundations GPA of at least 3.0. The following web site should be consulted for deadlines and specific requirements of portfolio contents. Students having completed University Studies and art foundation requirements, who fail to present work according to the stated guidelines, will not be considered for entry into Visual Communication classes at the UCD. Web site: www.tamuc.edu/viscom

All Visual Communication majors have an assessment system that students must pass in order to proceed in their emphasis: a basic assessment will be administered after the third year and a concentration assessment will be administered after the fourth year. Students who do not pass their assessments will be required to correct deficiencies before continuing their program. Students will be advised of the most expedient way to correct deficiencies by faculty and may be required to repeat courses to strengthen and further develop their skills areas. All majors must pass their senior exit review prior
to graduation. During the fourth and fifth years, all majors will be required to enter their work in various student shows and competitions. As with other university programs, students must pass their courses in their major with a minimum grade of "C."

Transfer work for students from other institutions may be accepted for courses that are not directly compatible with the common course numbering system; the faculty reserves the right to delay accepting these courses until reviewing the student's portfolio. Portfolio reviews for transfer students will generally occur late in the spring semester for students wishing to enter the program during the fall semester and late during the fall semester for students wishing to enter the program during the spring semester.

## BFA-Visual Communication with Emphasis in New Media

University Studies Courses
See the University Studies Requirements 43
Required courses in the major

## Core Studio

Art Core/Sophomore Studio
ART 110 Drawing I3
ART 111 Two-Dimensional Design and Color Theory ..... 3
ART 140 Three-Dimensional Design and Color Theory ..... 3
PHO 112 Basic Photography I ..... 3
ART 211 Introduction to Visual Communication ..... 3
ART 213 Figure Drawing ..... 3
Visual Communication Core
ART 300 Typography ..... 4
ART 309 Digital Imaging for Communication Art ..... 4
ART 310 Electronic Media ..... 4
ART 365 Design Communications I ..... 4
ART 472 Art Direction ..... 4
ART 475 Visual Communication Senior Studio ..... 4
Required/Emphasis Studio
ART 311 Multimedia I ..... 4
ART 312 Internet Development I ..... 4
ART 317 Three-Dimensional I ..... 4
ART 414 Motion Graphics ..... 4
12 semester hours from the following: ..... 12

| ART 313 | Interactive Vector Graphics and Animation |
| :--- | :--- |
| ART 410 | Three-Dimensional II |
| ART 411 | Multimedia II |
| ART 412 | Video in Visual Communications |
| ART 417 | Three-Dimensional III |
| ART 418 | Three-Dimensional IV |
| ART 460 | 3-D Painting |
| ART 462 | Visual Communication Branding |
| ART 495 | Internship |
| ART 497 | Special Topics |

Required Support Courses
Art/Design History
ART 1304 History of Art II ..... 3
ART 409 History of New Media ..... 3
6 semester hours from any upper division Art History ..... 6
Total Hours ..... 125

## BFA Visual Communication: Emphasis in Photography

Students seeking a major in Visual Communication will pursue a BFA degree.

The emphasis in Photography prepares students to author client driven solutions for advertising agencies, editorial projects, print and video media in commercial photography. Courses include editorial, food portraiture, architectural, on-location, still life, publication and collaborative opportunities with design and art directions students. Curriculum provides students a foundation in strong conceptual thinking while receiving intensive technical instruction in both photography and design. The BFA degree is a five-year program with emphasis options in Art Direction, Copywriting, Design Communications, New Media, or Photography. Each of these areas has a common core of Foundation Art/Visual Communication courses and specific classes in the major or emphasis area. All program emphasis require the student to complete University Studies courses. Students in the BFA major are not required to select a minor.

Entry into Visual Communication is by portfolio review. As a prerequisite to entering Visual Communication classes taught at the Universities Center at Dallas (UCD), students need to complete the art core foundation courses as prescribed in the undergraduate catalog and the student will have completed the University Studies requirements of A\&M-Commerce. The student must have an overall GPA of at least 2.5 and an art core foundations GPA of at least 3.0. The following web site should be consulted for deadlines and specific requirements of portfolio contents. Students having completed University Studies and art foundation requirements, who fail to present work according to the stated guidelines, will not be considered for entry into Visual Communication classes at the UCD. Web site: www.tamuc.edu/viscom

All Visual Communication majors have an assessment system that students must pass in order to proceed in their emphasis: a basic assessment will be administered after the third year and a concentration assessment will be administered after the fourth year. Students who do not pass their assessments will be required to correct deficiencies before continuing their program. Students will be advised of the most expedient way to correct deficiencies by faculty and may be required to repeat courses to strengthen and further develop their skills areas. All majors must pass their senior exit review prior to graduation. During the fourth and fifth years, all majors will be required to enter their work in various student shows and competitions. As with other university programs, students must pass their courses in their major with a minimum grade of "C."

Transfer work for students from other institutions may be accepted for courses that are not directly compatible with the common course numbering system; the faculty reserves the right to delay accepting these courses until reviewing the student's portfolio. Portfolio reviews for transfer students will generally occur late in the spring semester for students wishing to enter the program during the fall semester and late during the fall semester for students wishing to enter the program during the spring semester.

## BFA-Visual Communication with Emphasis in Photography



| PHO 357 | Documentary Photography |
| :--- | :--- |
| PHO 358 | Architectural Photography |
| PHO 361 | Abstract and Experimental |
| PHO 403 | Business Practices in Photography |
| ART 412 | Video in Visual Communications |
| ART 414 | Motion Graphics |
| Required Support Courses |  |
| Art/Design History | History of Art II |
| ART 1304 | Survey of Photographic History |
| PHO 379 |  |
| 6 hours from any upper division Art History | 3 |
| Total Hours |  |

## Photography Minor

## (22-24 semester hours)

Photography courses ( 6 sh Adv), with the exception of PHO 489 and PHO 495
PHO $111 \quad$ Introduction to Digital Media 3

Total Hours

## History

The Department of History offers the B.A., B.S., M.A., and M.S. degrees. Several of the baccalaureate degrees may be taken with teacher certification. The objectives of the history department are to acquaint students with the human past, give insight into the nature of the historic process, and prepare them for responsible democratic citizenship. In addition, an effort is made to inculcate in students the ability to analyze and think critically about historical works and issues, as well a s to express their judgments clearly in writing.

Recognizing that the mastery of the subject of history is a lifelong pursuit, the department has designed a program that includes a core of common courses for all students and a range of courses in selected areas from which students may choose. All majors and second majors in history are expected to complete survey courses in U.S. and World History as well as a workshop course that focuses on historical methodology and an upper division Themes in World History course. Students then may choose a stipulated number of courses in the areas of American, European, Asian, and Latin American history.

Students may use their B.A. or B.S. degrees in history as preparation for a variety of careers, in addition to teaching. Museum and archival work, government service, law, politics, publishing, genealogical services, and public relations are just a few of the fields in which historians may make careers.

While there is not agreed upon "core curriculum" in history in which one may demonstrate competency in a single exam, students will demonstrate their competency in critical thinking, analysis, writing skills, and the articulation of ideas by satisfactorily completing the requirements of each course. First or second majors who are enrolled in the teacher education program must pass a "TExES" exam, designed by the Texas Education Agency, before they may be certified as teachers. Student in the teacher preparation programs must have a G.P.A. of at least 3.0 in their major to be approved for student teaching.

For information about graduate programs, refer to the Graduate Catalog (http://coursecatalog.tamuc.edu/grad).
Students seeking a bachelor's degree in the following majors must complete:

1. degree requirements for a Bachelor of Arts or Bachelor of Science degree and
2. University Studies Requirements (p. 39) (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown below.
Students who elect to take a B.A. degree must complete four courses (12 hours) in the same foreign language. This requires selecting as electives four courses in a foreign language. Foreign language credit is not required for the B.S. degree; however, in view of the increasingly multicultural composition of this state's population, the department encourages future teachers to fulfill the language requirements of the B.A. degree.

History B.A./B.S. - Emphasis in History 8-12 Teaching Certification (p. 166)
History B.A./B.S. - Emphasis in Composite Social Studies (p. 165)

History B.A/B.S. (p. 168)
History Minor (p. 169)
History Second Major (p. 170)

## History B.A./B.S. - Emphasis in Social Studies 8-12, Teaching Certification

The purpose of this bachelor's degree for students is to become trained in the discipline of history. The objectives of this program are to acquaint students with the human past; to provide insight into the nature of the historic process; and to teach students to analyze and think critically about historical works and issues, and express their judgments clearly in writing. At the conclusion of this program students will be able to demonstrate an understanding of historiography, that is, a familiarity with a range of historical methods, theories, and schools of interpretation. They will also be able to research and write thesis-driven papers on historical topics, using appropriate sources.

This particular emphasis is designed for students to become certified and teach high school social studies, which includes the fields of history, government, geography, and economics.

| University Studies Courses |  |  |
| :---: | :---: | :---: |
| See the University Studies Requ | ents | 43 |
| Required courses |  |  |
| ECO 2301 | Principles of Macro Economics | 3 |
| ECO 2302 | Principles of Micro Economics | 3 |
| HIST 253 | Reading and Writing History | 3 |
| HIST 303 | Historical Geography | 3 |
| HIST 400 | Controversies in History and Social Studies | 3 |
| HIST 415 | History of Texas | 3 |
| PSCI 335 | Political Economy | 3 |
| ESCI 425 | Weather, Climate, and Human Environment | 3 |
| World History ( 3 sh) |  |  |
| Choose 3 sh from the following: |  | 3 |
| HIST 305 | World History: Origins through the Seventeenth Century |  |
| HIST 306 | The Emergence of the Modern World |  |
| HIST 360 | Themes in World History |  |
| Asia or Latin American History (3 sh) |  |  |
| Choose 3 sh from the following: |  | 3 |
| HIST 365 | History of Modern East Asia |  |
| HIST 366 | Modern India | 3 |
| HIST 375 | Colonial Latin America |  |
| HIST 385 | Latin America in the Modern Period |  |
| European History (3 sh) |  |  |
| Choose 3 sh from the following: |  | 3 |
| HIST 312 | Ancient and Medieval Europe |  |
| HIST 313 | A Feudal Society |  |
| HIST 314 | The European Reformations |  |
| HIST 327 | Europe in the Age of Enlightenment and Revolution, 1648-1848 |  |
| HIST 329 | Women and Gender in European History |  |
| HIST 333 | Modern Europe, 1848-1991 |  |
| HIST 334 | Urban Underworlds: The City and Its People in Modern Europe |  |
| Early U.S. History (3 sh) |  |  |
| Choose 3 sh from the following: |  | 3 |
| HIST 402 | Colonial North America to 1775 |  |

HIST 402

| HIST 403 | Revolutionary America and the Early National United States, 1775-1850 |  |
| :---: | :---: | :---: |
| HIST 404 | Religion in Early American History |  |
| Plus 1 course from: |  | 3 |
| PSCI 333 | Non-European Political Systems |  |
| PSCI 430 | Revolutions and Revolutionary Movements |  |
| PSCI 437 | Foreign Policy |  |
| PSCI 438 | International Relations |  |
| Plus 1 course from: |  | 3 |
| PSCI 331 | European Political Systems |  |
| PSCI 332 | Democracy and Democratization |  |
| PSCI 333 | Non-European Political Systems |  |
| Plus 1 course from: |  | 3 |
| PSCI 341 | The American Presidency |  |
| PSCI 342 | Introduction to Global Public Policy |  |
| PSCI 441 | Congressional Politics |  |
| PSCI 442 | Constitutional Law (NPS) |  |
| PSCI 443 | Civil Liberties and Civil Rights (NPS) |  |
| Plus 1 course from: |  | 3 |
| PSCI 342 | Introduction to Global Public Policy |  |
| PSCI 344 | American Political Parties and Electoral Politics |  |
| PSCI 345 | Public Opinion |  |
| PSCI 441 | Congressional Politics |  |
| Plus 1 course from: |  | 3 |
| PSCI 342 | Introduction to Global Public Policy |  |
| PSCI 346 | Introduction to Public Policy |  |
| PSCI 437 | Foreign Policy |  |
| PSCI 442 | Constitutional Law (NPS) |  |
| PSCI 443 | Civil Liberties and Civil Rights (NPS) |  |
| Plus 1 course from: |  | 3 |
| PSCI 332 | Democracy and Democratization |  |
| PSCI 410 | Political Theory I |  |
| PSCI 411 | Political Theory II |  |
| PSCI 412 | Political Theory III |  |
| PSCI 430 | Revolutions and Revolutionary Movements |  |
| Special note: |  |  |
| While some courses are included more than once in the list of required courses, a particular course MAY NOT be used to satisfy more than one requirement. |  |  |
| Teacher Education Courses |  |  |
| RDG 380 | Comprehension and Vocabulary in Middle and High Schools | 3 |
| SED 300 | The Teaching Profession | 3 |
| SED 302 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments | 3 |
| SED 401 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| SED 404 | Internship in Secondary Schools Field-Based | 3 |
| SED 405 | Residency in Secondary Teaching | 3-6 |
| Support Courses |  |  |
| PSY 300 | Learning Processes and Development | 3 |
| Electives Required |  |  |
| 0-2 semester hours may be required |  | 0-2 |
| Total hours |  | 120 |

## Other Requirements

A grade of "C" or higher must be earned in all History, Political Science, Economics, and Science courses required for this major. Fifteen semester hours of the major must be taken at Texas A\&M University-Commerce.

## History B.A./B.S. - Emphasis in Composite Social Studies

The purpose of this bachelor's degree for students is to become trained in the discipline of history. The objectives of this program are to acquaint students with the human past; to provide insight into the nature of the historic process; and to teach students to analyze and think critically about historical works and issues, and express their judgments clearly in writing. At the conclusion of this program students will be able to demonstrate an understanding of historiography, that is, a familiarity with a range of historical methods, theories, and schools of interpretation. They will also be able to research and write thesis-driven papers on historical topics, using appropriate sources.

This particular emphasis is designed to acquaint students who do not seek teacher certification with the fields of history, government, geography, and economics. This emphasis may be of interest to students who intend to pursue advanced degrees in an area of history that broadly overlaps with one of the social sciences.

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
ECO $2301 \quad$ Principles of Macro Economics 3
ESCI 425 Weather, Climate, and Human Environment 3
HIST 253 Reading and Writing History 3
HIST 303 Historical Geography 3
HIST $305 \quad$ World History: Origins through the Seventeenth Century 3
HIST 306 The Emergence of the Modern World 3
HIST 400 Controversies in History and Social Studies 3
PSCI $335 \quad$ Political Economy 3
PSCl 442 Constitutional Law (NPS) 3
Choose three semester hours from the following 3

| PSCI 331 | European Political Systems |
| :--- | :--- |
| or PSCI 333 | Non-European Political Systems |

Choose three semester hours from the following 3

| PSCI 410 | Political Theory I |
| :--- | :--- |
| or PSCI 411 | Political Theory II |
| or PSCI 412 | Political Theory III |

Choose three semester hours from the following 3

| PSCI 437 | Foreign Policy |
| :--- | :--- |
| or PSCI 438 | International Relations |

Non-U.S. History
Choose three sh from the following: 3

| HIST 312 | Ancient and Medieval Europe |
| :--- | :--- |
| HIST 313 | A Feudal Society |
| HIST 314 | The European Reformations |
| HIST 327 | Europe in the Age of Enlightenment and Revolution, 1648-1848 |
| HIST 329 | Women and Gender in European History |
| HIST 333 | Modern Europe, 1848-1991 |
| HIST 334 | Urban Underworlds: The City and Its People in Modern Europe |
| HIST 360 | Themes in World History |
| HIST 365 | History of Modern East Asia |
| HIST 366 | Modern India |
| HIST 375 | Colonial Latin America |
| or HIST 385 | Latin America in the Modern Period |

Plus 3 sh U.S. history:
Choose 3 sh from the following:

| HIST 402 | Colonial North America to 1775 |  |
| :--- | :--- | :--- |
| HIST 403 | Revolutionary America and the Early National United States, 1775-1850 |  |
| HIST 404 | Religion in Early American History |  |
| HIST 407 | Emergence of Modern America, 1850-1920 |  |
| HIST 409 | The Twentieth-Century United States |  |
| HIST 425 | Themes in Southern History |  |
| HIST 437 | American Diplomatic History |  |
| or HIST 439 | Women and Gender in U.S. History |  |
| Plus 6 sh from: |  |  |
| Choose 6 sh from the following: | The American Presidency |  |
| PSCI 341 | American Political Parties and Electoral Politics |  |
| PSCI 344 |  |  |
| or PSCI 441 | Congressional Politics |  |
| Electives Required |  | 6 |
| 29 semester hours |  | 29 |
| Total Hours |  | 120 |

## History B.A./B.S. - Emphasis in History 8-12 Teaching Certification

The purpose of this bachelor's degree for students is to become trained in the discipline of history. The objectives of this program are to acquaint students with the human past; to provide insight into the nature of the historic process; and to teach students to analyze and think critically about historical works and issues, and express their judgments clearly in writing. At the conclusion of this program students will be able to demonstrate an understanding of historiography, that is, a familiarity with a range of historical methods, theories, and schools of interpretation. They will also be able to research and write thesis-driven papers on historical topics, using appropriate sources.

This particular emphasis is designed to prepare students to become certified and teach high school history.

| Required courses in the major |  |  |
| :---: | :---: | :---: |
| University Studies Courses |  |  |
| See the University Studies Requirements |  | 43 |
| HIST 253 | Reading and Writing History | 3 |
| HIST 303 | Historical Geography | 3 |
| HIST 305 | World History: Origins through the Seventeenth Century | 3 |
| HIST 306 | The Emergence of the Modern World | 3 |
| HIST 360 | Themes in World History | 3 |
| HIST 400 | Controversies in History and Social Studies | 3 |
| HIST 415 | History of Texas | 3 |
| Plus 3 sh early Europe: |  |  |
| HIST 312 | Ancient and Medieval Europe | 3 |
| Plus 3 sh modern Europe: |  |  |
| HIST 327 | Europe in the Age of Enlightenment and Revolution, 1648-1848 | 3 |
| or HIST 333 | Modern Europe, 1848-1991 |  |
| Plus 3 sh Asia or Latin America: |  |  |
| Choose 3 sh from the following: |  | 3 |
| HIST 365 | History of Modern East Asia |  |
| HIST 366 | Modern India |  |
| HIST 375 | Colonial Latin America |  |
| or HIST 385 | Latin America in the Modern Period |  |
| Plus 3 sh early U.S.: |  | 3 |
| HIST 402 | Colonial North America to 1775 |  |
| or HIST 403 | Revolutionary America and the Early National United States, 1775-1850 |  |
| Plus 3 sh modern U.S.: |  | 3 |
| HIST 407 | Emergence of Modern America, 1850-1920 |  |
| or HIST 409 | The Twentieth-Century United States |  |


| Plus 3 sh from: |  | 3 |
| :---: | :---: | :---: |
| any 300- or 400-level Hist course |  |  |
| Teacher Education Courses |  |  |
| RDG 380 | Comprehension and Vocabulary in Middle and High Schools | 3 |
| SED 300 | The Teaching Profession | 3 |
| SED 302 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments | 3 |
| SED 401 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| SED 404 | Internship in Secondary Schools Field-Based | 3 |
| SED 405 | Residency in Secondary Teaching | 3-6 |
| Support Courses |  |  |
| PSY 300 | Learning Processes and Development | 3 |
| Electives Required |  |  |
| 14-17 semester hours required |  | 14-17 |
| Total hours |  | 120 |

## Other Requirements

A grade of "C" or higher must be earned in all History courses required for this major. Fifteen semester hours of History must be taken at Texas A\&M University-Commerce.

## History B.A./B.S. - Emphasis in Social Studies 4-8, Teaching Certification

Students seeking teacher certification in grades four through eight in social studies must take the courses required for this major. In addition they must take required support courses designed to broaden their content knowledge in order to help them team plan with middle school teachers in other disciplines.

The purpose of this bachelor's degree for students is to become trained in the discipline of history. The objectives of this program are to acquaint students with the human past; to provide insight into the nature of the historic process; and to teach students to analyze and think critically about historical works and issues, and express their judgments clearly in writing. At the conclusion of this program students will be able to demonstrate an understanding of historiography, that is, a familiarity with a range of historical methods, theories, and schools of interpretation. They will also be able to research and write thesis-driven papers on historical topics, using appropriate sources.

This particular emphasis is designed for students to become certified and teach middle school social studies, which includes the fields of history, government, geography, and economics.

## Teacher Certification, General Information

catalog.tamuc.edu/content.php

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
HIST 253 Reading and Writing History 3

HIST 303 Historical Geography 3
HIST 306 The Emergence of the Modern World 3
HIST $333 \quad$ Modern Europe, 1848-1991 3
HIST $400 \quad$ Controversies in History and Social Studies
HIST $402 \quad$ Colonial North America to 1775
HIST $403 \quad$ Revolutionary America and the Early National United States, 1775-1850 3
HIST $405 \quad$ The Civil War and Reconstruction, 1850-1877 3
HIST $411 \quad$ Race and Education in the 20th Century US 3
HIST $415 \quad$ History of Texas 3
PSCI $335 \quad$ Political Economy 3
Required support courses
PSY 300
Learning Processes and Development

| RDG 380 | Comprehension and Vocabulary in Middle and High Schools | 3 |
| :---: | :---: | :---: |
| RDG 450 | Middle School Reading: Theory \& Practice | 3 |
| MLED 314 | Young Adolescent Development | 3 |
| MLED 435 | Integrating Instruction: Science, Mathematics and Technology | 3 |
| MLED 402 | Best Practices in Pedagogy and Assessment | 3 |
| MLED 403 | Organization, Motivation and Management in Middle Level Classrooms | 3 |
| MLED 410 | Fostering School, Family, and Community Relationships | 3 |
| MATH 350 | Topics in Mathematics for Elementary Teachers I | 3 |
| MATH 351 | Topics in Mathematics for Elementary Teachers II | 3 |
| SPED 346 | Introduction to Exceptional Children | 3 |
| ENVS 403 | Environmental Ethics and Law | 3 |
| ESCI 461 | Earth Science for Teachers | 3 |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs | 3-6 |
| Plus 3 sh from: |  |  |
| ELED 300 | Introduction to Teaching | 3 |
| or SED 300 | The Teaching Profession |  |
| Plus 3 sh from: |  |  |
| ELED 200 | Education in Global Society | 3 |
| or SED 300 | The Teaching Profession |  |

Total Hours

## Other Requirements

A grade of " $C$ " or higher must be earned in all History and Political Science courses required for this major. Fifteen semester hours of the major must be taken at Texas A\&M University-Commerce.

## History B.A/B.S.

The purpose of this bachelor's degree for students is to become trained in the discipline of history. The objectives of this program are to acquaint students with the human past; to provide insight into the nature of the historic process; and to teach students to analyze and think critically about historical works and issues, and express their judgments clearly in writing. At the conclusion of this program students will be able to demonstrate an understanding of historiography, that is, a familiarity with a range of historical methods, theories, and schools of interpretation. They will also be able to research and write thesis-driven papers on historical topics, using appropriate sources.
This particular emphasis is designed to acquaint students who do not seek teacher certification with the field of history. This emphasis may be of interest to students who intend to pursue advanced degrees in history, or pursue a career in public history, historic preservation, or government service.

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
any 300- or 400-level History course 3
HIST 253 Reading and Writing History ..... 3
HIST $305 \quad$ World History: Origins through the Seventeenth Century ..... 3
HIST 306 The Emergence of the Modern World ..... 3
HIST 360 Themes in World History ..... 3
Early European History
HIST 312 Ancient and Medieval Europe ..... 3
Modern European History
HIST 327 Europe in the Age of Enlightenment and Revolution, 1648-1848 ..... 3
or HIST 333 Modern Europe, 1848-1991
Asia or Latin American HistoryChoose 3 sh from the following:3

| HIST 365 | History of Modern East Asia |
| :--- | :--- |
| HIST 366 | Modern India |
| HIST 375 | Colonial Latin America |
| or HIST 385 | Latin America in the Modern Period |

## Early U.S. History

Choose 3 sh from the following: 3

| HIST 402 | Colonial North America to 1775 |
| :--- | :--- |
| HIST 403 | Revolutionary America and the Early National United States, 1775-1850 |
| or HIST 404 | Religion in Early American History |
| Modern U.S. History |  |
| HIST 407 | Emergence of Modern America, 1850-1920 |
| HIST 409 | The Twentieth-Century United States |

Focused Study of European History
Choose 3 sh from the following:

HIST 313
HIST 314
HIST 329
or HIST 334
Focused Study of U.S. History
Choose 3 sh from the following:
A Feudal Society
The European Reformations
Women and Gender in European History
Urban Underworlds: The City and Its People in Modern Europe
HIST 404

Religion in Early American History
The Civil War and Reconstruction, 1850-1877
Race and Education in the 20th Century US
Themes in Southern History
American Diplomatic History
Women and Gender in U.S. History

## Required Electives

41 hours of electives required

Total Hours

## Other Requirements

A grade of " $C$ " or higher must be earned in all History courses required for this major. Fifteen semester hours of History must be taken at Texas A\&M University-Commerce.

## History Minor

Required courses in the minor
HIST 253 Reading and Writing History 3

HIST $305 \quad$ World History: Origins through the Seventeenth Century
HIST $306 \quad$ The Emergence of the Modern World 3
Plus 3 sh Europe

| Choose 3 sh from the following: |  |
| :--- | :--- |
| HIST 312 | Ancient and Medieval Europe |
| HIST 313 | A Feudal Society |
| HIST 314 | The European Reformations |
| HIST 327 | Europe in the Age of Enlightenment and Revolution, 1648-1848 |
| HIST 329 | Women and Gender in European History |
| HIST 333 | Modern Europe, 1848-1991 |
| HIST 334 | Urban Underworlds: The City and Its People in Modern Europe |

## Plus 3 sh World, Asia, or Latin America

Choose 3 sh from the following:

| HIST 360 | Themes in World History |
| :--- | :--- |
| HIST 365 | History of Modern East Asia |
| HIST 366 | Modern India |
| HIST 375 | Colonial Latin America |
| HIST 385 | Latin America in the Modern Period |

Plus 3 sh U.S.

| Choose 3 sh from the following: |  |
| :--- | :--- |
| HIST 402 | Colonial North America to 1775 |
| HIST 403 | Revolutionary America and the Early National United States, 1775-1850 |
| HIST 404 | Religion in Early American History |
| HIST 405 | The Civil War and Reconstruction, 1850-1877 |
| HIST 407 | Emergence of Modern America, 1850-1920 |
| HIST 409 | The Twentieth-Century United States |
| HIST 411 | Race and Education in the 20th Century US |
| HIST 425 | Themes in Southern History |
| HIST 437 | American Diplomatic History |
| HIST 439 | Women and Gender in U.S. History |

Total Hours

## Other Requirements

A grade of " $C$ " or better must be earned in all History courses required for this minor. Nine semester hours of history must be taken at A\&M-Commerce.

## History Second Major

| Required courses in the major |  |  |
| :---: | :---: | :---: |
| HIST 253 | Reading and Writing History | 3 |
| HIST 305 | World History: Origins through the Seventeenth Century | 3 |
| HIST 306 | The Emergence of the Modern World | 3 |
| HIST 360 | Themes in World History | 3 |
| Plus 3 sh Europe: |  |  |
| Choose 3 sh from the following: |  | 3 |
| HIST 312 | Ancient and Medieval Europe |  |
| HIST 327 | Europe in the Age of Enlightenment and Revolution, 1648-1848 |  |
| HIST 333 | Modern Europe, 1848-1991 |  |
| Plus 3 sh Asia or Latin America: |  |  |
| Choose 3 sh from the following: |  | 3 |
| HIST 365 | History of Modern East Asia |  |
| HIST 366 | Modern India |  |
| HIST 375 | Colonial Latin America |  |
| HIST 385 | Latin America in the Modern Period |  |
| Plus 3 sh U.S. |  |  |
| Choose 3 sh from the following: |  | 3 |
| HIST 402 | Colonial North America to 1775 |  |
| HIST 403 | Revolutionary America and the Early National United States, 1775-1850 |  |
| HIST 407 | Emergence of Modern America, 1850-1920 |  |
| HIST 409 | The Twentieth-Century United States |  |


| Plus 3 sh focused study in European History: |  |
| :--- | :--- |
| Choose 3 sh from the following: |  |
| HIST 313 | A Feudal Society |
| HIST 314 | The European Reformations |
| HIST 329 | Women and Gender in European History |
| HIST 334 | Urban Underworlds: The City and Its People in Modern Europe |

## Plus 3 sh from focused study in U.S. history:

| Choose 3 sh from the following: |  |
| :--- | :--- |
| HIST 404 | Religion in Early American History |
| HIST 405 | The Civil War and Reconstruction, 1850-1877 |
| HIST 411 | Race and Education in the 20th Century US |
| HIST 425 | Themes in Southern History |
| HIST 437 | American Diplomatic History |

## Plus 3 sh from:

Choose 3 sh from the following:
any 300- or 400-level History course
Total Hours

## Other Requirements

A grade of "C" or higher must be earned in all History courses required for this major. Fifteen semester hours of History must be taken at Texas A\&M University-Commerce.

## Liberal Studies

Liberal Studies is an interdisciplinary undergraduate program that offers both the Bachelor of Science and Bachelor of Arts degrees. Pulling from traditional university learning-the humanities, fine arts, the social sciences-Liberal Studies encourages the kind of learning valued today by many educators and employers. The diverse nature of the program prepares students in the areas of communication skills, critical thinking, and the ability to master new subjects, ideas, and skills. Its flexible yet coherent degree program is made up of courses taught through traditional classroom methods as well as through non-traditional instruction, such as distance education and online teaching.

Although not intended to train or encourage proficiency in any narrowly defined academic field, the Liberal Studies program encourages students to learn more about themselves and their world using a variety of disciplinary approaches. As such, it provides an opportunity to explore new modes of thinking, creative ways of asking questions, and unconventional means of problem solving. The program is designed to promote personal and intellectual growth that is not only enriching in its own right, but one that helps ensure success in careers and post-baccalaureate studies. Graduates seeking advanced degrees in such areas as education, law, communications, and business will find that a bachelor's in Liberal Studies lays the groundwork for further educational advancement. What is more, the program's flexibility is ideally suited for students wanting to acquire the broad-based knowledge and skills that are increasingly demanded by today's workplace.

Liberal Studies B.A./B.S (p. 171)
Gender Studies Minor (p. 171)

## Gender Studies Minor

| GDRS 300 | Fundamentals of Gender Studies | 3 |
| :---: | :---: | :---: |
| GDRS 400 | Topics in Gender Studies | 3 |
| Select 12 from: |  | 12 |
| ANTH 2351 | World Cultures: Perspectives from Anthropology |  |
| ENG 358 | Language and Society |  |
| HHPH 385 | Current Issues in Health |  |
| HIST 497 | Special Topics in History (Religion in Early American History) |  |
| HIST 497 | Special Topics in History (Witchcraft in Salem) |  |
| PSY 2306 | Psychology of Sexual Behavior |  |
| SOC 316 | Marriage and Family |  |
| ART 497 | Special Topics |  |
| ENG 335 |  |  |
| HIST 329 | Women and Gender in European History |  |
| HIST 439 | Women and Gender in U.S. History |  |
| Total Hours |  | 18 |

## Liberal Studies B.A./B.S.

Liberal Studies allows you to build the degree that best suits your interests and ambitions. An interdisciplinary undergraduate program designed to meet the needs of our increasingly diverse culture and marketplace, Liberal Studies draws from all areas of traditional university learning-the humanities, fine arts, the social sciences, math, and the natural sciences-in order to develop the kind of learning valued today by many educators and employers: communication skills, critical
thinking, and the ability to master new subjects, ideas, and skills. Working with the Director, you will craft a degree plan that specifically meets your needs and ambitions.

| University Studies Courses |
| :--- |
| See the University Studies Requirements |
| Required Courses in the Major |
| LIBS $300 \quad$ Introduction to Liberal Studies |
| LIBS $400 \quad$ Liberal Studies Senior Seminar |
| Language Requirement |
| foreign language or equivalent * |
| Concentration Requirements |
| Concentration in one subject area** |
| Complementary Field |
| Complementary Field Requirements |
| Other Requirements |
| elective courses *** |
| Total Hours |
| $* \quad$Two courses ( 6 semester hours) in foreign language or equivalent are required for a BS in Liberal Studies. Four courses (12 semester hours) in |
| foreign language or equivalent are required for a BA in Liberal Studies. |

## The Concentration and Complementary Fields

Students select a Concentration (at least 23 semester hours) in either one of the four interdisciplinary fields (Child and Family Studies, Global and Multicultural Issues, Popular Culture Studies, and Ways of Seeing and Knowing) or one of the traditional disciplines represented by the College of Humanities, Social Sciences and Arts. Students may also select courses for the Complementary Field (at least 15 semester hours) from either the College of Humanities, Social Sciences and Arts, the College of Science, Engineering and Agriculture, the College of Business and Entrepreneurship, or the College of Education and Human Services. Courses available from these colleges are listed in the current Undergraduate Catalog. An overall GPA of 2.5 is required in both the concentration and complementary fields with no grade lower than a C.

## Liberal Studies Interdisciplinary Fields

Liberal Studies students may focus their Concentration (23 hours) in one of the more traditional disciplines within the College of Humanities, Social Sciences, and Arts. Or students may choose to work in one of the four interdisciplinary concentrations listed below. They may focus their Complementary Field coursework ( 15 hours) in one of the disciplines in the College of Humanities, Social Sciences, and Arts; College of Science, Engineering, and Agriculture; College of Business and Entrepreneurship; or College of Education and Human Services.

## Child and Family Studies

The Child and Family Studies concentration encourages investigation into the many facets of contemporary domestic living. This area of investigation explores such topics as home and family welfare, parental dynamics, community involvement, and childhood development.

## Courses for this concentration include:

AGED $371 \quad$ Agricultural and Youth Leadership 3
CJ 326 Juvenile Delinquency 3

COUN 316 Parent and Family Dynamics 3
COUN 414 Home and Family Living 3
ECE $313 \quad$ Child Development: Early Years 3
ECE 358 Language Acquisition and Development in Early Childhood Education 3
ECE $364 \quad$ Survey of Theories Influencing Childhood Development 3
ECE 366 Learning Environments 3
ECE $460 \quad$ Early Childhood Curriculum 3
ENG $305 \quad$ Children's Literature 3

| ENG 406 | Adolescent Literature | 3 |
| :--- | :--- | :--- |
| HHPH 331 | Nutrition | 3 |
| HHPH 362 | Human Diseases | 3 |
| HHPK 324 | Health and Kinesiology for Children | 3 |
| PSY 300 | Learning Processes and Development | 3 |
| PSY 319 | Child and Adolescent Development | 3 |
| PSY 321 | Psychology of Adolescence | 3 |
| PSY 322 | Lifespan Development | 3 |
| PSY 443 | Psychology of Death and Dying | 3 |
| SOC 316 | Marriage and Family | 3 |
| SOC 317 |  | 3 |
| SPED 346 | Introduction to Exceptional Children | 3 |
| SWK 361 | Issues in Family Treatment | 3 |
| SWK 362 | Child Welfare | 3 |

## Global and Multicultural Issues

The Global and Multicultural Issues concentration emphasizes the diverse ways of looking at world cultures today. Its courses reflect the varying ways we understand communal and individual identity through the lens of race, ethnicity, gender, economics, politics, and culture, both in the United States and abroad. Students in this concentration are not only encouraged to enroll in courses that approach scholarship in a global context, but are also provided with an opportunity to apply that knowledge in a hands-on manner through practicum and field studies.

## Courses for this concentration include:

| AG 392 | Applied Ethics: US and World Agriculture | 3 |
| :---: | :---: | :---: |
| ANTH 2351 | World Cultures: Perspectives from Anthropology | 3 |
| ANTH 450 | Gender in Cross-Cultural Perspective | 3 |
| ART 405 | History of Modern Art | 3 |
| BAAS 345 | Organizational Leadership | 3 |
| ENG 355 | Women Writers | 3 |
| BAAS 409 | Global Technology and Society | 3 |
| ENG 202 | Multi-Ethnic American Literature | 3 |
| ENG 323 | Mythology | 3 |
| ENG 432 | History and Aesthetics of Film | 3 |
| ENG 444 | African American Literature | 3 |
| HIST 303 | Historical Geography | 3 |
| HIST 360 | Themes in World History | 3 |
| HIST 365 | History of Modern East Asia | 3 |
| HIST 497 | Special Topics in History | 1-4 |
| PSCI 333 | Non-European Political Systems | 3 |
| PSCI 438 | International Relations | 3 |
| PSCI 488 | Contemporary Ideas | 3 |
| SOC 310 | Psychology and Sociology of Diverse Populations | 3 |
| SOC 335 | Global Social Issues | 3 |
| SOC 370 | Minority Groups | 3 |

## Popular Culture Studies

Popular Culture Studies focuses on the many ways in which mass culture and media both reflect and inform our daily lives. The courses that make up this interdisciplinary concentration examine the ways we work, define leisure, and become consumers. They cover a wide variety of topics such as movies, television, sports, music, comics, magazines, museums, folk art, memorabilia and collecting, celebratory events, as well as the cultural ramifications of technology and advertising. Students are encouraged to engage these popular subject matters not only within their personal lives, but in light of cultural and political contexts as well.

## Courses for this concentration include:

ART $1301 \quad$ Art, Technology and Civilization 3
ART 304 3
ART 404 Contemporary Issues 3

| BAAS 409 | Global Technology and Society | 3 |
| :--- | :--- | :--- |
| CJ 360 | Mass Media and Crime | 3 |
| ENG 200 | Popular Literature and Culture | 3 |
| ENG 406 | Adolescent Literature | 3 |
| ENG 432 | History and Aesthetics of Film | 3 |
| HIST 264 | A Nation Divided: American History | 3 |
| JOUR 1307 | Mass Communication in Society | 3 |
| JOUR 260 | Advertising Principles | 3 |
| JOUR 335 | Media History | 3 |
| JOUR 445 | Ethics in the Media | 3 |
| MKT 386 | Channels of Distribution | 3 |
| MUS 1310 | Jazz; New Orleans to Jazz/Rock | 3 |
| PSCI 488 | Contemporary Ideas | 3 |
| SPC 418 | Communication and Social Change | 3 |

## Ways of Seeing and Knowing

The Ways of Seeing and Knowing concentration is designed to enable the individual to look upon the world from multiple perspectives so as to appreciate its richness and diversity. We may be limited to our own two eyes in perceiving the world (our egocentric predicament), but by exploring ways of seeing and knowing, we can break out of our culturally-determined egocentric, ethnocentric, and aristocentric limitations to understand and appreciate the world in all its complexity.

## Courses for this concentration include:

ART 1303 History of Art I ..... 3
ART 307 ..... 3
ART 404 Contemporary Issues ..... 3
ART 405 History of Modern Art ..... 3
BAAS 345 Organizational Leadership ..... 3
BAAS 350 Knowledge Management ..... 3
BAAS 444 Strategies for Decision Making ..... 3
CJ 488 Ethics in Criminal Justice ..... 3
ENG 323 Mythology ..... 3
ENG 432 History and Aesthetics of Film ..... 3
ENG 474 Topics in World Literature ..... 3
HIST 253 Reading and Writing History ..... 3
MUS 323 Music History I ..... 3
MUS 324 Music History II ..... 3
PHIL 1301 Introduction to Philosophy ..... 3
PHIL 2303 Logic ..... 3
PHIL 331 History of Philosophy I ..... 3
PHIL 332 History of Philosophy II ..... 3
PHIL 360 General Ethics ..... 3
PHIL 362 Aesthetics ..... 3
PHIL 497 Special Topics ..... 3
PSCI 330 Introduction to Political Science ..... 3
PSCI 345 Public Opinion ..... 3
PSCI 410 Political Theory I ..... 3
PSCI 411 Political Theory II ..... 3
PSCI 412 Political Theory III ..... 3
PSCI 414 American Political Thought ..... 3
PSY 2301 Introduction to Psychology ..... 3
PSY 310 Psychology and Sociology of Diverse Populations ..... 3
PSY 317 Psychology of Personality ..... 3
PSY 327 Cognitive Social Psychology ..... 3

## Literature and Languages

The Department of Literature and Languages is a multidisciplinary department with programs and emphases in English, linguistics, foreign languages, and philosophy, and affords opportunities to the student for academic enrichment through diverse offerings and an international faculty.

Degrees awarded are the Bachelor of Arts in English and Spanish; the Master of Arts and Master of Science degrees in English; the Master of Arts in Spanish; and the Ph.D. in English.

Courses in the Department of Literature and Languages improve the reading, writing, and analytical skills of students, offer insight into the use and structure of language, develop an understanding and appreciation of literature, and explore film as an art form. The programs offered for non-teaching majors are designed to prepare students to enter graduate study, or as basic preparation for professions such as law, publishing, ministry, broadcasting, government, advertising, free-lance writing, creative writing, and business. The programs prepare students to write effectively, to think and read critically and analytically, and to understand cultural and social differences.

## English

In order to secure a well-balanced program, students majoring or minoring in English will elect their courses in accordance with the following plans of study:

- Liberal Arts and Pre-Professional Major in English
- Second Major, or Minor, in English
- Teaching ESL Minor
- TESOL (Teaching English to Speakers of Other Languages) Minor

Teacher Education Program

- Secondary Teacher Certification, Grades 8-12
- Middle Level Teaching Field in English/Language Arts/Reading, Grades 4-8
- English as a Second Language Endorsement

Students seeking a bachelor's degree in the following major must complete:

1. degree requirements for a Bachelor of Arts degree and
2. University Studies Requirements (p.39) (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown below.

## Teacher Education Programs in English/Language Arts

Students seeking a Bachelor's of Arts degree in any of the following teacher education programs must complete:

1. degree requirements for a Bachelor of Arts degree (refer to the bachelor's degree requirements section of this catalog);
2. University Studies Requirements (p. 39) (refer to that section of this catalog);
3. requirements for admission to and retention in the Teacher Education Program (refer to the Center for Educator Certification and Academic Services section of this catalog); and
4. professional development courses (refer to the appropriate departmental section in this catalog, e.g., Department of Elementary Education or Department of Secondary and Higher Education).

In addition, courses in the major must be completed as shown below.
Students desiring concentrated study in English should choose one of the following:

- Teacher Education Programs (English):
- Secondary Education, Grades 8-12
- Middle Level English/Language Arts/Reading, Grades 4-8
- English as a Second Language Endorsement


## TExES and Teacher Certification

Students seeking certification in English/Language Arts/Reading should consult with the TExES adviser for English in the department as early as possible, but no later than the beginning of their junior year.

## Foreign Languages and Linguistics

This section of the Department of Literature and Languages offers instruction in understanding and speaking, reading, and writing as well as the study of literature in French and Spanish. The emphasis in all courses is on the student's ability to communicate adequately in a foreign language. Beginning courses emphasize speaking and understanding the language and the culture of people who use the language; advanced courses emphasize reading, writing, and speaking the language, as well as analyzing literature.

Advanced placement with credit is available for students who have begun French or Spanish in high school and have a score of three or above on the appropriate CEEB examination.

The foreign language staff is especially interested in developing teachers of foreign languages in both the elementary and secondary schools. Interdisciplinary Studies majors are encouraged to choose Spanish as an academic specialization.

Students who enter the University with previous high school or college credits or with native language proficiency and who wish to enroll in the same language normally should continue without repeating equivalent work. Equivalent courses in the same language may not be repeated for credit. However, students with language experience may enroll in equivalent courses in the same language on a non-credit basis. Students may also request a placement examination and interview to determine the status of their preparation. One high school unit (year) may be equivalent to one college semester upon approval of the department head.

The language requirement for a Bachelor of Arts degree may be satisfied by FRE 131, FRE 132, FRE 231, FRE 232 or SPA 131, SPA 132, SPA 231, SPA 232, or the equivalent of these courses.

## Philosophy

The philosophy offerings are designed to provide electives for students in any major area, but especially in the liberal arts. There are no formal prerequisites for any course.

The courses in philosophy introduce the student to some of the most enduring and challenging problems that we know and the attempts we have made to solve them. Students who take courses in philosophy enhance their ability to think critically and vigorously, analyze arguments, and express their views clearly and concisely, orally and in writing. Courses in philosophy are good preparation for students considering graduate studies, law, medicine, and work with government agencies and private corporations.

The University Studies requirement in behavioral science may be satisfied by completing PHIL 251, and the University Studies requirement in Humanities and Fine Arts may be satisfied by completing PHIL 231 or PHIL 331 or PHIL 332 or PHIL 360 or PHIL 362.

## Spanish

Emphasis in Liberal Arts and Pre-Professional Programs Courses in Spanish enable the student to learn the Spanish language and become familiar with Hispanic culture. Majors in Spanish also study the outstanding figures of Spanish and Latin American literature and civilization and are prepared for careers in teaching, government service and private corporations. Students may choose to major or minor in Spanish. The plans of study include the following:

- Major in Spanish (http://coursecatalog.tamuc.edu/undergrad/programs/1844)
- Second Major in Spanish (http://coursecatalog.tamuc.edu/undergrad/programs/1846)
- Minor in Spanish (http://coursecatalog.tamuc.edu/undergrad/programs/1845)

Students seeking a bachelor's degree in the following non-teacher education major must complete:

1. degree requirements for a Bachelor of Arts degree and
2. University Studies Requirements (p. 39) (refer to those sections of this catalog).

In addition, courses in the major must be completed.
Note: Oral proficiency is an integral component of language instruction at Texas A\&M-Commerce. Before credit or equivalency is given for a foreign language correspondence course, the student requesting such credit or equivalency must demonstrate satisfactory oral proficiency in the language as determined by the department head.

## Teacher Education Programs in Spanish

Students may choose to major or minor in Spanish or to elect Spanish as their field in the teacher education program.

Students seeking a bachelor's degree in any of the following teacher education programs must complete:

1. degree requirements for a Bachelor of Arts or Science degree (refer to the bachelor's degree requirements section of this catalog),
2. University Studies Requirements (p. 39) (refer to that section of this catalog),
3. requirements for admission to and retention in the Teacher Education Program (refer to the Center for Educator Certification and Academic Services section of this catalog), and
4. professional development courses (refer to the appropriate departmental section in this catalog, e.g., Department of Elementary Education or Department of Secondary and Higher Education).

In addition, courses in the major must be completed.

## L.O.T.E and Teacher Certification

Students seeking certification in Spanish or French should consult with the Spanish and/or French advisor in the department as early as possible, but no later than the beginning of their junior year.

Students in the Secondary Spanish (8-12) program must meet all of the following department criteria in order to be approved to go into their internship semester. Students who fail to meet the department criteria will have to fulfill a department remediation plan before they can be approved for internship.

1. Complete all required course work, including a minimum of 12 hours of upperlevel (300-400) courses in Spanish while in residence at Texas A\&MCommerce. Study abroad hours will NOT count toward the 12 hour residency requirement.
2. A GPA of 3.0 or above in Spanish courses at the 300 - and 400 -level.
3. A "B" or above in the following courses: SPA 331 or SPA 333 , SPA 332 or SPA 334, SPA 341, SPA 353, SPA 354, and SPA 485 Seminar in Spanish (senior seminar). Grades of "C" or lower in these courses will have to be repeated with a "B" or higher.
4. No more than two grades of "C" in ANY Spanish course whether taken at A\&M-Commerce or at another university or college
5. An overall GPA of 3.0 in all Spanish and support course work (ENG 358, ENG 457, ENG 462).
6. A meeting with the Spanish Adviser prior to one's senior year and preferably at the beginning of the junior year.
7. Take and pass the Pedagogy and Professional Responsibilities exam.

English B.A. (p. 177)
English Minor (p. 180)
English Second Major (p. 180)
English as a Second Language Endorsement (EDL) (p. 181)
French Minor (p. 181)
Middle School English/Language Arts/Reading B.A. (p. 182)
Philosophy Minor (p. 183)
English B.A. - Secondary School (8-12) English Teacher Certification (p. 179)
Spanish B.A. (p. 183)
Spanish Minor (p. 184)
Spanish Second Major (p. 185)
Teaching English as a Second Language Minor (p. 185)
Teaching English to Speakers of Other Languages (TESOL) Minor (p. 185)
Writing Minor (p. 186)

## English B.A.

## Emphasis in Liberal Arts and Pre-Professional Programs

Students desiring the B.A. in English will consult with the department head or their major adviser. At that time, a degree audit will be provided that specifies courses taken in the major and supporting fields. Each individually tailored degree audit will need to be submitted to the Graduation Coordinator in the semester the student anticipates graduating.

While students will be counseled to construct a well-balanced program, it is possible, by making the best use of departmental resources (regular course offerings, special topics seminars and colloquia, independent studies courses) and of supporting work outside the department, to devise sequences of study with special emphases: in literature (British, American, world); in languages and linguistics; in communications and creative writing; in philosophy, aesthetics, literary theory, or film; or in special cross-disciplinary areas of interest.

The B.A. in English is flexible enough to accommodate students with a wide variety of interests and career goals. It is suitable for students who wish to enter law, medicine, ministry, or business; who intend to take graduate work in the humanities for college teaching credentials; who intend to enter any profession or post-B.A. professional training program where competence in communication skills and a broad cultural awareness are required; or who desire to pursue an interest in literature and languages.

## University Studies Courses

See the University Studies Requirements

## Required courses in the major, minor or specialization

All English majors must take both:

| ENG 333 | Advanced Writing: Non-Fiction | 3 |
| :--- | :--- | :--- |
| ENG 399 | Literary and Research Methods * | 3 |

In addition, all majors must satisfy the appropriate hour requirements in the following four subject areas:

## British Literature

| Choose 3 sh from the following: |  |
| :--- | :--- |
| ENG 311 | Shakespeare |
| ENG 336 | British Poetry |
| ENG 425 | Development of the Novel |
| ENG 472 | Survey of English Literature II |
| ENG 451 | Twentieth-Century British Literature |
| ENG 471 | Survey of English Literature I |

## American Literature

Choose 3 sh from the following:
ENG 351 American Novel Before World War I

ENG 352 American Novel After World War I
ENG 355 Women Writers
ENG 441 A Survey of American Literature I
ENG 442 A Survey of American Literature II
ENG 444 African American Literature

## Genre

Choose 3 sh from the following: 3

| ENG 305 | Children's Literature |
| :--- | :--- |
| ENG 323 | Mythology |
| ENG 336 | British Poetry |
| ENG 351 | American Novel Before World War |
| ENG 352 | American Novel After World War I |
| ENG 406 | Adolescent Literature |
| ENG 425 | Development of the Novel |
| ENG 432 | History and Aesthetics of Film |
| ENG 434 | Literature and Film |
| ENG 474 | Topics in World Literature |

Language, Theory, and Composition
Choose 6 sh from the following: 6

| ENG 301 | Modern Grammar |
| :--- | :--- |
| ENG 315 | Advanced Writing: Creative Writing |
| ENG 317 | Word Building |
| ENG 331 | Introduction to Linguistics |
| ENG 332 | Pre-Law Composition |
| ENG 341 | Technical Writing |
| ENG 358 | Language and Society |



# English B.A. - Secondary School (8-12) English Teacher Certification 

## Secondary and All-Level Education

See for information: Secondary and All-Level Education (http://coursecatalog.tamuc.edu/undergrad/secondary-and-all-level-education)

## Teacher Certification, 8-12 English/Language Arts/Reading

Students in the Secondary English/Language Arts/Reading (8-12) program must meet all of the following department criteria in order to be approved to go into their internship semester. Students who fail to meet the department criteria will have to fulfill a department remediation plan before they can be approved for internship.

> 1. A "B" or higher grade in Secondary English TExES-designated classes: ENG 300 Reading, Analyzing, Teaching Literature, ENG 333 Advanced Writing: Non-Fiction, and ENG 403 The Discipline of English or ENG 420 Approaches to Literature.
> 2. No more than one "C" grade in any English course.
> 3. A minimum GPA of 3.0 in the upper-level $(300-400)$ English courses.
> 4. A THEA Reading Score of 250 .

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
ENG $300 \quad$ Reading, Analyzing, Teaching Literature 3
ENG $311 \quad$ Shakespeare 3
ENG $333 \quad$ Advanced Writing: Non-Fiction 3
ENG $399 \quad$ Literary and Research Methods 3
ENG $441 \quad$ A Survey of American Literature I 3
ENG $442 \quad$ A Survey of American Literature II 3
ENG $471 \quad$ Survey of English Literature I 3
ENG $472 \quad$ Survey of English Literature II 3
ENG 301 Modern Grammar * 3
or ENG 424 Development of the English Language
ENG 403
The Discipline of English


* These three courses also apply to requirements for the ESL Endorsement and Bilingual Interdisciplinary.
** Course may be used as both university studies and major.


## English Minor

Four advanced (300- or 400-level) English courses (six semester hours of advanced English must be taken at A\&M-Commerce). 12
ENG $2326 \quad$ Introduction to Literature 3
ENG $202 \quad$ Multi-Ethnic American Literature 3
or ENG 2331 Literature of the Western World
Total Hours

* ENG 1301 and ENG 1302 Written Argument and Research or equivalency are prerequisites for ENG 2326 Introduction to Literature.


## Other Requirements

A grade of " $C$ " or higher must be earned in English courses at the 200-level and above to satisfy requirements for this minor. Capstone courses may not be used to satisfy this minor.

## English Second Major

## Required courses for second major

Six advanced (300-400 level) English courses
Four courses (12-14 sh) in a foreign language or equivalent are strongly recommended.
Students who are considering teaching in high schools or middle schools should follow the course requirements for English or language arts teacher certification. Capstone courses do not count toward the second major.
ENG 2326

ENG 1301 and ENG 1302 or equivalency are prerequisites for ENG 2326

| Plus 3 sh from: |  |
| :--- | :--- |
| ENG 202 | Multi-Ethnic American Literature |
| ENG 2331 | Literature of the Western World |
| Total Hours |  |

## Other Requirements

A grade of " $C$ " or higher must be earned in all English courses required for this second major. Twelve semester hours of Advanced English (300-level or above) must be taken at Texas A\&M University-Commerce.

## Notes

This program is not an option for secondary certification, option II, English majors. Students electing English as a second major should consult with the head of the department of Literature and Languages. Recommendations in course selection will be based on the specific uses the student will make of the second major (e.g., in preparation for graduate study in literature or language or in preparation for the GRE, MCAT, or other professional school entrance examinations).

## English as a Second Language Endorsement (EDL)

## Requirements

Student teaching in ESL or one year's teaching experience in an ESL or bilingual classroom
Passing the ESL TExES
ENG $358 \quad$ Language and Society 3
ENG $301 \quad$ Modern Grammar 3

| or ENG 331 | Introduction to Linguistics |
| :--- | :--- |
| ENG 457 | Teaching English as a Second Language |

ENG $462 \quad$ Language Acquisition and Processing 3

## Other Requirements

Students must earn a "B" grade or above in each of the four required courses. Students who have earned one " $C$ " grade are considered to be at risk and may have to retake a course or courses.

## French Minor

Students may minor in French for the bachelor's degree by completing eighteen hours of which nine advanced semester hours must be taken at Texas A\&M University-Commerce.

## Requirements for Minor Elementary

| FRE 131 | Elementary French I | 3 |
| :--- | :--- | :--- |
| FRE 132 | Elementary French II | 3 |
| Advanced |  | 12 |
| Adv. courses |  | 18 |
| Total Hours |  |  |
| Requirements for Minor Intermediate |  |  |
| FRE 231 | Intermediate French I | 3 |
| FRE 232 | Intermediate French II | 3 |
| Advanced |  | 12 |
| Adv. courses |  | 18 |

## Notes

Oral proficiency is an integral component of language instruction at Texas A\&M-Commerce. Before credit or equivalency is given for a foreign language correspondence course, the student requesting such credit or equivalency must demonstrate satisfactory oral proficiency in the language as determined by the Literature and Languages Department.

## Middle School English/Language Arts/Reading B.A.

These programs meet state guidelines for students who wish to teach in Middle School (MS) English, Language Arts, and Reading.
Students in the Middle School English/Language Arts/Reading (4-8) program must meet all of the following department criteria in order to be approved to go into their internship semester. Students who fail to meet the department criteria will have to fulfill a department remediation plan before they can be approved for internship.

1. A " $B$ " or higher grade in Secondary English TExES-designated classes: ENG 300 Reading, Analyzing, Teaching Literature, and ENG 333 Advanced Writing: Non-Fiction.
2. No more than one "C" grade in any English, Reading, or Speech course.
3. A minimum GPA of 3.0 in the upper-level (300-400) courses in English, Reading, and Speech.
4. A THEA Reading Score of 250 .

## Secondary and All-Level Education

See for information: Secondary and All-Level Education (http://coursecatalog.tamuc.edu/undergrad/secondary-and-all-level-education)

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
ENG 202 Multi-Ethnic American Literature *
ENG 300 Reading, Analyzing, Teaching Literature 3
ENG 301 Modern Grammar \# 3
ENG 305 Children's Literature 3
ENG 323 Mythology 3
ENG 406 Adolescent Literature 3

ENG 432 History and Aesthetics of Film *
or ENG 434 Literature and Film
or ENG 444 African American Literature
ENG 331 Introduction to Linguistics ** 3
ENG 332 Pre-Law Composition 3
ENG 358 Language and Society ** 3
SPC 1315 Fundamentals of Public Speaking
$\begin{array}{ll}\text { Teacher Education courses } & \\ \text { MLED } 401 & \text { Differentiating Instruction for Diverse Learners }\end{array}$
MLED $402 \quad$ Best Practices in Pedagogy and Assessment 3
MLED $403 \quad$ Organization, Motivation and Management in Middle Level Classrooms 3
MLED 404 Developing Communication Skills 3
MLED $410 \quad$ Fostering School, Family, and Community Relationships 3
or ELED 200 Education in Global Society
ELED $452 \quad$ Student Teaching in Field-Based Teacher Education Programs 3-6
RDG $380 \quad$ Comprehension and Vocabulary in Middle and High Schools 3
RDG $450 \quad$ Middle School Reading: Theory \& Practice 3
$\begin{array}{lll}\text { Math and Science courses } & & \\ \text { MATH } 350 & \text { Topics in Mathematics for Elementary Teachers I }\end{array}$
MATH 351 Topics in Mathematics for Elementary Teachers II 3
Support courses
Foreign Language 12
PSY 300 Learning Processes and Development 3
PSY $310 \quad$ Psychology and Sociology of Diverse Populations ** 3
SPED 346
Introduction to Exceptional Children 3

| MLED 314 | Young Adolescent Development |
| :--- | :--- |
| Total Hours | $121-124$ |

Total Hours

* Course may be used as both university studies and major.
** These three courses also apply to requirements for the ESL Endorsement and Bilingual Interdisciplinary.
*** PSY 310 Psychology and Sociology of Diverse Populations required if not take as capstone in the Core.


## Philosophy Minor

## Requirements

A minor in philosophy for the bachelor's degree consists of 18 semester hours.

| PHIL 2303 | Logic |
| :--- | ---: |
| Phil (12 advanced) | 15 |
| Total Hours | 18 |

Total Hours18

## Spanish B.A.

This plan of study is for students who wish to earn a B.A. degree in Spanish. It requires thirty six hours.


## Other Requirements

A grade of "C" or higher must be earned in all Spanish courses required for this major. Twelve semester hours of Advanced (300-level or above) Spanish must be taken at Texas A\&M University-Commerce.

## Secondary Teacher Certification

This plan of study is for students who wish to be certified to teach Spanish at the secondary level (grades 8-12). It requires 36 semester hours.


## Specialization in Bilingual for Interdisciplinary Studies Majors (for Elementary Teaching EC4)

Students desiring to teach in elementary school should consult the appropriate advisor in Elementary Education.

## Requirements

Refer to the Department of Elementary Education section of this catalog.

## Spanish Minor

| Required courses in the minor |  |  |
| :--- | :--- | ---: |
| SPA 131 | Elementary Spanish I |  |
| SPA 132 | Elementary Spanish II |  |
| SPA 231 | Intermediate Spanish I |  |
| SPA 232 | Intermediate Spanish II |  |
| SPA 333 | Spanish for Heritage Speakers I (for heritage speakers) <br> or SPA 331 <br> SPA 334 <br> or SPA 332 | Spanish Conversation for Oral Proficiency |
| SPA 341 | Spanish for Heritage Speakers II (for heritage speakers) <br> Spanish Composition and Grammar | 3 |
| Total Hours | Introduction to Spanish Literature (this course may be substituted for another advanced course) |  |

## Other Requirements

A grade of " $C$ " or higher must be earned in all Spanish courses required for this minor. Nine semester hours of advanced (300-level or above) Spanish must be taken at Texas A\&M University-Commerce.

## Spanish Second Major

Students who are considering teaching in high schools or middle schools and plan to pursue emergency permits should follow the course requirements for English or language arts teacher certification.

## Required courses in the major

| SPA 131 | Elementary Spanish I | 3 |
| :---: | :---: | :---: |
| SPA 132 | Elementary Spanish II | 3 |
| SPA 231 | Intermediate Spanish I | 3 |
| SPA 232 | Intermediate Spanish II | 3 |
| SPA 333 | Spanish for Heritage Speakers I (for heritage speakers) | 3 |
| or SPA 331 | Spanish Conversation for Oral Proficiency |  |
| SPA 334 | Spanish for Heritage Speakers II (for heritage speakers) | 3 |
| or SPA 332 | Spanish Composition and Grammar |  |
| SPA 341 | Introduction to Spanish Literature | 3 |
| SPA 485 | Seminar in Spanish | 3 |
| And 9 advanced hours from: |  | 9 |
| SPA 471 | Literature, history and society of Latin America I: From Re-Columbian to Modernismo |  |
| SPA 472 | Literature, history and society of Latin America, II: From Modernismo to the Present |  |
| SPA 475 | Methods for Teaching Spanish as a Second Language |  |
| SPA 481 | Survey of Early Spanish Literature (1300-1700) |  |
| SPA 482 | Survey of Modern Spanish Literature (1700 to the present) |  |
| SPA 497 | Special Topics |  |

Total Hours

## Other Requirements

A grade of "C" or higher must be earned in all Spanish courses required for this major. Twelve semester hours of advanced (300-level or above) Spanish must be taken at Texas A\&M University-Commerce.

## Teaching English as a Second Language Minor

Required courses in the minor

| SPA 231 | Intermediate Spanish I | 3 |
| :--- | :--- | :--- |
| or FRE 231 | Intermediate French I |  |
| SPA 232 | Intermediate Spanish II |  |
| or FRE 232 | Intermediate French II |  |
| ENG 301 | Modern Grammar | 3 |
| ENG 358 | Language and Society | 3 |
| ENG 457 | Teaching English as a Second Language | 3 |
| ENG 462 | Language Acquisition and Processing | 3 |
| Total Hours |  | 18 |

## Teaching English to Speakers of Other Languages (TESOL) Minor

## Required Courses

| ENG 358 | Language and Society | 3 |
| :--- | :--- | :--- |
| ENG 457 | Teaching English as a Second Language | 3 |
| ENG 462 | Language Acquisition and Processing | 3 |
| ENG 301 | Modern Grammar | 3 |
| or ENG 331 | Introduction to Linguistics |  |

or ENG 424
Development of the English Language

## Required Support Courses

Two (2) 200-level foreign language 6

Total Hours

## Writing Minor

Non-English majors may minor in writing. An eighteen-semester-hour emphasis, in which at least nine semester hours of advanced coursework must be taken at Texas A\&M University-Commerce.

## Includes the following requirements

| ENG 333 | Advanced Writing: Non-Fiction | 3 |
| :---: | :---: | :---: |
| ENG 341 | Technical Writing | 3 |
| Plus 6 sh from: |  | 6 |
| ENG 315 | Advanced Writing: Creative Writing |  |
| ENG 317 | Word Building |  |
| ENG 332 | Pre-Law Composition |  |
| PHIL 2303 | Logic |  |
| Plus 3 sh from: |  | 3 |
| ENG 331 | Introduction to Linguistics |  |
| ENG 358 | Language and Society |  |
| ENG 424 | Development of the English Language |  |
| Plus 3 sh from: |  | 3 |
| JOUR 214 | Basic Reporting |  |
| JOUR 314 | Intermediate Reporting |  |
| JOUR 329 | Writing for Public Relations |  |

Total Hours

## Other Requirements

A grade of " C " or higher must be earned in these courses to satisfy requirements for the minor.

## Mass Media, Communication and Theatre

The Department of Mass Media, Communication and Theatre offers the Bachelor of Arts and Science degrees with majors in Journalism-News Editorial, Journalism-Public Relations, Journalism-Secondary Teacher Certification, Radio-Television, Speech Communication, and Theatre. Master of Arts and Master of Science degrees are offered in theatre. Teacher certification at the secondary educational levels is also available. The department consists of separate, but interrelated majors, with a strong liberal arts education, that prepare students for careers in journalism, public relations, communication arts and technologies and the performing arts.

Students seeking a bachelor's degree in any of the following non-teacher education majors must complete:

1. Degree requirements for a Bachelor of Arts or Science degree and
2. University Studies Requirements (p. 39) (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown.

## Teacher Education Programs

Students seeking a bachelor's degree in any of the following teacher education programs must complete:

1. Degree requirements for a Bachelor of Arts or Science degree (refer to the bachelor's degree requirements section of this catalog),
2. University Studies Requirements (p. 39) (refer to that section of this catalog),
3. Requirements for admission to and retention in the Teacher Education Program (refer to the Center for Educator Certification and Academic Services section of this catalog), and
4. Professional development courses (refer to the appropriate departmental section in this catalog. i.e., Department of Elementary Education or Department of Secondary and Higher Education).

Journalism B.A./B.S.- Emphasis in Broadcast Journalism (p. 188)
Journalism Minor (p. 188)
Journalism Second Major (http://coursecatalog.tamuc.edu/undergrad/colleges-and-departments/humanities-social-sciences-arts/mass-media-communication-theatre/journalism-second-major/Journalism\ Second\ Major)

Journalism B.A./B.S. - Secondary Teacher Certification (Option II) (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/ humanities-social-sciences-arts/mass-media-communication-theatre/journalism-babs-secondary-teacher-certification)

Public Relations Minor (p. 190)
Radio-Television B.A./B.S.- Emphasis in Broadcast Journalism (p. 191)
Radio-Television B.A./B.S.- Emphasis in Digital Media Production (p. 191)
Radio-Television B.A./B.S.- Emphasis in Media Performance (p. 192)
Radio-Television Minor (p. 193)
Speech Communication B.A./B.S. (p. 194)
Speech Communication Minor (p. 194)
Theatre B.A./B.S. - Secondary Teacher Certification (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/humanities-social-sciences-arts/mass-media-communication-theatre/theatre-babs-secondary-teacher-certification)

Theatre B.A./B.S. (p. 194)
Theatre Minor (p. 198)
Theatre Second Major (p. 198)

## Journalism B.A./B.S. - Secondary Teacher Certification

## Secondary and All-Level Education

See for information: Secondary and All-Level Education (http://coursecatalog.tamuc.edu/undergrad/secondary-and-all-level-education)
The Journalism BA/BS graduate with second teacher certification will receive the basic skills and knowledge required of journalism professionals, while obtaining pedagogy and educational professional development course work through the Curriculum and Instruction Department. The student should obtain advising from both the advisor in Journalism and from a Curriculum and Instruction faculty mentor. Students with bachelor's degrees who want to teach should consult the Graduate Catalog for requirements leading to certification.

| Required courses in the major |  |  |
| :---: | :---: | :---: |
| JOUR 115 | Publication Design and Production | 3 |
| JOUR 214 | Basic Reporting | 3 |
| JOUR 260 | Advertising Principles | 3 |
| JOUR 315 | Editing and Production | 3 |
| JOUR 335 | Media History | 3 |
| JOUR 336 | Media Law | 3 |
| JOUR 445 | Ethics in the Media | 3 |
| Required support courses |  |  |
| 3 semester hours from: |  | 3 |
| JOUR 314 | Intermediate Reporting |  |
| JOUR 326 | Advanced Reporting/Feature Writing |  |
| JOUR 350 | Visual Communication for News Publications |  |
| Special Topics class (3) as offered and approved by Division Coordinator. |  |  |

## Journalism B.A./B.S.- Emphasis in Broadcast Journalism

The Journalism/Broadcast Journalism emphasis provides students with the opportunity to obtain a liberal arts education and equips graduates with the intellectual background and professional skills required for entry-level positions and careers in broadcast and digital journalism. The graduate with this major emphasis should possess competencies in video and audio production, on-camera or on-air presentation skills, and news writing and have an understanding of journalistic law and media ethics.


## Journalism Second Major

Course requirements for a second major in journalism (news-editorial or public relations) are the same as for the first major. Substitutions for course requirements may be made with the approval of the journalism division coordinator.

## Journalism-News Editorial B.A./B.S.

The news-editorial emphasis provides students with the opportunity to obtain a liberal arts education and equips graduates with the intellectual background and professional skills required for entry-level positions and careers in print media journalism. The graduate with this major emphasis should possess competencies in news writing and have an understanding of journalistic law and media ethics.

1. Students will be able to write and edit documents (copy) suitable for publication styles in print and online outlets.
2. Students will be able to produce documents that incorporate the necessary design elements suitable for journalistic outlets.
3. Students will be able to identify the significant issues in journalistic history and ethics and the fundamentals of media law applicable to professional practices.

## University Studies Courses

See the University Studies Requirements ..... 43
Core courses
JOUR 1307 Mass Communication in Society ..... 3
JOUR 336 Media Law ..... 3
JOUR 445 Ethics in the Media ..... 3
RTV 420 Interactive Media ..... 3
News-editorial sequence
JOUR 115 Publication Design and Production ..... 3
JOUR 214 Basic Reporting ..... 3
JOUR 260 Advertising Principles ..... 3
JOUR 314 Intermediate Reporting ..... 3
JOUR 315 Editing and Production ..... 3
JOUR 316 Topics in Community Newspaper Journalism ..... 3
JOUR 335 Media History ..... 3
JOUR 350 Visual Communication for News Publications ..... 3
JOUR 380 Magazine Production and Editing ..... 3
JOUR 495 Media Internship ..... 3
RTV 322 Film-Style Shooting and Editing ..... 3
RTV 440 Broadcast and Digital Journalism ..... 3
RTV 453 Social Media ..... 3
Minor Required
A minor is required for this program ..... 18
Electives Required
Electives may be required to complete this degree ..... 8
Total Hours ..... 120

## Other requirements

A minimum grade of "C" must be earned in courses required for this major. Only one JOUR 489 Independent Study can be applied to the student's degree plan in his/her major. This limitation does not apply to JOUR 397 Special Topics and JOUR 497 Special Topics Special Topics courses. Substitutions can be made only with the approval of the Journalism Division coordinator.

## Journalism-Public Relations B.A./B.S.

The public relations emphasis provides students with the opportunity to obtain a liberal arts education and equips graduates with the professional skills required for entry-level positions and careers in public relations at corporate, organizational, governmental/public affairs and non-profit institutions. The graduate with this major emphasis should possess competencies in written communication, verbal communication, problem-solving, and interpersonal skills, and have an understanding of journalistic law and media ethics.

1. Students will be able to write, edit and design documents (copy) suitable for publication styles in public relations.
2. Students will be able to produce through problem-solving skills a campaign for a client.
3. Students will be able to identify the significant issues in the field with an understanding of ethics and the fundamentals of media law applicable to professional practices in the promotional field of public relations.


## Other Requirements

A minimum grade of " $C$ " must be earned in courses required for this major. Only one JOUR 489 Independent Study can be applied to the student's degree plan in his/her major. This limitation does not apply to JOUR 397 Special Topics and Special Topics courses. Substitutions can be made only with the approval of the Journalism Division coordinator.

## Public Relations Minor

(18 semester hours)

| Required courses in the minor |  |  |
| :--- | :--- | :--- |
| JOUR 115 | Publication Design and Production | 3 |
| JOUR 260 | Advertising Principles | 3 |
| JOUR 328 | Public Relations Principles | 3 |
| JOUR 329 | Writing for Public Relations | 3 |
| JOUR 425 | Public Relations Case Studies | 3 |
| JOUR 426 | Public Relations Campaigns | 3 |
| Plus 6 sh from: |  | 6 |
| JOUR 315 | Editing and Production |  |
| JOUR 335 | Media History |  |
| JOUR 350 | Visual Communication for News Publications |  |
| JOUR 445 | Ethics in the Media |  |

## Radio-Television B.A./B.S.- Emphasis in Broadcast Journalism

The Radio-Television major prepares graduates for careers in television broadcast announcing, writing, directing, management, editing, and production In addition students are prepared for audio/video production at advertising agencies, independent production houses and corporate communication facilities. A graduate should be competent in the ability to announce and speak with confidence for radio and television broadcast; to write, direct, manage and produce programming for radio, television and video; and to possess an understanding of the role of broadcasting in today's U.S. and global cultures.

1. Students will develop the ability to write effectively for TV, radio and Internet news, commercials and entertainment programming.
2. Students will develop the ability to shoot/record and edit video and audio for TV, radio and on-line media.
3. Students will be knowledgeable about the history and foundations of U.S. broadcasting and other electronic media.

## University Studies Courses

See the University Studies Requirements 43

## Core courses

JOUR 1307 Mass Communication in Society 3
JOUR 336 Media Law 3
RTV $420 \quad$ Interactive Media 3
JOUR $445 \quad$ Ethics in the Media 3
Broadcast news sequence $\quad 3$
JOUR $314 \quad$ Intermediate Reporting 3
RTV $1335 \quad$ Studies in Electronic Communications 3
RTV $151 \quad$ Communication Technology 3
RTV $215 \quad$ Media Performance 3
RTV $320 \quad$ Radio and Television Writing 3
RTV $322 \quad$ Film-Style Shooting and Editing 3
RTV $332 \quad$ Multicamera TV Production 3
RTV $440 \quad$ Broadcast and Digital Journalism 3
RTV 497 Special Topics (one-hour practicums; minimum four hours) 3-4
or RTV $480 \quad$ Professional Seminar and Portfolio
or RTV 495 Internship
RTV $109 \quad$ Beginning Audio 1
RTV 209 KKOM News and Programming 1
RTV 309 KETR-FM Practicum 1
RTV 409 Television Practicum 1
Choose one RTV course from: 3

RTV 221 Radio Programming
RTV 360 Digital Audio Production
RTV 380 Sports Broadcasting
RTV 451 Broadcasting Seminar
RTV 453 Social Media

## Required Minor

Minimum 18 hours required in the Minor 18

Electives Required
Minimum 10 hours of electives 10

Total Hours

## Radio-Television B.A./B.S.- Emphasis in Digital Media Production

The Radio-Television major prepares graduates for careers in television broadcast announcing, writing, directing, management, editing, and production In addition students are prepared for audio/video production at advertising agencies, independent production houses and corporate communication facilities. A graduate should be competent in the ability to announce and speak with confidence for radio and television broadcast; to write, direct,
manage and produce programming for radio, television and video; and to possess an understanding of the role of broadcasting in today's U.S. and global cultures.

1. Students will develop the ability to write effectively for TV, radio and Internet news, commercials and entertainment programming.
2. Students will develop the ability to shoot/record and edit video and audio for TV, radio and on-line media.
3. Students will be knowledgeable about the history and foundations of U.S. broadcasting and other electronic media.

## University Studies Courses

See the University Studies Requirements 43

## Core courses

JOUR 1307 Mass Communication in Society 3

JOUR 336

Media Law ..... 3
JOUR 445 Ethics in the Media ..... 3
RTV 420 Interactive Media ..... 3
Digital media sequence
RTV 1335 Studies in Electronic Communications ..... 3
RTV 151 Communication Technology ..... 3
RTV 215 Media Performance ..... 3
RTV 221 Radio Programming ..... 3
RTV $322 \quad$ Film-Style Shooting and Editing ..... 3
RTV 332 Multicamera TV Production ..... 3
RTV 440 Broadcast and Digital Journalism ..... 3
RTV 453 Social Media ..... 3
RTV 497 Special Topics (one-hour practicums; minimum four hours) ..... 3-4
or RTV 480 Professional Seminar and PortfolioRTV 109 Beginning Audio1
RTV 209 KKOM News and Programming ..... 1
RTV 309 KETR-FM Practicum ..... 1
RTV 409 Television Practicum ..... 1
Choose two RTV courses from: ..... 6
RTV 320 Radio and Television Writing
Electro Media Sales/OperationsRTV 360
Digital Audio Production
Sports Broadcasting
Broadcasting Seminar
RTV 380
Required Minor
Minimum 18 hours required in the Minor ..... 18
Electives Required
Minimum 10 hours of electives required ..... 10
Total Hours

## Radio-Television B.A./B.S.- Emphasis in Media Performance

The Radio-Television major prepares graduates for careers in television broadcast announcing, writing, directing, management, editing, and production In addition students are prepared for audio/video production at advertising agencies, independent production houses and corporate communication facilities. A graduate should be competent in the ability to announce and speak with confidence for radio and television broadcast; to write, direct, manage and produce programming for radio, television and video; and to possess an understanding of the role of broadcasting in today's U.S. and global cultures.

1. Students will develop the ability to write effectively for TV, radio and Internet news, commercials and entertainment programming.
2. Students will develop the ability to shoot/record and edit video and audio for TV, radio and on-line media.
3. Students will be knowledgeable about the history and foundations of U.S. broadcasting and other electronic media.


## Speech Communication B.A./B.S.

The major in speech communication prepares graduates for careers in positions such as business, teaching, law, management, human resources, public relations, communication, and theology. It is a flexible major that can accommodate a variety of interests and career goals. A graduate in speech communication should possess: The ability to understand and apply the skills necessary for success as a public speaker; the ability to understand and use knowledge and skills in professional and personal environments involving interpersonal, small group, organizational and political communication, and classroom interaction.

1. Students will have mastered the skills necessary to perform informative and persuasive speeches.
2. Students will learn the effective methods for desirable outcomes in small group decision making.
3. Students will learn the importance of intercultural communication in the 21st century.

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
SPC $1315 \quad$ Fundamentals of Public Speaking 3
or SPC 1321 US - Business and Professional Speaking
SPC 201 US-STUDIES IN HUMAN/COMM 3

SPC $112 \quad$ Voice and Phonetics 3
SPC 317 Interpersonal Communication 3
SPC 318 Small Group Communication 3
SPC 408 Intercultural Communication 3
SPC $412 \quad$ Theory of Communication 3
SPC 414 Political Communication 3
SPC $312 \quad$ Persuasive Communication 3
or SPC 418 Communication and Social Change
THE $211 \quad$ Oral Interpretation 3
or THE 311 Readers Theatre
Required support courses
MGT 305 Management and Organizational Behavior 3
JOUR 1307 Mass Communication in Society 3
Required Minor
Minimum 18 hours required in the Minor 18
Additional Electives Required
Electives required to meet minimum program hours 23
Total Hours 120

## Speech Communication Minor

Required courses in the minor

| SPC 1315 | Fundamentals of Public Speaking | 3 |
| :--- | :--- | :--- |
| or SPC 1321 | US - Business and Professional Speaking |  |
| SPC 112 | Voice and Phonetics | 3 |
| SPC 201 | US-STUDIES IN HUMAN/COMM | 3 |
| SPC 312 | Persuasive Communication | 3 |
| SPC 317 | Interpersonal Communication | 3 |
| SPC 412 | Theory of Communication | 3 |
| SPC 312 | Persuasive Communication | 3 |
| or SPC 418 | Communication and Social Change |  |

Total Hours

## Theatre B.A./B.S.

The theatre major prepares students for careers in acting, design and technology, production, management and teaching. A graduate is expected to possess the following competencies: the ability to understand and apply the skills necessary for success as an actor or actress; to prepare
students, non-students and professionals for theatrical presentations; to direct, produce and manage the overall operations of a theatre; to possess an understanding of the role of theatre in today's society and to the theatre of other cultures.

1. Acting/Directing/Playwriting:
a. Successfully develop ongoing audition material to be utilized in professional auditions in the pursuit of professional theatre employment.
b. Successfully develop production concepts and ideas for theatrical productions.
c. Successfully develop short plays, one-act plays, and full length plays ready for production.
2. Design/Technical Production:
a. Successfully develop a design/technical portfolio (both physical and digital) to be utilized in the acquisition of professional theatre employment.
b. Successfully create fully realized designs through the use and development of learned skills.
c. Successfully utilize the management and public relations skills applied within the theatre industry.
3. Theatrical Education:
a. Successfully utilize theatrical techniques (including acting, directing, design, and management) for use in primary and secondary education.

## University Studies Courses

See the University Studies Requirements 43

## Required courses in the major



## Other Requirements

A grade of " $C$ " or higher must be earned in all courses required for this major.

## BA/BS Theatre Emphasis in Acting/ Directing

## Required courses in the major

University Studies Courses
See the University Studies Requirements 43
THE 1310 Introduction to the Theatre


| THE 366 | Introduction to Scene Design |
| :--- | :--- |
| THE 397 | Special Topics |
| THE 445 | Projects in Acting |
| THE 497 | Special Topics |
| Choose 6 sh from the following: |  |
| ART 110 | Drawing I |
| ART 112 | Drawing II |
| ART 213 | Figure Drawing |
| ART 227 | Sophomore Studio: Introduction to Painting |
| ART 316 | Advanced Drawing |
| ART 317 | Three-Dimensional I |
| ART 320 | Airbrush Painting |
| ART 321 | Watercolor I |
| Total Hours |  |

## Other Requirements

A grade of " C " or higher must be earned in all courses required for this major.

## Theatre B.A./B.S. - Secondary Teacher Certification

## Secondary and All-Level Education

See for information: Secondary and All-Level Education (http://coursecatalog.tamuc.edu/undergrad/secondary-and-all-level-education)
The Theatre major prepares students for careers in acting, design and technology, production, management and teaching. Students receiving Theatre teacher certification obtain pedagogy and educational professional development course work through the Curriculum and Instruction Department. The student should obtain advising from both the advisor in Theatre and from a Curriculum and Instruction faculty mentor. Students with bachelor's degrees who want to teach should consult the Graduate Catalog for requirements leading to certification.
University Studies Courses ..... 43
See the University Studies Requirements
Required courses in the major
Practicum or Rehearsal and Performance ..... 6
SPC $112 \quad$ Voice and Phonetics ..... 3
THE 211 Oral Interpretation ..... 3
THE $213 \quad$ Fundamentals of Acting ..... 3
THE 215 Technical Theatre ..... 4
THE 311 Readers Theatre ..... 3
THE $340 \quad$ History of the Theatre I ..... 3
THE 415 Stage Directing ..... 3
THE $440 \quad$ History of the Theatre II ..... 3
THE $480 \quad$ Lyric Theatre ..... 3
THE 489 Independent Study ..... 4
or THE 490 H Honors Thesisor THE 495 Senior Theatre Project
Two courses from: ..... 7
THE $316 \quad$ Lighting for the TheatreTHE 349 Theatrical CostumingTHE 366 Introduction to Scene Design
Required Minor
Minimum 18 hour required in the minor ..... 18
Electives Required
Electives required to meet minimum ..... 14 ..... 120
Total Hours
Total Hours

## Other Requirements

A grade of "C" or higher must be earned in all courses required for this major. Twelve semester hours of advanced major courses must be taken at Texas A\&M University-Commerce. Enrollment in practicum is required each semester of attendance at A\&M-Commerce unless waived by the head Mass Media, Communication, and Theatre.

## Theatre Minor

| Required courses in the minor |  |  |
| :---: | :---: | :---: |
| Electives (Adv) |  | 6 |
| Practicum |  | 4 |
| THE 415 | Stage Directing | 3 |
| Plus 6 sh from: |  | 6 |
| THE 1310 | Introduction to the Theatre |  |
| THE 340 | History of the Theatre I |  |
| THE 440 | History of the Theatre II |  |
| Plus 3 sh from: |  | 3 |
| THE 213 | Fundamentals of Acting |  |
| THE 315 | Stage Dialects |  |
| THE 445 | Projects in Acting |  |
| Plus 3 sh from: |  | 3 |
| THE 215 | Technical Theatre |  |
| THE 316 | Lighting for the Theatre |  |
| THE 218 | Stage Make-up |  |
| THE 349 | Theatrical Costuming |  |
| Total Hours |  | 25 |

## Theatre Second Major

## (43-44 sh)

## Required courses in the major

Practicum or Rehearsal and Performance 6
THE $1310 \quad$ Introduction to the Theatre 3
THE $211 \quad$ Oral Interpretation 3
or THE 311 Readers Theatre
THE $213 \quad$ Fundamentals of Acting 3
THE $215 \quad$ Technical Theatre 4
THE $445 \quad$ Projects in Acting 3
THE $316 \quad$ Lighting for the Theatre 3
or THE 349 Theatrical Costuming

| or THE 366 | Introduction to Scene Design |
| :--- | :--- |
| THE 340 | History of the Theatre I |

THE $415 \quad$ Stage Directing 3
THE $440 \quad$ History of the Theatre II 3
THE $480 \quad$ Lyric Theatre 3
THE $489 \quad$ Independent Study $1-4$

| or THE 490 H |  |
| :--- | :--- |
| or THE 495 | Senior Theatre Project |
| SPC 112 | Voice and Phonetics |

Total Hours 41-44

## Other Requirements

Practicum is required in each semester of attendance at Texas A\&M University-Commerce unless waived by the Mass Media, Communication, and Theatre head. A grade of " $C$ " or higher must be earned in all courses required for this major. Twelve semester hours of advanced major courses must be taken at Texas A\&M University-Commerce.

## Music

The Department of Music is an accredited member of the National Association of Schools of Music and the Texas Association of Music Schools. The department offers two undergraduate degrees with majors in music (Bachelor of Science and Bachelor of Music) and one master's degree with majors in music performance or education (Master of Music). The Department of Music also offers a minor in music for undergraduate students majoring in other disciplines.

The Bachelor of Science (BS) music degree, combined with Professional Education requirements, provides students with the information and skills to be a music educator at all levels and prepares them to take the exams for teacher certification in Texas. Though students are prepared to teach instrumental and vocal music at all grade levels, the curriculum allows them to select one of three areas of emphasis:

1. elementary general-preparation for teaching general music in the elementary grades,
2. secondary choral-preparation for organizing and directing choral organizations at the secondary level; or
3. secondary instrumental-preparation for directing bands and orchestras at the secondary level.

The Bachelor of Music (BM) degree designates an emphasis in performance (piano, voice, winds, or percussion) and prepares the students for careers as professional musicians in an orchestra, opera, ballet, recording studio, private studio, or military organization.

## - University Studies (43 sh)

- Refer to University Studies Requirements (p. 39)
- Visual and Performing Arts option: Introduction to World Music Literature (MUS 1308, 3 s.h.)
- Physical Education option: MUS 100 Ensembles (2 s.h.)

Music requires disciplined skill development and careful sequencing of specific courses. Starting with the freshman year, students enroll in two University Studies courses per semester with the balance of coursework in music. This pattern continues throughout the degree program. Additional non-music courses may be required to satisfy deficiencies. Due to the substantial degree requirement, summer school is frequently encouraged.

## Major in Music Education

Students seeking a bachelor's degree in any of the following teacher education programs must complete:

1. degree requirements (Music Core and Music Emphasis; see below) for a Bachelor of Science in Music with All-Level Teacher Certification degree,
2. University Studies Requirements (p. 39),
3. requirements for admission to and retention in the teacher education program, and
4. professional development courses.
(For admission requirements to the teacher education program and teacher certification requirements please see the College of Education section of this catalog). Students electing to pursue the Elementary General Emphasis must take emphasis courses according to their major performance medium (voice or instrument). Keyboard majors must declare an instrument or voice as minor applied and as their area music education emphasis.

## Ensembles

The bands, choirs, and other ensembles are open to all students upon audition. These ensembles carry one hour credit each semester. Non-music majors may count ensemble credits as elective or minor credits toward graduation. Two Marching Band credits will substitute for two semester hours of University Studies Fitness and Recreation requirement. Other instrumental and vocal ensembles give students the opportunity to perform specialized literature. Music majors must enroll for a principal ensemble each semester until all music degree requirements are met or until the semester of practice teaching. Principal ensembles include Chorale, University Choir, Wind Ensemble and Symphonic Band. All instrumental music majors are required to participate in Marching Band for four semesters. One or two additional ensembles may be elected and/or stipulated by the student's advisor in order to ensure appropriate experience and adequate instrumentation.

## Applied Music

## Private Instruction

Private instruction in applied music is offered each term. Each credit hour involves one 30-minute private lesson per week and requires a minimum of six hours practice each week. A maximum of three semester credit hours may be taken in a long semester. During the summer sessions, a maximum of one credit hour may be taken in each summer term. A jury exam will be given at the end of each long semester and at the end of summer school in

MUS 151, MUS 152, MUS 351, and MUS 352 unless waived by the applied music faculty. Music majors without basic skills may be required to take additional instruction beyond what is suggested in degree outlines to meet proficiency requirements for various majors.
B.M. Music (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/humanities-social-sciences-arts/music/music-bmbs)
B.S Music with All-Level Teacher Certification (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/humanities-social-sciences-arts/music/music-with-all-level-teacher-certification-bs)

Music Minor (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/humanities-social-sciences-arts/music/music-minor)

## B.M. Music



## Additional Requirements for All Music Majors

All incoming students must audition for acceptance as a music major (BS or BM). to be taken concurrently with the Freshmen Success Seminar ( Course COH 111 Not Found). In addition, each music major must (1) enroll for a major ensemble each semester until all music degree requirements are met; (2) pass six semesters of recital attendance (MUS 100R Recital); (3) meet the keyboard competency requirement; (4) pass the barrier examination in applied music study, and (5) present one or more public recital(s).

## Keyboard Competency Requirement

Requirements for keyboard skills vary according to the major. Instrumental majors may demonstrate keyboard competency through proficiency examination or by completion of Music. Vocalists must pass two proficiency exams: the first to move from MUS 151 Minor Applied Music to MUS 351 Minor Applied Music, and the second to complete study at the upper division level (MUS 351 Minor Applied Music). All students must demonstrate keyboard competency before conferral of their degrees.

## Applied Barrier Exam Requirement

A barrier exam is required of all music majors to achieve advanced standing on their principal applied instrument before registering for upper division applied study. The examination is administered at the end of the fourth semester of study, but may be taken earlier upon the recommendation of the applied teacher. (Regardless, all students must complete the required total number of semester hours in applied music as specified on the various degree plans.) Students who do not satisfactorily pass the initial exam have, at the discretion of the principal applied professor, one additional long semester to complete the exam requirement. Students who do not satisfactorily pass the second attempt at the barrier exam will be dismissed from the A\&M-Commerce music program. Upper division applied credit (MUS 352 Principal Applied) must be completed at A\&M-Commerce to be counted toward a music degree.

## Recital Performance Requirement

After enrollment in upper division applied study, students must present one or more public recitals. Performance majors must present a junior half ( 30 min .) recital and a senior full ( 60 min .) recital; education majors must present a half recital ( 30 min .) during their junior or senior year. The applied faculty must approve the scope of the recital.

## Emphasis in Instrumental

Required courses in the major beyond the Music Cor

| MUS 100 | Ensembles | 8 |
| :--- | :--- | :--- |
| MUS 151 | Minor Applied Music | 6 |
| MUS 152 | Principal Applied | 4 |
| MUS 318 | Counterpoint | 2 |
| MUS 351 | Minor Applied Music | 3 |
| MUS 352 | Principal Applied | 9 |
| MUS 416 | Orchestration/Arranging | 2 |
| MUS 430 | Instrumental Literature | 3 |
| Electives |  | 4 |
| Total Hours |  | 41 |

## Emphasis in Piano Performance

Required courses in the major beyond the Music Core
MUS $151 \quad$ Minor Applied Music 4
MUS $318 \quad$ Counterpoint 2
MUS $326 \quad$ Piano Literature 6

MUS $331 \quad$ Piano Pedagogy 6
MUS $351 \quad$ Minor Applied Music 3
MUS $352 \quad$ Principal Applied 12
MUS $416 \quad$ Orchestration/Arranging 2
Electives 6
Total Hours 41

## Emphasis in Voice

Required courses in the major beyond the Music Core

| MUS 100 | Ensembles |  |
| :--- | :--- | ---: | :--- |
| or MUS 300 | Jazz Ensemble I, the Mane Attraction | 8 |
| or MUS 300P | Percussion Ensemble I |  |
| or MUS 300S | Chamber Singers |  |
| or MUS 300W | Wind Ensemble |  |
| MUS 141 | Diction for Singers |  |
| MUS 142 | Diction for Singers | 2 |
| MUS 151 | Minor Applied Music | 2 |
| MUS 318 | Counterpoint | 4 |
| MUS 351 | Minor Applied Music | 2 |
| MUS 352 | Principal Applied | 4 |
| MUS 403 | Voice Production | 13 |


| MUS 416 | Orchestration/Arranging | 2 |
| :---: | :---: | :---: |
| Electives |  | 2 |
| Total Hours |  | 41 |
| B.S Music with All-Level Teacher Certification |  |  |
| University Studies |  |  |
| See the University Studies Requirements |  | 43 |
| Core Curriculum for All Music Majors |  |  |
| Music requirements |  |  |
| MUS 100 | Ensembles | 6 |
| or MUS 300 | Jazz Ensemble I, the Mane At |  |
| or MUS 300P | Percussion Ensemble I |  |
| or MUS 300S | Chamber Singers |  |
| or MUS 300W | Wind Ensemble |  |
| MUS 115 | Theory I | 3 |
| MUS 117 | Ear Training I | 1 |
| MUS 125 | Theory II | 3 |
| MUS 127 | Ear Training II | 1 |
| MUS 152 | Principal Applied | 8 |
| MUS 215 | Theory III | 3 |
| MUS 217 | Ear Training III | 1 |
| MUS 225 | Theory IV | 3 |
| MUS 313 | Fundamentals of Conducting | 2 |
| MUS 316 | Analysis of Music Form | 2 |
| MUS 323 | Music History I | 3 |
| MUS 324 | Music History II | 3 |
| MUS 352 | Principal Applied | 3 |
| MUS 136(c) | (keyboard class) | 1 |
| or |  |  |
| MUS 151 | Minor Applied Music (applied |  |
| Emphasis Area Required |  |  |
| 20 semester hours required in emphasis |  | 20 |
| Professional Development Area Required |  |  |
| 21 semester hours required |  | 21 |
| Total Hours |  | 127 |

## Additional Requirements for All Music Majors

All incoming students must audition for acceptance as a music major (BS or BM). MUS 115 Theory I to be taken concurrently with the Freshmen Success Seminar (COH 111). In addition, each music major must (1) enroll for a major ensemble each semester until all music degree requirements are met; (2) pass six semesters of recital attendance (MUS 100R Recital); (3) meet the keyboard competency requirement; (4) pass the barrier examination in applied music study, and (5) present one or more public recital(s).

## Keyboard Competency Requirement

Requirements for keyboard skills vary according to the major. Instrumental majors may demonstrate keyboard competency through proficiency examination or by completion of Music MUS 136(c). Vocalists must pass two proficiency exams: the first to move from MUS 151 Minor Applied Music to MUS 351 Minor Applied Music, and the second to complete study at the upper division level (351). All students must demonstrate keyboard competency before conferral of their degrees.

## Applied Barrier Exam Requirement

A barrier exam is required of all music majors to achieve advanced standing on their principal applied instrument before registering for upper division applied study. The examination is administered at the end of the fourth semester of study, but may be taken earlier upon the recommendation of the applied teacher. (Regardless, all students must complete the required total number of semester hours in applied music as specified on the various degree plans.) Students who do not satisfactorily pass the initial exam have, at the discretion of the principal applied professor, one additional long
semester to complete the exam requirement. Students who do not satisfactorily pass the second attempt at the barrier exam will be dismissed from the A\&M-Commerce music program. Upper division applied credit (MUS 352 Principal Applied) must be completed at A\&M-Commerce to be counted toward a music degree.

## Recital Performance Requirement

After enrollment in upper division applied study, students must present one or more public recitals. Performance majors must present a junior half (30 min.) recital and a senior full ( 60 min .) recital; education majors must present a half recital ( 30 min .) during their junior or senior year. The applied faculty must approve the scope of the recital.

## Music Education Emphasis (20 sh) <br> Elementary General Emphasis

| MUS 310 | Music Technology | 3 |
| :---: | :---: | :---: |
| MUS 321 | Elementary Music Instruments | 2 |
| MUS 450 | Music and Movement I | 3 |
| MUS 465 | Music and Movement II | 3 |
| Choose Vocal or Instrumental |  | 9 |
| Total Hours |  | 20 |
| For Vocal Majors Complete |  |  |
| MUS 141 | Diction for Singers | 2 |
| MUS 142 | Diction for Singers | 2 |
| MUS 351 | Minor Applied Music | 1 |
| MUS 403 | Voice Production | 2 |
| MUS 413 | Choral Conducting | 2 |
| Total Hours |  | 9 |
| For Instrumental Majors Complete |  |  |
| MUS 139 | Voice Class | 1 |
| MUS 133 | Class Instruments | 3 |
| MUS 134 | Elementary String Class | 1 |
| MUS 151 | Minor Applied Music | 1 |
| MUS 100 | Ensembles | 1 |
| MUS 414 | Instrumental Conducting | 2 |
| Total Hours |  | 9 |

## Secondary Instrumental Emphasis

| MUS 133 | Class Instruments | 3 |
| :--- | :--- | :--- |
| MUS 134 | Elementary String Class | 1 |
| MUS 139 | Voice Class | 1 |
| MUS 310 | Music Technology | 3 |
| MUS 320 | Music Literature for Elementary Music Education | 3 |
| MUS 414 | Instrumental Conducting | 2 |
| MUS 416 | Orchestration/Arranging | 2 |
| MUS 420 | Instrumental Organization | 2 |
| MUS 430 | Instrumental Literature | 3 |
| Total Hours |  | 20 |

## Secondary Vocal Emphasis

| MUS 141 | Diction for Singers | 2 |
| :--- | :--- | :--- |
| MUS 142 | Diction for Singers | 2 |
| MUS 310 | Music Technology | 3 |
| MUS 320 | Music Literature for Elementary Music Education | 3 |


| MUS 351 | Minor Applied Music (piano, 1sh) | 1 |
| :--- | :--- | ---: |
| MUS 403 | Voice Production | 2 |
| MUS 410 | History and Organization of Choral Music | 2 |
| MUS 413 | Choral Conducting | 2 |
| MUS 470 | Choral Literature | 3 |
| Total Hours |  | 20 |
| Professional Development (21 sh) |  |  |
| PSY 300 | Learning Processes and Development | 3 |
| RDG 380 | Comprehension and Vocabulary in Middle and High Schools | 3 |
| SED 300 | The Teaching Profession | 3 |
| SED 302 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments | 3 |
| SED 401 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| SED 405 | Residency in Secondary Teaching | 3 |
| ELED 452 | Student Teaching in Field-Based Teacher Education Programs | 3 |
| Total Hours |  | 21 |

## Prerequisites to Student Teaching in Music

Prior to student teaching, a music major in the Teacher Education program must be:

- admitted to upper division and complete three semester hours of upper division credit in his/her major applied music area,
- complete the courses in his/her area of emphasis and the required professional development courses,
- complete the piano requirements (n.b. Piano requirements are designed for three levels of achievement depending upon the student's major applied area.),
- be on campus as full-time music majors either two full semesters or one semester and a full summer session prior to registering for student teaching.


## Music Minor

| Required courses in the minor (12sh) |  |  |
| :---: | :---: | :---: |
| MUS 100 | Ensembles | 0-2 |
| MUS 115 | Theory I | 3 |
| MUS 117 | Ear Training I | 1 |
| MUS 136(c) | (must be repeated until Level C proficiency is attained) | 1 |
| MUS 151 | Minor Applied Music* | 1-4 |
| MUS 1308 | Introduction to World Music Literature | 3 |
| Upper Division Courses |  |  |
| (Choose 6 sh from the following) |  | 6 |
| MUS 305 | Integrated Arts for Elementary Teachers |  |
| MUS 310 | Music Technology |  |
| MUS 323 | Music History I |  |
| MUS 324 | Music History II |  |
| MUS 403 | Voice Production |  |

Total Hours

MUS 141 Diction for Singers ( 2 sh ) and MUS 142 Diction for Singers ( 2 sh ) are strongly recommended to be taken concurrently with MUS 151 Minor Applied Music.

## Political Science

The Department of Political Science offers undergraduate programs leading to the B.A. and B.S. degrees, including a traditional political science degree and a degree with an emphasis in paralegal studies. The Department also offers, in conjunction with the Department of History, a degree leading to a Bachelor's degree with a Provisional Teaching Certificate. While the B.S. curriculum is available, the B.A. program is recommended for all political science majors since it includes four semesters or the equivalent of foreign language.

Students seeking a bachelor's degree in the following major must complete:

1. degree requirements for a Bachelor of Arts or Science degree and
2. University Studies Requirements (p. 39) (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown below. No Political Science course grade lower than "C" will count toward a major, second major, or minor.

## Honors Program

Special study opportunities are available through the Honors Program for qualified majors in political science. The major advisor and the director of the Honors Program should be consulted.

## Teacher Education Program

Students seeking a bachelor's degree in the teacher education program must complete: (1) degree requirements for a Bachelor of Arts or Science degree (refer to the bachelor's degree requirements section of this catalog), (2) University Studies requirements (refer to that section of this catalog), (3) requirements for admission to and retention in the Teacher Education Program (refer to the Center for Educator Certification and Academic Services section of this catalog), and (4) professional development courses (refer to the appropriate departmental section in this catalog, i.e. Department of Secondary and Higher Education).

## Texas A\&M University-Commerce

## Government/Political Science Course Combinations*

Texas Common Course Numbers (TCCNS) for government courses:

| GOV 2301 | (federal and Texas constitutions) |
| :--- | :--- |
| GOV 2302 | (federal and Texas topics) |
| GOV 2305 | (federal constitution and topics) |
| GOV 2306 | (Texas constitution and topics) |

Acceptable course combinations:

| $\begin{aligned} & \text { GOV } 2301 \\ & \text { \& GOV } 2302 \end{aligned}$ | and (intended as a sequence) | 0 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { GOV } 2305 \\ & \text { \& GOV } 2306 \end{aligned}$ | and (intended as a sequence) | 0 |
| $\begin{aligned} & \text { GOV } 2301 \\ & \text { \& GOV } 2305 \end{aligned}$ | and (acceptable substitute sequence) | 0 |
| $\begin{aligned} & \text { GOV } 2301 \\ & \& \text { GOV } 2306 \end{aligned}$ | and (acceptable substitute sequence) | 0 |
| **Unacceptable course combinations (other than duplication): |  |  |
| GOV 2302 <br> \& GOV 2305 | and (omits study of Texas constitution) | 0 |
| GOV 2302 | and (omits study of U.S. constitution) | 0 |

\& GOV 2306

* September 2004 Academic Course Guide Manual. NOTE: Because Texas Education Code; Subchapter F, Section 51.301 does not specify how the required course content should be distributed over the required six SCH, two instructional patterns, represented by the TCCN course sequences GOVT and GOVT 2302 or GOVT and GOVT 2306 , have evolved among institutions. Because combination of a course from one sequence with a course from the other sequence may not successfully fulfill the content requirement of Section 51.301, students are urged to complete all six SCH within a single institution. Inevitably, however, students will seek to combine courses from the two sequences. The following alternative combinations will fulfill the content requirement of Section 51.301: GOVT and GOVT 2305 ; GOVT and GOVT 2306 . The following combinations will not satisfy the content requirement of $\S 51.301$ : GOVT and GOVT 2305 (omits study of the Texas constitution; GOVT and GOVT 2306 (omits study of the U.S. Constitution).
** Students with credit for GOVT and GOVT 2305, GOVT and GOVT 2306, or equivalent combinations may satisfy the legislative requirement by earning credit for GOVT, a 1 SCH course providing the required constitutional content missing from these two course combinations.)


## Angelo State University

GOV 2301

GOV 2302
Abilene Christian University
POLS 225 (2305)
POLS 226 (2306)
Baylor University
PSC 1305 (2305)
PSC 1306 (2306)
Collin
GOVT 2301
GOVT 2302
Dallas Baptist University
POLS 2301 (2305)
POLS 2302 (2306)
DCCCD
GOVT 2301
GOVT 2302
Grayson County College
GOVT 2305
GOVT 2306
Hardin Simmons University
POLS 1301 (2305)
POLS 2301 (2306)
Midwestern State University
POLS 1333 (2301)
POLS 1433 (2302)
North Central Texas College
GOVT 2305
GOVT 2306
Oklahoma State University
POLS 2—. ****
POLS 1113 (2302)
Paris Junior College
GOVT 2305
GOVT 2306
Sam Houston State University

POL 285 (2302)
Southeastern Oklahoma State U.
*****
POSC 1513 (2301, 2302, or 2305)
Southern Methodist University
PLSC 1320 (2301)
ENBLOC
SFA State University
PSC 141 (2301)
PSC 142 (2302)
Tarleton State University
GOVT 201 (2305)
GOVT 202 (2306)
Tarrant County College
GOVT 2305
GOVT 2306
Texas A\&M University
POLS 206 (2305)
POLS 207 (2306)
Texas A\&M-Commerce
PSCI 220 (2305) 211 (2301)
PSCI 221 (2306) 212 (2302)
Texas Christian University
ENBLOC***
ENBLOC***
Texas State University
POSI 2310 (2301)
POSI 2320 (2302)
Texas Tech University
POLS 1301 (2301)
POLS 2302 (2302)
Texas Wesleyan University
POL 2311 (2301)
POL 2314 (2302)
Texas Woman's University
GOV 2013 (2305)

GOV 2023 (2306)
University of Houston
POLS 1336 (2301)
POLS 1337 (2302)
University of Oklahoma
PSC 1113 (2301 or 2302 ****)
University of North Texas
PSCI 1040 (2301)
PSCI 1050 (2302)
University of Texas-Arlington
POLS 2311 (2305)
POLS 2312 (2306)
University of Texas-Austin
GOVT 310L (2301)
GOVT 312L (2302)
University of Texas-Dallas
GOVT 2301
GOVT 2302
University of Texas-Tyler
POLS 2305 (2305)
POLS 2306 (2306)
If students have taken a Political Science or Government course at an out-of-state college or university, they must complete GOV 2301 to meet the Texas state requirement.
*** TCU recommends that students take the government course requirement at TCU. Both of these courses together will fulfill teacher certification requirements for the state.
**** No equivalent, but will fulfill general education requirement in Core Area III—Social Science or reevaluated.
***** No equivalent, but will fulfill general education requirement.

Paralegal Studies B.A./B.S. (p. 208)
Paralegal Studies Second Major (p. 210)
Political Science B.A./B.S. (p. 211)
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## Paralegal Studies B.A./B.S.

The B.A./B.S. in paralegal studies is career-specific because it is designed to prepare people to work in support of attorneys. The program stresses the fundamentals of legal research, family law, probate, civil procedure, business organizations, law office management, real estate law, and constitutional law.


#### Abstract

The paralegal studies program provides a broadly-based liberal arts and specialized education for paralegals/legal assistants. Program graduates will be qualified to work under the supervision of an attorney. The program does not train lawyers or legal administrators. Paralegals may not provide legal services directly to the public, except as permitted by law.


## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
PSCI 222 Introduction to Law (PS-R) 3
PSCI 223 Legal Research (PS-R) 3
PSCI 310 Law Office Management (PS-R) 3
PSCl 322 Civil Procedure (PS-R) 3
PSCl $426 \quad$ Paralegal Internship (PS-R) 3
PSCl $427 \quad$ Torts and Personal Injury Law (PS-R) 3
Plus 15 sh from the following: 15
PSCI $312 \quad$ Bankruptcy for Paralegals (PS-E)
PSCI $321 \quad$ Probate (PS-E)
PSCI 323 Business Law for Paralegals (PS-E)
PSCI $324 \quad$ Criminal Law and Procedure (PS-E)
PSCI 325 Family Law (PS-E)
PSCI 328 Real Estate Law for Paralegals (PS-E)
PSCI $422 \quad$ Trial and Appellate Litigation and Procedure (PS-E)
Choose BA or BS Option
(listed below)
Total Hours ..... 120

## BS ONLY (Non-Language)

Upper Level Political Science Courses, Excludes: PSCI 310, PSCI 312,PSCI 321, PSCI 322, PSCI 323,PSCI 324,PSCI 325, 3 PSCI 328 ,PSCI 422, PSCI 426, and PSCI 427
HIST 264 A Nation Divided: American History 3
or HIST 265 A World Divided: Global History
or HIST 305 World History: Origins through the Seventeenth Century
or HIST 306 The Emergence of the Modern World
Electives 6

Minor Required
Minimum 18 hours in the Minor 18
Additional Electives 14
Total Hours 44
BA ONLY (Lanugage)
Language Requirement
12 hours of a foreign language*
Minor Required
Minimum 18 hours in the Minor18
Additional Electives ..... 14
Total Hours ..... 44

* Note: In addition to fulfilling these requirements, students majoring in Paralegal Studies must submit a portfolio of their work in Paralegal Studies courses and complete a survey on their experiences in the program.
** Paralegal students must complete an internship of 160 hours. Students must contact the Program Director at least two month prior to the semester the student plans to participate in the internship.


## Other information for First and Second Majors, Paralegal Studies Major

Courses in the Paralegal Studies Major are designated PS-R=required paralegal specialty course; PS-E=elective paralegal specialty course.

## Suggested Curriculum Outline (B.A.)*

| Freshman | Hours |
| :---: | :---: |
| US Science | 8 |
| FLang 131 | 3 |
| FILang 132 | 3 |
| COH 111 | 1-3 |
| ENG 1301 | 3 |
| ENG 1302 | 3 |
| MATH 1314, 1324, or 176 | 3 |
| SPC 1315 or 1321 | 3 |
| HIST 1301 | 3 |
| HIST 1302 | 3 |
|  | 33-35 |
| Sophomore | Hours |
| US Humanities | 3 |
| FLang 231 | 3 |
| FLang 232 | 3 |
| Second Major or Minor | 6 |
| US PE Activity | 2 |
| US Soc/Behav Sci | 3 |
| PSCI 2301 | 3 |
| PSCI 2302 | 3 |
| PSCI 222 | 3 |
| PSCI 223 | 3 |
|  | 32 |
| Junior | Hours |
| PSci 9 sh from the above list | 9 |
| Second Major or Minor | 6 |
| Electives | 6 |
| US Vis/Perf Arets | 3 |
| PSCI 310 | 3 |
| PSCI 322 | 3 |
|  | 30 |
| Senior | Hours |
| PSci 6 sh from above list | 6 |
| Second Major or Minor | 6-12 |
| Electives to make a minimum of 120 sh | 7-0 |
| PSCI 426 | 3 |
| PSCI 427 | 3 |
|  | 25-24 |

Total Hours: 120-121

* BS student substitute upper level Political Science, History course and electives for foreign language as indicated above in BS only block.


## Paralegal Studies Second Major

The B.A/B.S. in paralegal studies is career-specific because it is designed to prepare people to work in support of attorneys. The program stresses the fundamentals of legal research, family law, probate, civil procedure, business organizations, law office management, real estate law, and constitutional law.

The paralegal studies program provides a broadly-based liberal arts and specialized education for paralegals/legal assistants. Program graduates will be qualified to work under the supervision of an attorney. The program does not train lawyers or legal administrators. Paralegals may not provide legal services directly to the public, except as permitted by law.

## Required courses in the second major

| PSCI 222 | Introduction to Law (PS-R) | 3 |
| :---: | :---: | :---: |
| PSCI 223 | Legal Research (PS-R) | 3 |
| PSCI 310 | Law Office Management (PS-R) | 3 |
| PSCI 322 | Civil Procedure (PS-R) | 3 |
| PSCI 426 | Paralegal Internship (PS-R) | 3 |
| PSCI 427 | Torts and Personal Injury Law (PS-R) | 3 |
| 9 sh from the following: |  | 9 |
| PSCI 312 | Bankruptcy for Paralegals (PS-E) |  |
| PSCI 321 | Probate (PS-E) |  |
| PSCI 323 | Business Law for Paralegals (PS-E) |  |
| PSCI 324 | Criminal Law and Procedure (PS-E) |  |
| PSCI 325 | Family Law (PS-E) |  |
| PSCI 328 | Real Estate Law for Paralegals (PS-E) |  |
| PSCI 422 | Trial and Appellate Litigation and Procedure (PSE) |  |

Total Hours
*
Note: In addition to fulfilling these requirements, students majoring in Paralegal Studies must submit a portfolio of their work in Paralegal Studies courses and complete a survey on their experiences in the program.
**
Paralegal students must complete an internship of 160 hours. Students must contact the Program Director at least two month prior to the semester the student plans to participate in the internship.

## Other information for First and Second Majors, Paralegal Studies Major

Courses in the Paralegal Studies Major are designated PS-R=required paralegal specialty course; PS-E=elective paralegal specialty courses.

## Political Science B.A./B.S.

The B.A./B.S. in political science is not career specific. Political science graduates go to law school or to graduate school for further study in political science. Other career possibilities include government employment, business, teaching, and politics. They are required to be knowledgeable about the major paradigms in political theory, American politics, comparative politics, international relations, and fundamental research methods. The most important competency is the ability to think clearly and critically about politics.

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
PSCI 335 Political Economy 3
PSCl 488 Contemporary Ideas 3

Political Theory and Philosophy
Choose 2 courses from the following: 6

| PSCI 332 | Democracy and Democratization |
| :--- | :--- |
| PSCI 410 | Political Theory I |
| PSCI 411 | Political Theory II |
| PSCI 412 | Political Theory III |
| PSCI 414 | American Political Thought |
| PSCI 430 | Revolutions and Revolutionary Movements |
| Public Policy |  |
| Choose 2 courses from the following: |  |
| PSCI 342 | Introduction to Global Public Policy |
| PSCI 346 | Introduction to Public Policy |
| PSCI 437 | Foreign Policy |
| PSCI 442 | Constitutional Law (NPS) |

PSCI 443
Civil Liberties and Civil Rights (NPS)

## American Political Processes

Choose 2 courses from the following: 6

| PSCI 341 | The American Presidency |
| :--- | :--- |
| PSCI 342 | Introduction to Global Public Policy |
| PSCI 344 | American Political Parties and Electoral Politics |
| PSCI 345 | Public Opinion |
| PSCI 441 | Congressional Politics |

## Comparative Politics and International Relations

Choose 2 courses from the following: 6

| PSCI 331 | European Political Systems |
| :--- | :--- |
| PSCI 332 | Democracy and Democratization |
| PSCI 333 | Non-European Political Systems |
| PSCI 415 | Introduction to Comparative Politics |
| PSCl 430 | Revolutions and Revolutionary Movements |
| PSCl 437 | Foreign Policy |
| PSCI 438 | International Relations |

Electives within the major


| Choose BA or BS Option (listed below) | 41 |
| :--- | ---: |
| Total Hours | 120 |

BS ONLY (Non- Language)

| Choose 1 course from the following: |  |
| :--- | :--- |
| MATH 301 | Introductory Geometry |
| MATH 380 | Mathematics History |
| MATH 453 | Essentials of Statistics |
| PHIL 2303 | Logic |
| PSCl 347 | Intro to Research Methods |
| SOC 331 | Introduction to Social Research |
| LIBS 310 | Research Methods |

## Required Minor

Minimum 18 hours required in the Minor ..... 18
Additional Electives Required ..... 20Minimum 20 hours of electives required
Total Hours ..... 41
BALanugauge Requirement
12 hours of a foreign language* ..... 12
Minor Required
Minimum 18 hours in the Minor ..... 18
Additional Electives
Minimum 11 hours required ..... 11
Total Hours ..... 41
In addition to fulfilling these requirements, students majoring Political Science must submit a portfolio of their work in Political Science courses and complete a survey on their experiences in the program. Details may be found on the department's website.

## Suggested Curriculum Outline (B.A.)*

Freshman ..... Hours
US Science ..... 8
FLang 131
FLang 132
CAS 111
ENG 1301 ..... 3
ENG 1302 ..... 3
MATH 1314, 1324, or 179 ..... 3
SPC 1315 or 1321 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
Sophomore ..... Hours26
FLang 231FLang 232
Second Major or Minor ..... 6
US Humanities ..... 3
US Vis/Perf Arts ..... 3
US Soc/Behav Sci ..... 3
US PE Activity ..... 2
PSCI 2301 ..... 3
PSCI 2302 ..... 3
Junior ..... Hours23
PSci (adv) ..... 9
Second Major or Minor ..... 6
Electives ..... 12
PSCI 335 ..... 330
Senior ..... Hours
PSci (Adv) ..... 12
Second Major or Minor (Adv) ..... 6-12
Electives, to make a minimum of 120 sh ..... 20

Total Hours: 120-126

## Notes

While some courses are included more than once in the list of required courses for the first or second major, a particular course may NOT be used to satisfy more than one requirement.

# Other information for First and Second Majors, Paralegal Studies Major <br> tamuc.acalogadmin.com/preview_program.php (http://coursecatalog.tamuc.edu/undergrad/programs/2062) <br> Political Science B.A./B.S. Pre-Law Emphasis 

| University Studies Courses |  |  |
| :---: | :---: | :---: |
| See the University Studies Requirements |  | 43 |
| Required courses in the major (36 sh) |  |  |
| PSCI 335 | Political Economy | 3 |
| PSCI 488 | Contemporary Ideas | 3 |
| PSCI 222 | Introduction to Law (PS-R) | 3 |
| PSCI 223 | Legal Research (PS-R) | 3 |
| 2 courses required in Political Theory and Philosophy from the following: |  | 6 |
| PSCI 332 | Democracy and Democratization |  |
| PCSI 410 |  |  |
| PSCI 411 | Political Theory II |  |
| PSCI 412 | Political Theory III |  |
| PSCI 414 | American Political Thought |  |
| PSCI 430 | Revolutions and Revolutionary Movements |  |
| 2 courses required in Public Policy, 1 course must be PSCI 442 or PSCI 443 |  | 6 |
| PSCI 342 | Introduction to Global Public Policy |  |
| PSCI 346 | Introduction to Public Policy |  |
| PSCI 437 | Foreign Policy |  |
| PSCI 442 | Constitutional Law (NPS) |  |
| PSCI 443 | Civil Liberties and Civil Rights (NPS) |  |
| 2 courses required in American Political Processes: |  | 6 |
| PSCI 342 | Introduction to Global Public Policy |  |
| PSCI 344 | American Political Parties and Electoral Politics |  |
| PSCI 345 | Public Opinion |  |
| PSCI 441 | Congressional Politics |  |
| 1 course required in Comparative Politics and International Relations 1 course from: |  | 3 |
| PSCI 331 | European Political Systems |  |
| PSCI 332 | Democracy and Democratization |  |
| PSCI 333 | Non-European Political Systems |  |
| PSCI 415 | Introduction to Comparative Politics |  |
| PSCI 430 | Revolutions and Revolutionary Movements |  |
| PSCI 437 | Foreign Policy |  |
| PSCI 438 | International Relations |  |
| 1 required elective course from the following list: |  | 3 |
| PSCI 322 | Civil Procedure (PS-R) |  |
| PSCI 323 | Business Law for Paralegals (PS-E) |  |
| PSCI 324 | Criminal Law and Procedure (PS-E) |  |
| PSCI 325 | Family Law (PS-E) |  |
| PSCI 422 | Trial and Appellate Litigation and Procedure (PS-E) |  |
| PSCI 427 | Torts and Personal Injury Law (PS-R) |  |

Choose BA or BS Option
(listed below) ..... 41
Total Hours ..... 120
BS ONLY (Non-Language)
Choose 1 course from the following: ..... 3
MATH 301 Introductory Geometry ..... 3
MATH 380 Mathematics History ..... 3
MATH 453 Essentials of Statistics ..... 3
PHIL 2303 Logic ..... 3
PSCI 347 Intro to Research Methods ..... 3
SOC 331 Introduction to Social Research ..... 3
LIBS 310 Research Methods ..... 3
Minor Required ..... 18
Additional Electives ..... 20
Total Hours ..... 41
BA ONLY (Language Option)
Language Requirement
12 hours of a foreign language* ..... 12
Minor Required ..... 18
Additional Electives ..... 11
Total Hours ..... 41
In addition to fulfilling these requirements, students majoring Political Science must submit a portfolio of their work in Political Science courses and complete a survey on their experiences in the program. Details may be found on the department's website.

## Political Science Minor

## At least 21 sh political science courses, to include:

| Student's choosing * | 9 |  |
| :--- | :--- | ---: |
| PSCI 2301 | Principles of United States and Texas Government | 3 |
| PSCI 2302 | United States and Texas Government: Institutions and Policies | 3 |
| PSCI 335 | Political Economy | 3 |
| PSCI 488 | Contemporary Ideas | 3 |
| Total Hours |  | 21 |

* excluding PSCI 223 Legal Research (PS-R), PSCI 310 Law Office Management (PS-R), PSCI 312 Bankruptcy for Paralegals (PS-E), PSCI 321 Probate (PS-E), PSCI 322 Civil Procedure (PS-R), PSCI 323 Business Law for Paralegals (PS-E), PSCI 324 Criminal Law and Procedure (PSE), PSCI 325 Family Law (PS-E), PSCI 328 Real Estate Law for Paralegals (PS-E), PSCI 422 Trial and Appellate Litigation and Procedure (PSE), PSCI 423 Fundamental of Bankruptcy, PSCI 426 Paralegal Internship (PS-R), PSCI 427 Torts and Personal Injury Law (PS-R).


## Political Science Second Major

Required courses in the second major

| PSCI 335 | Political Economy |
| :--- | :--- | ---: |
| PSCI 488 | Contemporary Ideas |
| Political Theory and Philosophy |  |
| Choose 1 course from the following: |  |
| PSCI 332 | Democracy and Democratization |
| PSCI 410 | Political Theory I |
| PSCI 411 | Political Theory II |
| PSCI 412 | Political Theory III |
| PSCI 430 | Revolutions and Revolutionary Movements |

## Public Policy

$$
\text { Choose } 1 \text { course from the following: } 3
$$

| PSCI 342 | Introduction to Global Public Policy |
| :--- | :--- |
| PSCI 346 | Introduction to Public Policy |
| PSCI 437 | Foreign Policy |
| PSCI 442 | Constitutional Law (NPS) |
| PSCI 443 | Civil Liberties and Civil Rights (NPS) |


| American Political Institutions and Processes |
| :--- |
| Choose 1 course from the following:  <br> PSCI 341 The American Presidency <br> PSCI 342 Introduction to Global Public Policy <br> PSCI 344 American Political Parties and Electoral Politics <br> PSCI 345 Public Opinion <br> PSCI 415 Introduction to Comparative Politics <br> PSCI 441 Congressional Politics <br> PSCI 442 Constitutional Law (NPS) <br> PSCI 443 Civil Liberties and Civil Rights (NPS) <br> Comparative Politics  |

Choose 1 course from the following: 3

| PSCI 331 | European Political Systems |  |
| :--- | :--- | :--- |
| PSCI 332 | Democracy and Democratization |  |
| PSCI 333 | Non-European Political Systems |  |
| International Relations |  |  |
| Choose 1 course from the following: |  |  |
| PSCI 333 | Non-European Political Systems |  |
| PSCI 430 | Revolutions and Revolutionary Movements |  |
| PSCl 437 | Foreign Policy |  |
| PSCI 438 | International Relations |  |
| otal Hours |  | 21 |

## Paralegal Studies Second Major

tamu-commerce.acalogadmin.com/preview/preview_program.php (http://coursecatalog.tamuc.edu/undergrad/programs/2097)

## Sociology and Criminal Justice

The mission of the Department of Sociology and Criminal Justice is to provide quality learning experiences to equip students with social, intellectual, leadership, and critical thinking skills, preparing them for a global and diverse society.

The department offers several majors which prepare students for entry into a variety of careers or graduate professional study. In addition to a major and minor in sociology, students may select a broadfield major in criminal justice or a minor in criminal justice. Also, a number of courses in anthropology are offered in the department.

Although most courses are offered every semester (not including summer sessions), particular courses in sociology and criminal justice are offered alternating semesters. Please note the courses denoted with (1) are offered only during the fall semester, and those denoted with (2) are offered only during the spring semester.

- Courses transferred in from a Community College cannot count for a 300-400 level course.
- Fifteen Semester Hours in the major must be taken at Texas A\&M University-Commerce.
- All courses in the major must be completed with a grade of " C " or higher.

Criminal Justice B.A.C.J./B.S.C.J. (p. 217)
Criminal Justice Minor (p. 218)
Criminal Justice Second Major (p. 218)
Sociology B.A./B.S. (p. 219)

## Sociology Minor (p. 220)

## Criminal Justice B.A.C.J./B.S.C.J.

The broadfield major in criminal justice is designed for students who wish to receive the Bachelor of Arts or Bachelor of Science in Criminal Justice. The curriculum has a multi-disciplinary foundation, is social science oriented, is academic in content, and emphasizes the development of knowledge and skills essential for a broad understanding of the criminal justice system. The objective of the major is to prepare students for entry level positions in law enforcement, juvenile justice, courts, community based corrections, institutional corrections, and other related fields.

A second major or a minor is not required for students electing this major.

## University Studies Courses

See the University Studies Requirements 43
Required core courses


| CJ 101 | Introduction to Criminal Justice |
| :---: | :---: |
| CJ 201 | Police and Law Enforcement |
| CJ 326 | Juvenile Delinquency |
| CJ 330 | Crime and Criminology |
| CJ 301 | Criminal Investigation |
| CJ 430 | Courts and Criminal Procedure |
| or CJ 431 | Criminal Law |
| CJ 468 | Correctional Systems |
| or CJ 478 | Community-Based Corrections |
| CJ 470 | Criminal Justice Internship I |
| or CJ 480 | Senior Seminar in Criminal Justice |

## Required support courses

| 22 semester hours from: | World Cultures: Perspectives from Anthropology |
| :--- | :--- |
| ANTH 2351 | Introduction to Sociology |
| SOC 1301 | Deviant Behavior |
| SOC 320 | Introduction to Social Research |
| SOC 331 | Methods of Statistical Analysis |
| SOC 332 | Minority Groups |
| SOC 370 | Abnormal Psychology |
| PSY 316 | Psychology of Personality |
| or PSY 317 | Lifespan Development |
| or PSY 322 | Forensic Psychology |
| or PSY 339 |  |

## Electives for Major

| 12 semester hours from: |  |
| :--- | :--- |
| CJ 360 | Mass Media and Crime |
| CJ 420 | Crime Profiling |
| CJ 430 | Courts and Criminal Procedure |
| or CJ 431 | Criminal Law |
| CJ 470 | Criminal Justice Internship I (whichever of the two is not taken as core) |
| or CJ 480 | Senior Seminar in Criminal Justice |
| CJ 468 | Correctional Systems (whichever of the two is not taken as core) |
| or CJ 478 | Community-Based Corrections |
| CJ 488 | Ethics in Criminal Justice |
| CJ 497 | Special Topics |
| PSCI 223 | Legal Research (PS-R) |
| PSCI 325 | Family Law (PS-E) |
| PSCI 342 | Introduction to Global Public Policy |
| SPA 131 | Elementary Spanish I |

Also, any 300-400 level SOC course. Except: SOC 320, 331, 332, 370, and 485
Additional Electives Required 19

Total Hours

## Additional Requirements

- Students seeking a B.A. Degree must fulfill the Foreign Language Requirement
- A grade of "C" or higher must be earned for all SOC and CJ courses required for this major
- Fifteen Semester hours in CJ courses must be taken at Texas A\&M University-Commerce
- Courses transferred in from a Community College may not count for senior level credit


## Criminal Justice Minor

A minor in criminal justice consists of the following

| CJ 101 | Introduction to Criminal Justice | 3 |
| :--- | :--- | :--- |
| CJ 201 | Police and Law Enforcement | 3 |
| CJ 326 | Juvenile Delinquency | 3 |
| CJ 430 | Courts and Criminal Procedure | 3 |
| or CJ 431 | Criminal Law |  |
| CJ 468 | Correctional Systems | 3 |
| or CJ 478 | Community-Based Corrections | 3 |
| SOC 331 | Introduction to Social Research | 3 |
| SOC 320 | Deviant Behavior | 3 |
| SOC 332 | Methods of Statistical Analysis | 4 |
| Total Hours |  | 25 |

## Other Requirements

1. A Grade of "C" or higher must be earned in all Criminal Justice courses required for this minor
2. Nine Semester hours of Sociology must be taken at Texas A\&M University-Commerce
3. Courses transferred in from a Community College may not count for 300-400 level courses

## Criminal Justice Second Major

Students choosing a second major in Criminal Justice must complete minimum of 34 semester hours, including 24 advanced hours.

## Complete the following courses

CJ $101 \quad$ Introduction to Criminal Justice 3
CJ 201 Police and Law Enforcement 3
CJ 326 Juvenile Delinquency 3
CJ 330 Crime and Criminology 3
CJ $301 \quad$ Criminal Investigation 3
CJ $430 \quad$ Courts and Criminal Procedure 3
or CJ 431 Criminal Law
CJ 468 Correctional Systems 3
or CJ 478 Community-Based Corrections
CJ 470
Criminal Justice Internship I
or CJ 480 Senior Seminar in Criminal Justice
SOC 331 Introduction to Social Research 3
SOC 332 Methods of Statistical Analysis 4
SOC 320 Deviant Behavior 3
or SOC $370 \quad$ Minority Groups
Total Hours

## Other Requirements

1. A Grade of " $C$ " or higher must be earned in all courses required for the second major
2. Fifteen Semester hours of Criminal Justice courses must be taken at Texas A\&M University-Commerce
3. Courses transferred in from a Community College may not count for 300-400 level course

## Sociology B.A./B.S.

A major in sociology helps individuals understand human behavior - how and why people act the way they do. This field of study provides insights into the invisible networks of rules and institutional arrangements which guide human behavior. Majoring in sociology provides knowledge of human behavior, organizational dynamics, and cultural diversity essential for many occupations. Sociology majors work in business and the private sector, or public and state/federal agencies. Graduates with a sociology degree have gained employment in such areas as city planning directors, data analysts, sales directors, managers in social service type agencies, and entered graduate school seeking a doctoral degree.


## Other Requirements

1. A Grade of " C " or higher must be earned in all Sociology courses required for this major
2. Fifteen Semester hours of Sociology must be taken at Texas A\&M University-Commerce
3. Courses transferred in from a Community College may not count for senior level credit

## Sociology with Criminology Emphasis

A major in Sociology-Criminology Emphasis is designed for students planning to work in criminal justice but who do not wish to receive a Bachelor of Arts or Science in Criminal Justice (see below). Students selecting this major option must also complete another major or minor

* This program will no longer be offered after 2014.


## Required courses in the major

| SOC 1301 | Introduction to Sociology | 3 |
| :--- | :--- | :--- |
| SOC 331 | Introduction to Social Research | 3 |
| SOC 332 | Methods of Statistical Analysis | 4 |
| SOC 436 | Sociological Theory | 3 |
| SOC 485 | Senior Seminar in Sociology | 3 |
| CJ 101 | Introduction to Criminal Justice | 3 |
| CJ 326 | Juvenile Delinquency | 3 |
| CJ 330 | Crime and Criminology | 3 |
| Additional Requirements for the Emphasis | 3 |  |
| Student must complete 6sh from: |  | 6 |
| SOC 311 | Social Class, Wealth, and Power | 6 |
| SOC 318 | Urban Sociology and Anthropology |  |
| SOC 320 | Deviant Behavior |  |
| or any advanced CJ class |  |  |
| Total Hours |  | 31 |

## Sociology with Global Emphasis

A major in Sociology with Global Emphasis is designed for students interested in or planning to work in a multi-cultural and/or multi-national setting. The Office of International Studies has a broad listing of courses that can be applied to this program.

Required courses in the major

| SOC 1301 | Introduction to Sociology | 3 |
| :--- | :--- | :--- |
| SOC 318 | Urban Sociology and Anthropology | 3 |
| SOC 331 | Introduction to Social Research | 3 |
| SOC 332 | Methods of Statistical Analysis | 4 |
| SOC 335 | Global Social Issues | 3 |
| SOC 436 | Sociological Theory | 3 |
| SOC 485 | Senior Seminar in Sociology | 3 |
| Additional courses for the emphasis | 9 |  |
| 9 semester hours required |  |  |
| ** |  |  |


#### Abstract

** $\quad 9$ semester hours (with all of these hours coming from International Studies) or 6 sh of advanced sociology beyond those listed above are required. Students with this major must take a minimum of 3 sh of International Studies. Please review the catalog for international studies courses in sociology and/or anthropology.


## Other Requirements

1. A Grade of " C " or higher must be earned in all Sociology courses required for this major
2. Fifteen Semester hours of Sociology must be taken at Texas A\&M University-Commerce
3. Courses transferred in from a Community College may not count for 300-400 level courses

## B.A. Foreign Language Requirement

A Candidate for the Bachelor of Arts degree must meet the requirements specified for the Bachelor of Science degree. In addition, the candidate must complete at least 12 semester hours (four courses) in one foreign language, or complete six semester hours above the elementary courses if two units of high school credit in the language have been submitted as a part of the regular university admission requirements, or complete three semester hours if he presents three or four high school credits.

## Sociology Minor

A minor of 18 sh in Sociology is available.

## Required Courses

Advanced SOC courses

## Other Requirements

1. A Grade of " C " or higher must be earned in all Criminal Justice courses required for this minor
2. Nine Semester hours must be taken at Texas A\&M University-Commerce
3. Courses transferred in from a Community College may not count for 300-400 level courses

## College of Science, Engineering and Agriculture

The College of Science, Engineering, \& Agriculture consists of the following academic departments: Agricultural Sciences, Biological \& Environmental Sciences, Chemistry, Computer Science \& Information Systems, Engineering \& Technology, Mathematics, and Physics \& Astronomy.

Programs of study are dedicated to providing a strong emphasis on discipline-based scholarship and challenging opportunities facing an increasingly complex and multidisciplinary world. University Studies courses offered by the college assist to form the academic foundation for undergraduate students across the university. Undergraduate degree programs are designed to prepare students for entry-level professional careers in an array of areas and admission to graduate or professional schools. Graduate degrees demonstrate mastery in a STEM discipline and often lead directly into doctoral studies at leading institutions throughout the world.

The college also offers a wide variety of pre-professional and professional programs and works closely with the College of Education and Human Services by offering several content areas for teacher education and certification.

## Mission

Innovation and Discovery. That is our charge and our pledge. The faculty and staff of CoSEA accept the responsibility of building an innovative framework to join our students in building a better Texas eager to compete in an interconnected world with creativity, ethical leadership, and imagination. We don't just discover the future, we make it.

## Pre-Professional Program in Science, Engineering, \& Agriculture

The college administers course curricula designed to prepare students for entry into the professional school of their choice in several areas of study.
A pre-professional program is not a major. Pre-professional programs do not fulfill all degree requirements of the university and no degree is granted on completion. Students intending to pursue a pre-professional program of study and who desire financial aid should consult with the Office of Financial Aid prior to enrollment with regard to regulations related to having a declared major. Contact the dean of CoSEA for more information.

## Advising and Student Success

Karen St. John, Advising and Outreach Coordinator
karen.stjohn@tamuc.edu
AGET Building, Room 105
Academic Advising \& Student Success provides information regarding academic matters to increase student success and facilitate graduation. Academic advising services are available year round for students in the College of Science, Engineering and Agriculture.

The responsibility for advising students is shared between Faculty Advisors and Advising \& Student Success. Undergraduate Faculty Advisors have an in-depth knowledge of the majors and professional field requirements offered by the College of Science, Engineering and Agriculture. Advising \& Student Success helps students understand the policies and procedures of the university and facilitate student success by providing resources and tools to students.

## Agricultural Sciences

The Department of Agricultural Sciences offers degrees at both the baccalaureate and master's levels. A Bachelor of Science degree can be earned in several different majors, as described below.

## Majors in Agricultural Sciences <br> Students seeking a bachelor's degree in any of the following majors must complete:

1. general requirements for a Bachelor of Arts or Science degree, and
2. University Studies Requirements (p. 39) (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown below.
undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/wildlife-conservation-science-bs/

- AgriBusiness B.A./B.S. (p. 223)
- Agricultural Science and Technology B.A./B.S. - Emphasis in Ornamental Horticulture (p. 229)
- Agricultural Science and Technology B.A./B.S. - Industry Emphasis (p. 231)
- Agricultural Science and Technology B.A./B.S. - Teacher Certification Option (p. 232)
- Agricultural Science B.A./B.S. - Broadfield (p. 225)
- Agricultural Science B.A./B.S., Emphasis in Plant and Soil Science (p. 227)
- Animal Science B.A./B.S. (p. 236)
- Wildlife and Conservation Science B.S.


## Pre-Professional Program for Veterinary Medicine

The Department also supervises undergraduate pre-professional programs in veterinary medicine. Students are advised to follow the pre-professional curriculum as well as pursue a degree in a related field in case the student chooses an alternative career path. Students selecting one of these preprofessional programs will be trained in biological, animal, chemical and physical sciences. For further information about these programs, refer to the preceeding pages under the College of Science, Engineering and Agriculture heading.

## Teacher Education Programs

Student Interested in becoming a middle or high school teacher of Agricultural Science and Technology should contact Dr. Bob Williams (903-886-5350), the faculty advisor for specific information and appropriate course selection.

## Minors in Agricultural Sciences

The Department offers a minor in:

- Agricultural Education Minor
- Animal Science Minor
- Equine Science Minor
- Equine Studies Minor
- Family and Consumer Sciences Minor
- Plant and Soil Science Minor

Agricultural Business B.A./B.S. (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/agribusiness-ba-bs)

Agricultural Science and Technology B.A./B.S. - Emphasis in Ornamental Horticulture (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/agricultural-science-technology-ba-bs-emphasis-ornamental-horticulture)

Agricultural Science and Technology B.A./B.S. - Industry Emphasis (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/agricultural-science-technology-ba-bs-industry-emphasis)

Agricultural Science and Technology B.A./B.S. - Teacher Certification Option (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/agricultural-science-technology-ba-bs-teacher-certification-option)

Agriculture Second Major (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/agriculture-second-major)

Agricultural Science B.A./B.S. - Broadfield (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/ agricultural-sciences/agricultural-science-ba-bs-broadfield)

Agricultural Science B.A./B.S., Emphasis in Plant and Soil Science (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/agricultural-science-ba-bs-emphasis-plant-soil-science)

Animal Science B.A./B.S. (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/animal-science-ba-bs)

Animal Science Pre-Veterinary Medicine Option B.A./B.S. (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/animal-science-pre-veterinary-medicine-option-ba-bs)
Wildlife and Conservation Science Major B.S.Agricultural Economics MinorAgricultural Education MinorAnimal Science MinorEquine Science Minor
Equine Studies Minor
Family and Consumer Sciences Minor
Plant and Soil Science Minor

## Agricultural Business B.A./B.S.

The department also offers a major in AgriBusiness. This program of study is designed to prepare students for careers in various businesses or government agencies associated with the production, processing, and distribution of agricultural products. This major integrates competencies in the principles of business management including financial management, marketing, planning, analysis and organization with the technical knowledge of agricultural sciences. This major prepares graduates in careers in agribusiness, agricultural finance, county extension agents, ranch management, banks, ag loan office, federal agencies, and ag consultancy businesses. The major also provides the graduate with the prerequisites for the master of business administration (MBA) degree.


| MGT $307 \quad$ Operations Management |
| :--- |
| Electives |
| 7 semester hours required |
| Total Hours |
| Suggested Curriculum Outline (B.S.) |

Freshman ..... Hours
Fitness and Recreational Activity ..... 2
AG 100 ..... 1
ANS 118 ..... 4
CHEM 1405 or 1411 ..... 4
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
MATH 1314 or 1324 ..... 3
MIS 128 ..... 3
PLS 115 or 1415 ..... 4
Sophomore ..... Hours
Electives ..... 6
ACCT 221 ..... 3
AEC 219 ..... 3
AEC 316 ..... 3
ECO 2301 ..... 3
ECO 2302 ..... 3
HIST 1302 ..... 3
PSCI 2301 ..... 3
SPC 1321 ..... 3
Junior ..... Hours
Elective ..... 3
Visual and Performing Arts ..... 3
ACCT 222 ..... 3
AEC 314 ..... 3
AEC 360 or BA 301 ..... 3
AG 300 ..... 1
AG 392 ..... 3
AMC 315 or 424 ..... 3
PLS 309 ..... 4
PSCI 2302 ..... 3
Senior ..... Hours
Elective ..... 3
US Humanities ..... 3
AEC 340 or FIN 304 ..... 3
AEC 380 or BA 302 ..... 3
AEC 435 ..... 3
AEC 445 ..... 3
AEC 455 ..... 3
AG 400 ..... 1
MGT 305 ..... 3
MGT 307 ..... 3

Total Hours: 120

## AgriBusiness BA requirements

The candidate for the Bachelor of Arts degree must meet the requirements specified for the Bachelor of Science degree. In addition, the candidate must complete at least 12 semester hours ( 4 courses) in one foreign language, or complete six semester hours above the elementary courses if two units of high school credit in the language have been submitted as part of the regular university admission requirements, or complete three semester hours if he presents three or four high school credits.

## Agricultural Economics Minor

| AEc electives |  | 3 |
| :--- | :--- | ---: |
| AEC 219 | Agricultural Economics | 3 |
| AEC 314 | Farm Management | 3 |
| AEC 316 | Agricultural Marketing | 3 |
| AEC 340 | Agricultural Finance | 3 |
| AEC 435 | Agricultural Policy | 3 |
| Total Hours |  | 18 |

## Agricultural Education Minor

| AGED 371 | Agricultural and Youth Leadership | 3 |
| :---: | :---: | :---: |
| AGED 404 | Supervised Experience Programs | 3 |
| AGED 470 | Methods of Teaching Agricultural Science and Technology | 3 |
| AGED 471 | The Program of Instruction in Agricultural Science and Technology | 3 |
| Plus 6 sh from: |  | 6 |
| AGED 465 | Student Teaching in Secondary Schools * |  |
| AG 405 | Internship in Agri-Industries |  |
| Required Support Courses |  |  |
| 3 sh from: |  |  |
| AMC 315 | Agricultural Systems Technology Management |  |
| AMC 424 | Agricultural Safety |  |
| AMC 428 | Laboratory Management in Agricultural Mechanization |  |

Total Hours

* Must also complete prerequisites for AGED 465 (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/agricultural-education-minor) which include PSY 300 (https://nextcoursecatalog.tamuc.edu/ undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/agricultural-education-minor), ETEC 424 (https:// nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/agricultural-educationminor), SED 300 (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/agricultural-sciences/agricultural-education-minor). if planning to student teach.


## Agricultural Science B.A./B.S. - Broadfield

In agricultural science, a student may select the broadfield major or select an emphasis in agricultural economics or plant and soil sciences. Depending upon the option selected, these majors prepare graduates for careers in positions such as agricultural civil service occupations, technical and sales positions with agbusinesses, agricultural finance, landscape operations, county extension agents, ranch management, agronomic or horticultural production management, food manufacturing and preservation, and quality control. A graduate with a major in agricultural science should possess competencies in basic economics and management, plant and animal nutrition, pest control, production and utilization of plant and animal products, marketing and food sciences.

## University Studies Courses

See the University Studies Requirements
Required courses in the major
AG 100

FDSC 210 ..... 327
Junior ..... Hours
US Vis/Perf Arts ..... 3
Ag Sci Electives, 9 sh (3 Adv) ..... 9
AG 392 ..... 3
ANS 317 ..... 3
PLS 309 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
Plus 4 sh from:
BSC 254, 303, or PLS 253 ..... 4
Senior ..... Hours
Ag Sci Electives, 9 sh (Adv) ..... 9
Electives, 10 sh (Adv) ..... 10
AG 300 ..... 1
AG 400 ..... 1
AMC 315 ..... 3
Plus 4 sh from:
PLS 253, BSC 254, or BSC 303 ..... 4
Total Hours: 120

* Satisfies three hour Social Science core requirement


## Agricultural Science B.A./B.S., Emphasis in Plant and Soil Science

In agricultural science, a student may select the broadfield major or select an emphasis in agricultural economics or plant and soil sciences. Depending upon the option selected, these majors prepare graduates for careers in positions such as agricultural civil service occupations, technical and sales positions with agbusinesses, agricultural finance, landscape operations, county extension agents, ranch management, agronomic or horticultural production management, food manufacturing and preservation, and quality control. A graduate with a major in agricultural science should possess competencies in basic economics and management, plant and animal nutrition, pest control, production and utilization of plant and animal products, marketing and food sciences.

## University Studies Courses

See the University Studies Requirements 43
Required courses in the emphasis
PLS Electives 15
PLS $309 \quad$ Soil Science 4
PLS $320 \quad$ Soil Fertility and Plant Nutrition 3
PLS $381 \quad$ Crop Physiology 3
PLS $326 \quad$ Forage and Pasture Crops 3
or PLS 460 Plant Taxonomy
or PLS 417 Geospatial Mapping

## Required courses in the core

AG $100 \quad$ Introduction to Agriculture 1
AG $300 \quad$ Writing for Publication 1
AG $392 \quad$ Applied Ethics: US and World Agriculture 3
AG $400 \quad$ Seminar 1
ANS $118 \quad$ Introduction to Animal Science 4
AEC $219 \quad$ Agricultural Economics 3
PLS $115 \quad$ Introduction to Plant Science 4
or PLS 1415 Introduction to Horticulture

## Required support courses

| AEC 380 | Agricultural Statistics | 3 |
| :--- | :--- | :--- |
| or BA 302 | Business and Economic Statistics |  |
| or BSC 412 | Quantitative Biology |  |
| or MATH 453 | Essentials of Statistics |  |
| BSC 1411 Botany | 4 |  |
| BSC 1413 | Zoology | 4 |
| CHEM 101 | General Chemistry Tutorial I | 1 |
| CHEM 102 | General Chemistry Tutorial II | 1 |
| CHEM 1407 | Survey of Organic and Biochemistry | 4 |
| CHEM 1411 | General and Quantitative Chemistry I | 4 |
| CHEM 1412 | General and Quantitative Chemistry II | 4 |
| PLS 253 | Economic Entomology | 4 |
| or BSC 254 | General Microbiology | 4 |
| SPC 1321 | US - Business and Professional Speaking | 4 |
| Total Hours |  | 3 |

* These courses may be counted towards a minor.


## Total Semester Hours: 120-124

## Suggested Curriculum Outline (B.S), Emphasis in Plant and Soil Science

Freshman ..... Hours
US PE Activity ..... 1
AG 100 ..... 1
ANS 118 ..... 4
PLS 115 or 1415 ..... 4
MATH 1314 or 1324 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
CHEM 1411 ..... 4
SPC 1321 ..... 3SophomoreHours
US Humanities ..... 3
AEC 219 ..... 3
BSC 1411 ..... 4
BSC 1413 ..... 4
CHEM 101 ..... 1
CHEM 102 ..... 1
CHEM 1411 ..... 4
CHEM 1412 ..... 4
PLS 309 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
Junior ..... Hours
PIS electives ..... 9
US Soc/Behav Sci ..... 3
US Vis/Perf Arts ..... 3
AG 392 ..... 3
PLS 320 ..... 3
CHEM 1407 ..... 4
PLS 253 or BSC 254 ..... 4
29
Senior ..... Hours
PIS electives, 9 sh (Adv) ..... 9
Electives, 10 sh (6 sh Adv) ..... 10
AEC 380, BSC 412, BA 302, or MATH 453 ..... 3
AG 300 ..... 1
AG 400 ..... 1
PLS 381 ..... 327
Total Hours: 122

## * Students intending to pursue a graduate degree should select CHEM 2114 and CHEM 2124 as their organic chemistry sequence.

Those students transferring from a community college whose agriculture courses have been oriented toward horticulture or who plan to do graduate work in horticulture should consult with the Agricultural Sciences Department head.

## Agricultural Science and Technology B.A./B.S. - Emphasis in Ornamental Horticulture

## The B.S. degree with a major in Agricultural Science and Technology is available with Teacher Certification, Ornamental Horticulture or Industry Emphasis.

University Studies Courses
See the University Studies Requirements ..... 43
Required courses in the Emphasis
PLS electives, 9 sh (adv) ..... 9
Ag Sci elective, 18 sh ( 6 adv) ..... 18
AEC 219 Agricultural Economics ..... 3
AG 100 Introduction to Agriculture ..... 1
AG 300 Writing for Publication ..... 1
AG 392 Applied Ethics: US and World Agriculture ..... 3
AG 400 Seminar ..... 1
AG 405 Internship in Agri-Industries ..... 6
PLS 1415 Introduction to Horticulture ..... 4
PLS 230 Ornamental Plant Identification ..... 3
PLS 253 Economic Entomology ..... 4
PLS 305 Landscape Design ..... 3
PLS 306 Plant Propagation ..... 3
PLS 309 Soil Science ..... 4
PLS 320 Soil Fertility and Plant Nutrition ..... 3
PLS 430 Greenhouse Management ..... 3
PLS 450 Landscape Management ..... 3
Required support courses
AEC 380 Agricultural Statistics ..... 3
or BSC 412 Quantitative BiologyANS 310CHEM 1405or CHEM 1411CHEM 1407
Genetics of Livestock Improvement ..... 3
Survey of General Chemistry
General and Quantitative Chemistry I
Survey of Organic and Biochemistry4

| MGT 305 | Management and Organiz |
| :--- | :--- |
| Total Hours |  |
| Suggested Curriculum Outline (B.S.) |  |

Freshman Hours ..... 3
US Visual/Performing Arts
US Visual/Performing Arts
US Communication ..... 3
US Humanity ..... 3
Ag Elective ..... 3
AG 100 ..... 1
ENG 1301 ..... 3
ENG 1302 ..... 3
MATH 1314 or 176 ..... 3
PLS 1415 ..... 4
Sophomore ..... Hours
US PE Activity ..... 2
Ag Elec ..... 3
CHEM 1405 or 1411 ..... 4
CHEM 1407 ..... 4
HIST 1301 ..... 3
HIST 1302 ..... 3
AEC 219 ..... 3
PLS 230 ..... 3Junior25
HoursAg Elec (6 Adv sh)
PLS Elec ( 3 Adv sh)6
ANS 310 ..... 3
MGT 305 ..... 3
PLS 253 ..... 4
PLS 305 ..... 3
PLS 309 ..... 4
PLS 430 ..... 3
PLS 450 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
Senior ..... Hours
Ag Elec (6 Adv sh) ..... 6
PLS Elec (6 Adv sh) ..... 6
AEC 380 or BSC 412 ..... 3
AG 300 ..... 1
AG 392 ..... 3
AG 400 ..... 1
AG 405 ..... 6
PLS 306 ..... 3
PLS 320 ..... 3

## Agricultural Science and Technology B.A./B.S. - Industry Emphasis

The Bachelor of Science Degree in Agricultural Science and Technology with an Industry Emphasis is available to community college transfer students who have earned an Associate of Applied Science degree in a specialized agricultural technology. Credit for courses in the specialized agricultural technology will be awarded only from departmentally approved AAS programs with articulation agreements on file with the Department of Agricultural Sciences.

## University Studies Courses

See the University Studies Requirements ..... 43
Required Courses in the major
AG 300 Writing for Publication ..... 1
AG 335 Wildlife Management I ..... 3
AG 392 Applied Ethics: US and World Agriculture ..... 3
AG 400 Seminar ..... 1
AEC 314 Farm Management ..... 3
AGED 371 Agricultural and Youth Leadership ..... 3
AMC 315 Agricultural Systems Technology Management ..... 3
AMC 423 Natural Resources Management ..... 3
PLS 1415 Introduction to Horticulture ..... 4
Introduction to Plant Science
Soil Science ..... 4
Advanced 300/400 level AEC Electives ..... 9
AMC/ANS/PLS Advanced 300/400 level electives ..... 8
Specialized Agricultural Tech
Community College courses in specialized agricultural tech ..... 32
Required support courses

| CHEM 1405 | Survey of General Chemistry * |
| :--- | :--- |
| or CHEM 1411 | General and Quantitative Chemistry I |
| CHEM 1412 | General and Quantitative Chemistry II |
| or CHEM 1407 | Survey of Organic and Biochemistry |

Total Hours120

* This course can be used to fulfill the University Studies requirement


## Suggested Curriculum Outline (B.S.)

Freshman32 semester hours specialized courses in agricultural tech (horticulture,32
equine, agribusiness, etc)32
Sophomore ..... Hours
ENG 1301 ..... 3
PLS 1415 or 115 ..... 4
CHEM 1405 or 1411 ..... 4
MATH 1314 ..... 3
PSCI 2301 ..... 3
SPC 1315 or 1321 ..... 3
Junior ..... Hours
US Vis/Perf Arts ..... 3
US Soc/Behav Sci ..... 3
US Humanities ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
PSCI 2302 ..... 3
CHEM 1412 or 1407 ..... 4
AG 300 ..... 1
AMC 315 ..... 3
PLS 309 ..... 4
Senior ..... Hours
Electives ..... 17
US PE Activity ..... 2
AG 335 ..... 3
AG 392 ..... 3
AG 400 ..... 1
AGED 371 ..... 3
AEC 314 ..... 3
AMC 423 ..... 3

Total Hours: 120
No more than 64 semester hours can be transferred from a community college.

## Agricultural Science and Technology B.A./B.S. - Teacher Certification Option

The B.S. degree with a major in agricultural science and technology is available with teacher certification or industry emphasis. A student can select an emphasis in teaching, or industry. The purpose of this degree is to prepare graduates for careers as teachers at the high school level, as well as areas of leadership within the agricultural industry and related governmental agencies. A graduate with this major should possess competencies in technical and production agriculture, methods and techniques of teaching, planning courses and programs for classroom instruction, and organizing and conducting community and on-farm agricultural instruction and demonstration programs.

| University Studies Courses |  |  |
| :---: | :---: | :---: |
| See the University Studies Requirements |  | 43 |
| Required courses in the major |  |  |
| AEC 219 | Agricultural Economics | 3 |
| AG 100 | Introduction to Agriculture | 1 |
| AG 300 | Writing for Publication | 1 |
| AG 392 | Applied Ethics: US and World Agriculture | 3 |
| AG 400 | Seminar | 1 |
| AGED 371 | Agricultural and Youth Leadership | 3 |
| AMC 315 | Agricultural Systems Technology Management | 3 |
| ANS 118 | Introduction to Animal Science | 4 |
| ANS 317 | Livestock Management Techniques | 3 |
| PLS 1415 | Introduction to Horticulture* | 4 |
| or PLS 115 | Introduction to Plant Science |  |
| PLS 309 | Soil Science | 4 |
| Plus AMc electives 6 sh from: |  | 6 |
| AMC 423 | Natural Resources Management |  |
| AMC 424 | Agricultural Safety |  |
| AMC 425 | Agricultural Structures and Material Handling Systems |  |
| AMC 426 | Agricultural Power and Energy Systems Management |  |
| AMC 428 | Laboratory Management in Agricultural Mechanization |  |
| AMC 489 | Independent Study |  |
| AMC 497 | Special Topics |  |


| Plus PLS elective 3 sh from: |  |
| :--- | :--- |
| PLS 230 | Ornamental Plant Identification |
| PLS 253 | Economic Entomology |
| PLS 305 | Landscape Design |
| PLS 306 | Plant Propagation |
| PLS 320 | Soil Fertility and Plant Nutrition |
| PLS 323 | Field Crops |
| PLS 326 | Forage and Pasture Crops |
| PLS 328 | Introduction to Range Management |
| PLS 355 | Interior Plantscaping |
| PLS 381 | Crop Physiology |
| PLS 417 | Geospatial Mapping |
| PLS 420 | Crop Production Practicum |
| PLS 430 | Greenhouse Management |
| PLS 450 | Landscape Management |
| PLS 455 | Turfgrass Management |
| PLS 489 | Independent Study |
| PLS 497 | Special Topics |

Plus Agricultural Science electives 9 sh from: ..... 9
any course with Ag, AEc, AnS, AMc, EqSc, FDSC or PLS prefix

## Required support courses

IT 111 Computer Aided Design (CAD) 3
PSY 300 Learning Processes and Development ..... 3
CHEM 1405 Survey of General Chemistry ..... 4or CHEM 1411 General and Quantitative Chemistry IRequired certification courses
ETEC $424 \quad$ Integrating Technology into the Middle/Secondary Curriculum 3
RDG 380 Comprehension and Vocabulary in Middle and High Schools ..... 3
SED 300 The Teaching Profession ..... 3
AGED 404 Supervised Experience Programs ..... 3
AGED 465 Student Teaching in Secondary Schools ..... 6
AGED 470 Methods of Teaching Agricultural Science and Technology ..... 3
AGED 471 The Program of Instruction in Agricultural Science and Technology ..... 3
Total Hours ..... 125

This course fulfills the University Studies science requirement

## Suggested Curriculum Outline (B.S)

| Freshman | Hours |
| :--- | ---: |
| US Soc/Behav Sci | 3 |
| US PE Activity | 1 |
| AG 100 | 1 |
| ANS 118 | 4 |
| PLS 115 or 1415 | 4 |
| ENG 1301 | 3 |
| ENG 1302 | 3 |
| MATH 1314 or 1324 | 3 |
| HIST 1301 | 3 |
| HIST 1302 | 3 |
| SPC 1321 | 3 |

Sophomore Hours
US PE Activity ..... 1
US Humanities ..... 3
AG Elec ..... 3
PLS Elec ..... 3
AMC 315 ..... 3
AEC 219 ..... 3
CHEM 1405 or 1411 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
T 111 ..... 3
Junior ..... Hours
AMc Elec ..... 6
US Visual/Performing Arts ..... 3
PLS 309 ..... 4
AG 300 ..... 1
AG 392 ..... 3
ANS 317 ..... 3
ETEC 424 ..... 3
PSY 300 ..... 3
AGED 371 ..... 3
RDG 380 ..... 3
32
Senior ..... Hours
Ag Elec ..... 6
Elec ..... 4
AG 400 ..... 1
AGED 404 ..... 3
AGED 465 ..... 6
AGED 470 ..... 3
AGED 471 ..... 3
SED 300 ..... 3
Total Hours: 121

## Agricultural Sciences Double Major

With an emphasis in Agricultural Economics and Economics/Finance

## (121 semester hours)

Required courses in the double major
AEc electives 6
Economics Electives (Adv) 3
AG $100 \quad$ Introduction to Agriculture 1
AG $300 \quad$ Writing for Publication 1
AG $392 \quad$ Applied Ethics: US and World Agriculture 3
AG $400 \quad$ Seminar 1
AEC $219 \quad$ Agricultural Economics 3
AEC $314 \quad$ Farm Management 3
AEC $316 \quad$ Agricultural Marketing 3
AEC $340 \quad$ Agricultural Finance 3
AEC $360 \quad$ Agricultural Law 3

| AEC 435 | Agricultural Policy | 3 |
| :---: | :---: | :---: |
| ECO 2301 | Principles of Macro Economics | 3 |
| ECO 309 | Economic Forecasting | 3 |
| ECO 332 | Intermediate Microeconomics | 3 |
| ECO 428 | International Economics/Finance | 3 |
| FIN 312 | Money, Banking, and Financial Markets | 3 |
| ACCT 221 | Principles of Accounting I | 3 |
| Required support courses |  |  |
| AEC 380 | Agricultural Statistics | 3 |
| or BA 302 | Business and Economic Statistics |  |
| ANS 118 | Introduction to Animal Science | 4 |
| MIS 128 | Business Computer Systems | 3 |
| MATH 176 | Mathematics for Business Applications II | 3 |
| PLS 115 | Introduction to Plant Science | 4 |
| or PLS 1415 | Introduction to Horticulture |  |
| PLS 309 | Soil Science | 4 |
| University Studies courses |  |  |
| See the University Studies Requirements |  | 43 |
| CHEM 1405 | Survey of General Chemistry | 4 |
| or CHEM 1411 | General and Quantitative Chemistry I |  |
| CHEM 1407 | Survey of Organic and Biochemistry | 4 |
| or CHEM 1412 | General and Quantitative Chemistry II |  |
| ECO 2302 | Principles of Micro Economics | 3 |
| ENG 2326 | Introduction to Literature | 3 |
| SPC 1321 | US - Business and Professional Speaking | 3 |
| Total Hours |  | 132 |
| Agriculture Second Major |  |  |
| Required courses in the second major |  |  |
| AEC 219 | Agricultural Economics | 3 |
| ANS 118 | Introduction to Animal Science | 4 |
| ANS 317 | Livestock Management Techniques | 3 |
| AG 100 | Introduction to Agriculture | 1 |
| AG 300 | Writing for Publication | 1 |
| AG 392 | Applied Ethics: US and World Agriculture | 3 |
| AG 400 | Seminar | 1 |
| AMC 315 | Agricultural Systems Technology Management | 3 |
| PLS 115 | Introduction to Plant Science | 4 |
| or PLS 1415 | Introduction to Horticulture |  |
| PLS 309 | Soil Science | 4 |
| University Studies courses |  |  |
| See the University Studies Requirements |  | 43 |
| CHEM 1405 | Survey of General Chemistry | 4 |
| or CHEM 1411 | General and Quantitative Chemistry I |  |
| CHEM 1407 | Survey of Organic and Biochemistry | 4 |
| or CHEM 1412 | General and Quantitative Chemistry II |  |
| MATH 1314 | College Algebra | 3 |
| or MATH 1324 | Mathematics for Business Applications |  |
| Total Hours |  | 81 |

## Animal Science B.A./B.S.

The department also offers the B.S. degree with a major in animal science. The purpose of this degree is to prepare students for careers in positions such as ranch management, county extension agents, technical and sales representatives with agricultural businesses such as feed and pharmaceutical companies, agricultural civil service, regulatory agencies, technical consultants, and laboratory technicians. A graduate with this major should possess competencies in animal reproductive physiology and genetics, animal nutrition, animal health management, production, utilization, and marketing of animal products, and business management.

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
AG $100 \quad$ Introduction to Agriculture 1

AG $300 \quad$ Writing for Publication 1
AG $392 \quad$ Applied Ethics: US and World Agriculture 3
AG 400 Seminar 1
ANS 308 Animal Nutrition 3
ANS 118 Introduction to Animal Science 4
ANS $310 \quad$ Genetics of Livestock Improvement 3
ANS 311 Reproductive Physiology of Domestic Animals 3
ANS 317 Livestock Management Techniques 3
ANS $319 \quad$ Anatomy and Physiology of Domestic Animals 3
or ANS 419 Diseases and Parasites of Livestock
ANS 307 Animal Feeds and Feeding 3
Plus 6 sh AnS Mgt electives from the following: 6

| ANS 312 | Artificial Breeding of Domestic Animals |
| :--- | :--- |
| ANS 313 | Dairying |
| ANS 411 | Small Ruminant Management |
| ANS 412 | Beef Cattle Management |
| ANS 413 | Swine Management |
| ANS 415 | Companion Animal Management |
| or EQSC 441 | Stable Management |

## Required support courses*

AEC 219 Agricultural Economics 3
AEC $380 \quad$ Agricultural Statistics 3
or BA 302 Business and Economic Statistics
or BSC 412 Quantitative Biology
or MATH 453 Essentials of Statistics
BSC $254 \quad$ General Microbiology 4
or PLS 253 Economic Entomology
BSC 1413 Zoology 4
CHEM 101 General Chemistry Tutorial I 1
CHEM $102 \quad$ General Chemistry Tutorial II 1
CHEM 1407 Survey of Organic and Biochemistry 4
CHEM 1411 General and Quantitative Chemistry I
CHEM 1412 General and Quantitative Chemistry II
PLS 115 Introduction to Plant Science 4
$\begin{array}{lll}\text { or PLS } 1415 & \text { Introduction to Horticulture } & 4 \\ \text { PLS } 309 & \text { Soil Science } & 4\end{array}$
PLS $326 \quad$ Forage and Pasture Crops 3

Electives Required
Electives required to meet minimum program hours $\quad 15$
$\begin{array}{ll}\text { Total Hours } & 123\end{array}$

These courses may be counted toward a minor.

## Suggested Curriculum Outline (B.S.)

Freshman ..... Hours
US Vis/Perf Arts ..... 3
US PE Activity ..... 2
US Speech ..... 3
AG 100 ..... 1
ANS 118 ..... 4
PLS 115 or 1415 ..... 4
BSC 1413 ..... 4
ENG 1301 ..... 3
ENG 1302 ..... 3
MATH 1314 ..... 3SophomoreHours
US Humanities ..... 3
AEC 219 ..... 3
ANS 317 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
CHEM 101 ..... 1
CHEM 102 ..... 1
CHEM 1411 ..... 4
CHEM 1412 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
31
Junior ..... Hours
Electives for Minor ..... 6
ANS 308 ..... 3
ANS 310 ..... 3
ANS 311 ..... 3
PLS 309 ..... 4
PLS 326 ..... 3
CHEM 1407 ..... 4
BSC 254 or PLS 253 ..... 430
Senior ..... Hours
AnS Mgt Electives ..... 6
Electives for Minor** ..... 9
AEC 380, BA 302, BSC 412, or MATH 453 ..... 3
AG 300 ..... 1
AG 392 ..... 3
AG 400 ..... 1
ANS 307 ..... 3
ANS 319 or 419 ..... 3

Total Hours: 120

* Students intending to pursue a graduate degree or enter veterinary school should select Chem and chem as their organic sequence.
** Electives for minor will support an interdisciplinary minor in which the Biology, Chemistry and Math courses can be used. If a minor in a specific discipline is desired, additional courses may be required.
*** To be selected from AG 335 Wildlife Management I; ANS 312 Artificial Breeding of Domestic Animals, ANS 313 Dairying, ANS 411 Small Ruminant Management, ANS 412 Beef Cattle Management, ANS 413 Swine Management, ANS 415 Companion Animal Management or EQSC 441 Stable Management.


## Animal Science Minor

(19 semester hours)

| ANS 118 | Introduction to Animal Science | 4 |
| :--- | :--- | :--- |
| ANS 310 | Genetics of Livestock Improvement | 3 |
| ANS 311 | Reproductive Physiology of Domestic Animals |  |
| ANS 319 | Anatomy and Physiology of Domestic Animals |  |
| Plus 3 sh from the following: |  |  |
| ANS 312 | Artificial Breeding of Domestic Animals |  |
| ANS 313 | Dairying |  |
| ANS 411 | Small Ruminant Management |  |
| ANS 412 | Beef Cattle Management |  |
| ANS 413 | Swine Management |  |
| ANS 415 | Companion Animal Management |  |
| EQSC 441 | Stable Management |  |

Total Hours

## Animal Science-Pre-Veterinary Medicine Option B.A./B.S.

| University Studies Courses |  |  |
| :---: | :---: | :---: |
| See the University Studies Requirements |  | 43 |
| Required courses in the major |  |  |
| AG 100 | Introduction to Agriculture | 1 |
| AG 300 | Writing for Publication | 1 |
| AG 392 | Applied Ethics: US and World Agriculture | 3 |
| AG 400 | Seminar | 1 |
| ANS 118 | Introduction to Animal Science | 4 |
| ANS 307 | Animal Feeds and Feeding | 3 |
| ANS 310 | Genetics of Livestock Improvement | 3 |
| ANS 311 | Reproductive Physiology of Domestic Animals | 3 |
| ANS 317 | Livestock Management Techniques | 3 |
| ANS 319 | Anatomy and Physiology of Domestic Animals | 3 |
| or ANS 419 | Diseases and Parasites of Livestock |  |
| ANS 308 | Animal Nutrition | 3 |
| Required Support Courses |  |  |
| AEC 219 | Agricultural Economics | 3 |
| AEC 380 | Agricultural Statistics | 3 |
| or BA 302 | Business and Economic Statistics |  |
| or BSC 412 | Quantitative Biology |  |
| or MATH 453 | Essentials of Statistics |  |
| BSC 1406 | Introductory Biology I | 4 |
| BSC 1407 | Introductory Biology II | 4 |
| CHEM 101 | General Chemistry Tutorial I | 1 |
| CHEM 102 | General Chemistry Tutorial II | 1 |
| CHEM 201 | Organic Chemistry Tutorial I | 1 |
| CHEM 202 | Organic Chemistry Tutorial II | 1 |


| CHEM 211 | Organic Chemistry I | 4 |
| :---: | :---: | :---: |
| CHEM 212 | Organic Chemistry II | 4 |
| ENG 2326 | Introduction to Literature | 3 |
| or ENG 202 | Multi-Ethnic American Literature |  |
| or ENG 2331 | Literature of the Western World |  |
| ENG 341 | Technical Writing | 3 |
| PLS 115 | Introduction to Plant Science | 4 |
| or PLS 1415 | Introduction to Horticulture |  |
| SPC 1321 | US - Business and Professional Speaking | 3 |
| Interdisciplinary minor |  |  |
| BSC 303 | Cell Biology | 4 |
| BSC 306 | Applied Microbiology | 4 |
| BSC 422 | Comparative Vertebrate Anatomy | 4 |
| AG 408 | Nutritional Biochemistry | 3 |
| CHEM 314 | General Biochemistry | 3 |
| PHYS 1401 | College Physics | 4 |
| PHYS 1402 | College Physics | 4 |
| Total Hours |  | 136 |
| Suggested Curriculum Outline (B.S.) |  |  |
| Freshman |  | Hours |
| US Vis/Perf Arts |  | 3 |
| US PE Activity |  | 2 |
| AG 100 |  | 1 |
| ANS 118 |  | 4 |
| PLS 115 or 1415 |  | 4 |
| BSC 1406 |  | 4 |
| BSC 1407 |  | 4 |
| ENG 1301 |  | 3 |
| ENG 1302 |  | 3 |
| MATH 2413 or 176 |  | 3-4 |
| SPC 1321 |  | 3 |
|  |  | 34-35 |
| Sophomore |  | Hours |
| AEC 219 |  | 3 |
| ANS 317 |  | 3 |
| HIST 1301 |  | 3 |
| HIST 1302 |  | 3 |
| ENG 2326, 202, or 2331 |  | 3 |
| ENG 341 |  | 3 |
| CHEM 101 |  | 1 |
| CHEM 102 |  | 1 |
| CHEM 1411 |  | 4 |
| CHEM 1412 |  | 4 |
| PSCI 2301 |  | 3 |
| PSCI 2302 |  | 3 |
|  |  | 34 |
| Junior |  | Hours |
| ANS 308 |  | 3 |
| ANS 310 |  | 3 |
| ANS 311 |  | 3 |
| BSC 303 |  | 4 |

BSC 306 ..... 4
BSC 422 ..... 4
CHEM 201 ..... 1
CHEM 202 ..... 1
CHEM 211 ..... 4
CHEM 212 ..... 431
Senior ..... Hours
AEC 380, BA 302, BSC 412, or MATH 453 ..... 3
AG 300 ..... 1
AG 392 ..... 3
AG 408 ..... 3
CHEM 314 ..... 3
AG 400 ..... 1
ANS 319 or 419 ..... 3
ANS 408 ..... 3
PHYS 1401 ..... 4
PHYS 1402 ..... 4
Total Hours: 127-128

## Equine Science Minor

## Only available with a major in Animal Science

## Requirement courses in the major (18 sh)



## Equine Studies Minor

## Required

| EQSC 240 | Intro to Equine Science | 3 |
| :--- | :--- | ---: |
| EQSC 241 | Advanced Horsemanship | 3 |
| EQSC 441 | Stable Management |  |
| Choose nine (9) from the following: |  |  |
| EQSC 340 | Yearling Training |  |
| EQSC 341 | Two-Year-Old Horse Training |  |
| EQSC 342 | Equine Nutrition |  |
| EQSC 343 | Equine Reproduction |  |
| EQSC 344 | Veterinary Techniques in the Equine |  |
| EQSC 345 | Training and Behavior Modification in Equine |  |

## Total Hours

## Family and Consumer Sciences Minor

## Required courses in the minor (18 sh)

AGED 371 Agricultural and Youth Leadership ..... 3
HHPH 331 Nutrition ..... 3
COUN 316 Parent and Family Dynamics ..... 3
COUN 414 Home and Family Living ..... 3
PSY 319 Child and Adolescent Development ..... 3
AGED/FDSC Advanced 300/400 level elective ..... 3
Total Hours ..... 18
Plant and Soil Science Minor
(20-22 semester hours)
PLS 115 Introduction to Plant Science ..... 4
415
PLS 309 Soil Science ..... 4
PLS 381 Crop Physiology ..... 3
Plus one of the following sequences: ..... 9-10
For agronomy students:

| PLS 323 | Field Crops |
| :--- | :--- |
| PLS 326 | Forage and Pasture Crops |
| PLS 420 | Crop Production Practicum |

For horticulture students:

| PLS 305 | Landscape Design |
| :---: | :--- |
| PLS 306 | Plant Propagation |
| PLS 430 | Greenhouse Management |
| For soils students: |  |
| PLS 320 | Soil Fertility and Plant Nutrition |
| PLS 321 | Soil Morphology Classification and Mapping |
| PLS 420 | Crop Production Practicum |
| Total Hours |  |

## Pre-Veterinary Medicine

Advisor: Dr. Bob Williams, Agricultural Sciences

A total of at least 84 semester hours must be completed before entry into the Professional Veterinary Program. In addition, large animal experience is required. The two animal science courses listed in the freshman year will document this experience. The veterinary program is the most competitive

## of any professional program. Thus, it is highly recommended that a major be selected in the event that admission into the program is denied. Regular consultation with the Pre-Veterinary advisor is encouraged.

The suggested pre-professional program is outlined below:
Freshman
ANS 118 4
ANS 317 3
BSC 14064
BSC 14074
HIST 1301 3
HIST 1302
ENG 1301 3
ENG 1302 3
MATH 2413 or 176
30-31

Sophomore Hours
SPC 13213
ENG 2326, 202, or 2331
ENG 341 3
PHYS 1401 4
PHYS 14024
CHEM 101 ( 1
CHEM $102 \longrightarrow 1$
CHEM 14114
CHEM $1412 \quad 4$
ANS 310 3

Junior Hours
CHEM 201 2 1
CHEM 202 隹 1
CHEM 211 4
CHEM 212 4
BSC 3034
BSC 3064
BSC 4224
AG 408 3
CHEM 3143

Total Hours: 88-89

## Wildlife and Conservation Science B.S.

## Associate Wildlife Biologist Pre-Certification

## University Studies Courses

See the University Studies Requirements 43
Required Courses in the Major

| AG 335 | Wildlife Management I | 3 |
| :--- | :--- | :--- |
| or BSC 335 | Wildlife Management I |  |
| AG 336 | Wildlife Management II |  |
| or BSC 336 | Wildlife Management II |  |
| AG 100 | Introduction to Agriculture | 1 |
| AG 300 | Writing for Publication | 1 |

AG 400 Seminar ..... 1
AG 405 Internship in Agri-Industries ..... 3-6
or BSC 405 Biology Internship
Agricultural Law
Agricultural Law ..... 3 ..... 3
ANS 310 Genetics of Livestock Improvement ..... 3
ANS 319 Anatomy and Physiology of Domestic Animals ..... 3
PLS 309 Soil Science ..... 4
PLS 460 Plant Taxonomy ..... 3
BSC 301 Biological Literature ..... 3
BSC 307 Ecology ..... 4
BSC 337 Field Methods in Wildlife and Conservation Science ..... 4
BSC 402 Ornithology ..... 3
or BSC 406
Mammalogy
Vertebrate Biology ..... 3
BSC 404
Quantitative Biology ..... 3
BSC 412
Plant Diversity and Conservation ..... 3
BSC 436
Geospatial Mapping ..... 3
BSC 417
Botany ..... 4
BSC 1411
Zoology ..... 4
BSC 14133
Required Support Courses
PSY 302 Psychological Statistics: Descriptive and Inferential ..... 4
CHEM 101 General Chemistry Tutorial I ..... 1
CHEM 1407 Survey of Organic and Biochemistry ..... 4
CHEM 1411 General and Quantitative Chemistry I ..... 4
MATH 1314 College Algebra ..... 3
MATH 142 Pre-Calculus ..... 3Total Hours127-130
Suggested Curriculum Outline (B.S.)
Freshman ..... Hours
BSC 1411 ..... 4
BSC 1413 ..... 4
MATH 1314 ..... 3
MATH 142 ..... 3
AG 100 ..... 1
ENG 1301 ..... 3
ENG 1302 ..... 3
CHEM 101 ..... 1
CHEM 1407 ..... 4
CHEM 1411 ..... 4
Sophomore ..... Hours
ANS 319 ..... 3
AG 335 or BSC 335 ..... 3
AG 336 or BSC 336 ..... 3
BSC 301 ..... 3
PLS 309 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
PSY 302 ..... 4
US Soc/Behav Sci ..... 3
US Vis Perf Arts ..... 332
Junior ..... Hours
US Humanities ..... 3
ENVS 403 ..... 3
ANS 310 ..... 3
BSC 307 ..... 4
BSC 412 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
Even Years
AEC 360 ..... 3
BSC 402 or 406 ..... 3
PLS 460 ..... 3
Odd Years
BSC 404 ..... 3
BSC 417 ..... 3
SPC 1315 or 1321 ..... 3
Senior40
US PE Activity ..... 2
BSC 337 ..... 4
BSC 416 ..... 3
BSC 436 ..... 3
AG 405 or BSC 405 ..... 3-6
AG 300 ..... 1
AG 400 ..... 1
Even Years
AEC 360 ..... 3
BSC 402 or 406 ..... 3
PLS 460 ..... 3Odd Years
BSC 404 ..... 3
BSC 417 ..... 3
SPC 1315 or 1321 ..... 3

Total Hours: 137-140
Program will also accept Chem 112 (common course CHEM 1412 General and Quantitative Chemistry II) and as substitute for CHEM 108 (common course CHEM 1407 Survey of Organic and Biochemistry); BSC 304 Genetics as substitute for ANS 310 Genetics of Livestock Improvement; BSC 305 General Physiology as substitute for ANS 319 Anatomy and Physiology of Domestic Animals.

## Biological and Environmental Sciences

The Department of Biological and Environmental Sciences offers the Bachelor of Sciences and the Bachelor of Arts in Biological Sciences, Bachelor of Science in Environmental Science, and Bachelor of Science in Wildlife and Conservation Science. The department also offers minors in Biology and Environmental Sciences. The programs include teacher certification in 8-12 life science and pre-professional programs in medicine, allied health, pharmacy, dentistry, osteopathy, optometry, nursing, medical technology, and physical therapy.

Graduate programs in the Department of Biological and Environmental Sciences include a Master of Science degree in Biological Sciences (including a fully on-line MS degree in Biological Sciences), an on-line Graduate Certificate in Environmental Sciences, and a Master of Education in Biological Sciences.

Graduates from the department are academically prepared for graduate schools and for careers in education, industry, and government.

1. degree requirements for a Bachelor of Arts or Science degree and
2. University Studies Requirements (p. 39) (refer to those sections of this catalog).

## II. Major in Biological Sciences

The Department of Biological and Environmental Sciences offers a general degree in the biological sciences. This program provides a comprehensive overview of biological sciences, working from the molecular level up through ecosystems. The program is suitable for students who are interested in the biological sciences, who are interested in a career in biological research, or who may be applying toward candidacy in some of the Allied Health Sciences fields. Students interested in the program are encouraged to talk to one of the advisors: Dr. Venu Cheriyath (903-468-6064), Dr. DongWon Choi (903-886-5221), Dr. Jeff Kopachena (903-886-5395), or Dr. J.P. Slovak (903-886-5368)

## II. Major in Pre-Medical Biological Sciences

The Department of Biological and Environmental Sciences offers a Pre-Medical degree in the biological sciences. The program provides a comprehensive background in the principles and processes of biology and biological research. This program is necessary for those students who want to enter into a medical school or a pre-professional school in the Allied Health Sciences. Students interested in the program are encouraged to talk to one of the advisors: Dr. Venu Cheriyath (903-468-6064) or Dr. J.P. Slovak (903-886-5368).

## IV. Major in Pre-Physical Therapy Biological Sciences

The Department of Biological and Environmental Sciences offers a Pre-Physical Therapy degree in the biological sciences. This program is designed specifically for students who want to enter into Physical Therapy Schools. Students interested in the program are encouraged to talk to one of the advisors: Dr. Venu Cheriyath (903-468-6064) or Dr. J.P. Slovak (903-886-5468)

## V. Major in Environmental Sciences

This unique program is designed for students who wish to work in the growing field of environmental science. Graduates of this program work for private environmental companies, with corporations, or with Federal, state, county, or civic governments. Students interested in the program are encouraged to talk to the program advisor: Dr. Haydn A. "Chip" Fox (903-886-5442).

## VI. Major in Wildlife and Conservation Science

The Department of Biological and Environmental Sciences offers a program in Wildlife and Conservation Science. This program is designed for students interested in Wildlife Management, Ecology, or the preservation of biodiversity. The program is designed around the requirements established by The Wildlife Society and the U.S. Fish and Wildlife Service. Graduates of this program are qualified to work for private, state, and Federal agencies. In addition, students graduating from this program can proceed into a graduate program for further professional development. Students interested in the program are encouraged to talk to an advisor: Dr. Jeff Kopachena (903-886-5395).

## VII. Teacher Education Programs

Students seeking a bachelor's degree in the following teacher education program must complete:

1. degree requirements for a Bachelor of Arts or Science degree (refer to the bachelor's degree requirements section of this catalog),
2. University Studies Requirements (p. 39) (refer to that section of this catalog),
3. requirements for admission to and retention in the Teacher Education Program (refer to the Center for Educator Certification and Academic Services section of this catalog), and
4. professional development courses (refer to the appropriate departmental section in this catalog, i.e. Department of Curriculum and Instruction or Department Educational Leadership.

In addition, courses in the major must be completed as shown below. "B.S. in Biological Sciences: Secondary Certification: (Grades 8 - 12) Life Sciences" For required courses see the academic advisor, Dr. J.P. Slovak (903-886-5368).

## VIII. Other Programs

Students can choose from a variety of other options depending on their academic requirements. The Department of Biological and Environmental Sciences offers the following additional programs:

Other Pre-Allied Health Programs
Second Major in Biological Sciences (p. 249)
Minor in Biology (p. 248)

## Minor in Environmental Science (p. 250)

Biological Sciences B.A./B.S. (p. 246)
Biological Sciences B.S. - Secondary Certification (Grades 8-12) Life Sciences (p. 248)
Biological Sciences Minor (p. 248)
Biological Sciences Second Major (p. 249)
Environmental Science B.S. (p. 249)
Environmental Science Minor (p. 250)
Pre-Dental Hygiene (p. 251)

Pre-Dentistry (p. 251)

Pre-Medical (Biological Sciences Major) (p. 252)
Pre-Medical Technology (p. 254)
Pre-Optometry (p. 255)
Pre-Osteopathy (p. 257)
Pre-Pharmacy (p. 258)
Pre-Physical Therapy (p. 260)
Pre-Physical (Therapy Biological Sciences Major) (p. 258)
Pre-Physician's Assistant (p. 261)

## Biological Sciences B.A./B.S.

University Studies Courses
See the University Studies Requirements 43

| Required courses in the major |  |  |
| :--- | :--- | :--- |
| BSC 1406 | Introductory Biology I* |  |
| BSC 1407 | Introductory Biology II * |  |
| BSC 111 | Introduction to Biology | 1 |
| BSC 301 | Biological Literature | 3 |
| BSC 303 | Cell Biology | 4 |
| BSC 304 | Genetics | 4 |
| BSC 305 | General Physiology | 4 |
| BSC 306 | Applied Microbiology | 4 |
| BSC 307 | Ecology | 4 |
| BSC 401 | Senior Seminar | 1 |
| Plus 18 sh advanced BSC course electives | 18 |  |

Required support courses

| CHEM 1411 | General and Quantitative Chemistry I | 5 |
| :--- | :--- | :--- |
| \& CHEM 101 | and General Chemistry Tutorial I (CHEM 1411 requires CHEM 101 tutorial concurrently.) |  |
| CHEM 1412 | General and Quantitative Chemistry II |  |
| \& CHEM 102 | and General Chemistry Tutorial II (CHEM 1412 requires CHEM 102 tutorial concurrently.) |  |
| CHEM 201 | Organic Chemistry Tutorial I | 1 |
| CHEM 202 | Organic Chemistry Tutorial II | 1 |
| CHEM 211 | Organic Chemistry I | 4 |
| CHEM 212 | Organic Chemistry II | 4 |
| PHYS 1401 | College Physics | 4 |


| PHYS 1402 | College Physics | 4 |
| :--- | :--- | ---: |
| Plus one course from: | Essentials of Statistics | $3-4$ |
| MATH 453 | Psychological Statistics: Descriptive and Inferential |  |
| PSY 302 | Quantitative Biology |  |
| BSC 412 | College Algebra* |  |
| MATH 1314 | Pre-Calculus |  |
| or MATH 142 | Calculus I | $3-4$ |
| or MATH 2413 | Calculus II |  |
| or MATH 192 | Pre-Calculus |  |
| MATH 142 <br> or MATH 1314 <br> or MATH 2413 <br> or MATH 192 | College Algebra | Calculus I |
| Total Hours | Calculus II | $120-122$ |

## Suggested Curriculum Outline (B.S.)

| Freshman | Hours |
| :---: | :---: |
| BSC 1406 | 4 |
| BSC 1407 | 4 |
| BSC 111 | 1 |
| MATH 1314, 2413, 142, or $192{ }^{*}$ | 3-4 |
| MATH 142, 192, 2413, or $1314^{*}$ | 3-4 |
| ENG 1301 | 3 |
| ENG 1302 | 3 |
| CHEM 101 | 1 |
| CHEM 102 | 1 |
| CHEM 1411 | 4 |
| CHEM 1412 | 4 |
|  | 31-33 |
| Sophomore | Hours |
| BSC 301 | 3 |
| BSC 303 | 4 |
| BSC 304 | 4 |
| CHEM 201 | 1 |
| CHEM 202 | 1 |
| CHEM 211 | 4 |
| CHEM 212 | 4 |
| PHYS 1401 | 4 |
| PHYS 1402 | 4 |
| HIST 1301 | 3 |
|  | 32 |
| Junior | Hours |
| BSC 305 | 4 |
| BSC 306 | 4 |
| BSC 307 | 4 |
| HIST 1302 | 3 |
| PSCI 2301 | 3 |
| PSCI 2302 | 3 |
| US Vis/Perf Arts | 3 |
| US Humanities | 3 |
|  | 27 |

Senior Hours
BSC 401 ..... 1
MATH 453, PSY 302, or BSC 412 ..... 3
SPC 1315 ..... 3
US Soc/Behav Sci ..... 3
US PE Activity ..... 2
Advanced Classes in Biological Sciences ..... 18
Total Hours: 120-122

* These courses should be used to satisfy the University Studies Requirements
Biological Sciences B.S. - Secondary Certification (Grades 8-12) Life Sciences
Secondary and All-Level Education
See for information: Secondary and All-Level Education (http://coursecatalog.tamuc.edu/undergrad/secondary-and-all-level-education)
University Studies Courses
See the University Studies Requirements ..... 43
Required courses in the major
Biological sciences (Adv) ..... 12
BSC 1406 Introductory Biology I ..... 4
BSC 1407 Introductory Biology II ..... 4
BSC 111 Introduction to Biology ..... 1
BSC 303 Cell Biology ..... 4
BSC 304 Genetics ..... 4
BSC 305 General Physiology ..... 4
BSC 306 Applied Microbiology ..... 4
BSC 307 Ecology ..... 4
BSC 461 Biology for Middle School Teachers ..... 3
CHEM 101 General Chemistry Tutorial I ..... 1
CHEM 102 General Chemistry Tutorial II ..... 1
CHEM 1411 General and Quantitative Chemistry I ..... 4
CHEM 1412 General and Quantitative Chemistry II ..... 4
ENVS 1301 Introduction to Environmental Science ..... 4
Required support courses
IS 451Historical Development of Great Ideas in Science3
PSY 300 Learning Processes and Development ..... 3
Teacher education courses
SED 300 The Teaching Profession ..... 3
SED 302 Teaching Styles and Learning Styles in Pluralistic Field-Based Environments ..... 3
SED 401 Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments ..... 3
SED 404 Internship in Secondary Schools Field-Based ..... 3
SED 405 Residency in Secondary Teaching ..... 3-6
RDG 380 Comprehension and Vocabulary in Middle and High Schools ..... 3
Total Hours ..... 125-128
Biological Sciences Minor
BSC 1406 Introductory Biology I ..... 4
Introductory Biology II ..... 4
Cell Biology ..... 4

| BSC 304 | Genetics | 4 |
| :--- | :--- | ---: |
| Plus 8 sh from: |  | 8 |
| BSC 305 | General Physiology |  |
| BSC 306 | Applied Microbiology |  |
| BSC 307 | Ecology |  |
| Total Hours |  | 24 |

## Biological Sciences Second Major

## Required Courses

BSc courses (Adv) 3
BSC $1406 \quad$ Introductory Biology I 4
BSC $1407 \quad$ Introductory Biology II 4
BSC $303 \quad$ Cell Biology 4
BSC 304 Genetics ..... 4
BSC 305 General Physiology ..... 4
BSC 306 Applied Microbiology ..... 4
BSC 307 Ecology ..... 4
Total Hours ..... 31

## Environmental Science B.S.

## University Studies Courses

See the University Studies Requirements ..... 43
Required courses in major
BSC 307 Ecology ..... 4
BSC 417 Geospatial Mapping ..... 3
ENVS 104 Natural Disasters ..... 4
ENVS 1301 Introduction to Environmental Science ..... 4
ENVS 301 Risk Assessment and Environmental Impact Statements ..... 3
ENVS 302 Phase I Environmental Site Assessments ..... 3
ENVS 304 Frontiers in Environmental Sciences ..... 1
ENVS 305 Environmental Hydrology ..... 4
ENVS 312 Introduction to Environmental Toxicology ..... 3
ENVS 403 Environmental Ethics and Law ..... 3
ENVS 410 Environmental Monitoring and Waste Management ..... 4
CHEM 1407 Survey of Organic and Biochemistry ..... 4
AEC 219 Agricultural Economics ..... 3
or AEC 445
PLS 309
Soil Science ..... 4
Required support courses
ESCI 1403Physical Geology4
BSC 1411 Botany
BSC 1413
Zoology
General and Quantitative Chemistry I ..... 4
CHEM 1412 General and Quantitative Chemistry II ..... 4
Minor Required
18 semester hours required in the Minor ..... 18
Total Hours ..... 120

[^3]
## Suggested Curriculum Outline (B.S.)

Freshman Hours
BSC 111 ..... 1
ESCI 1403 ..... 4
ENVS 104 ..... 4
CHEM 1411 ..... 4
CHEM 101 ..... 1
CHEM 1412 ..... 4
CHEM 102 ..... 1
MATH 1314 ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
31
Sophomore ..... Hours
BSC 301 ..... 3
BSC 1411 ..... 4
BSC 1413 ..... 4
ENVS 1301 ..... 4
ENVS 305 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1315 ..... 3
HIST 1302 ..... 3
US Soc/Behav Sci ..... 3
US Vis/Perf Arts ..... 3
37
Junior ..... Hours
BSC 307 ..... 4
ENVS 301 ..... 3
ENVS 302 ..... 3
ENVS 312 ..... 3
ENVS 403 ..... 3
PLS 309 ..... 4
US Humanities ..... 3
Minor ..... 6
29
Senior ..... Hours
ENVS 410 ..... 4
ENVS 304 ..... 1
AEC 219 or 445 ..... 3
BSC 417 ..... 3
CHEM 1407 ..... 4
US PE Activity ..... 2
Minor ..... 4

Total Hours: 118

## Environmental Science Minor

This program allows a student to have a disciplinary major in a wide range of fields plus an Environmental Science minor.

| Required courses |  |  |
| :--- | :--- | ---: |
| ENVS 1301 | Introduction to Environmental Science | 4 |
| ENVS 301 | Risk Assessment and Environmental Impact Statements | 3 |
| ENVS 302 | Phase I Environmental Site Assessments |  |
| Plus three advanced courses from: |  | $9-12$ |
| ENVS 305 | Environmental Hydrology |  |
| ENVS 312 | Introduction to Environmental Toxicology |  |
| ENVS 403 | Environmental Ethics and Law |  |
| ENVS 410 | Environmental Monitoring and Waste Management |  |
| BSC 307 | Ecology |  |
| BSC 417 | Geospatial Mapping |  |
| Total Hours |  |  |

## Pre-Dental Hygiene

Advisor: John Slovak, Department of Biological and Environmental Sciences, 903-886-5378
The course requirements for entrance into a Dental Hygiene Program vary among the different baccalaureate degree granting institutions. Specific information on the various programs should be directed to a Pre-Dental Hygiene advisor.

## The following curriculum is provided for the student's guidance:

Freshman I ..... Hours
BSC 1406 ..... 4
BSC 1407 ..... 4
CHEM 1405 ..... 4
CHEM 1407 ..... 4
ENG 1301 ..... 3
ENG 1302 ..... 3
Freshman II ..... Hours22
US PE Activity ..... 2
HIST 1301
HIST 1302 ..... 3
MATH 1314 or 1324 ..... 3
Sophomore I ..... Hours
ENG 2326 ..... 3
ENG 202 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
PSY 2301 ..... 3
SOC 1301 ..... 318
Sophomore II ..... Hours
Electives ..... 12
SPC 1315 or 1321 ..... 3

Total Hours: 66

## Pre-Dentistry

Advisor: John Slovak, Department of Biological and Environmental Sciences, 903-886-5378
A student in the medical pre-professional programs must have a thorough understanding of the basic sciences but also must possess a broad cultural knowledge of the people with whom he/she will work. It is highly recommended that the student entering these programs formulate plans to complete the
bachelor's degree since most professional schools in Texas require a bachelor's degree. The student should consult with the pre-medical advisor during the freshman year to plan a major and minor. The student should consider alternate career goals in this planning in case admission to medical school is not achieved. The student should plan to take the MCAT or DAT during the spring semester preceding the fall semester that application is made to medical school.

## The following curriculum is provided for the student's guidance:

| Freshman | Hours |
| :---: | :---: |
| US PE Activity | 2 |
| BSC 1406 | 4 |
| BSC 1407 | 4 |
| CHEM 1411 | 4 |
| CHEM 1412 | 4 |
| MATH 1314 or 142 | 3 |
| MATH 2413 | 4 |
| ENG 1301 | 3 |
| ENG 1302 | 3 |
| SPC 1315 or 1321 | 3 |
| HIST 1301 | 3 |
| HIST 1302 | 3 |
|  | 40 |
| Sophomore | Hours |
| US Soc/Behav Sci | 3 |
| BSC 303 | 4 |
| BSC 304 | 4 |
| CHEM 211 | 4 |
| CHEM 212 | 4 |
| PHYS 1401 | 4 |
| PHYS 1402 | 4 |
| PSCI 2301 | 3 |
| PSCI 2302 | 3 |
|  | 33 |
| Junior | Hours |
| First Major (Adv) ${ }^{* * *}$ | 12-16 |
| US Humanities | 3 |
| Second Major | 12-16 |
| US Vis/Perf Arts (Adv)*********) | 3 |
|  | 30-38 |
| Senior | Hours |
| First Major (Adv) | 12-16 |
| Second Major (Adv) | 12-16 |
| US Capstone | 3 |
|  | 27-35 |

Total Hours: 130-146

* Pre-medical students will elect MATH 141 and/or MATH 142 Pre-Calculus, and MATH 191.
** Non-biological sciences majors may choose a different biological sciences course upon consultation with advisor.
*** First and Second major course requirements will vary depending upon academic discipline selected.


## Pre-Medical (Biological Sciences Major)

## University Studies Courses

See the University Studies Requirements

| BSc classes in Specialization Area (Adv) |  | 15 |
| :---: | :---: | :---: |
| BSC 1406 | Introductory Biology I* |  |
| BSC 1407 | Introductory Biology II * |  |
| BSC 111 | Introduction to Biology | 1 |
| BSC 301 | Biological Literature | 3 |
| BSC 303 | Cell Biology | 4 |
| BSC 304 | Genetics | 4 |
| BSC 305 | General Physiology | 4 |
| BSC 306 | Applied Microbiology | 4 |
| BSC 307 | Ecology | 4 |
| BSC 401 | Senior Seminar | 1 |
| Required support courses |  |  |
| CHEM 101 | General Chemistry Tutorial I | 1 |
| CHEM 102 | General Chemistry Tutorial II | 1 |
| CHEM 1411 | General and Quantitative Chemistry I | 4 |
| CHEM 1412 | General and Quantitative Chemistry II | 4 |
| CHEM 201 | Organic Chemistry Tutorial I | 1 |
| CHEM 202 | Organic Chemistry Tutorial II | 1 |
| CHEM 211 | Organic Chemistry I | 4 |
| CHEM 212 | Organic Chemistry II | 4 |
| CHEM 314 | General Biochemistry | 3 |
| MATH 142 | Pre-Calculus * |  |
| or MATH 1314 | College Algebra |  |
| or MATH 142 | Pre-Calculus |  |
| or MATH 2413 | Calculus I |  |
| or MATH 192 | Calculus II |  |
| MATH 2413 | Calculus I | 3-4 |
| or MATH 1314 | College Algebra |  |
| or MATH 142 | Pre-Calculus |  |
| or MATH 192 | Calculus II |  |
| PHYS 1401 | College Physics | 4 |
| PHYS 1402 | College Physics | 4 |
| Plus one course from: |  | 3-4 |
| MATH 453 | Essentials of Statistics |  |
| PSY 302 | Psychological Statistics: Descriptive and Inferential |  |
| BSC 412 | Quantitative Biology |  |
| Total Hours |  | 120-122 |
| Suggested Curriculum Outline (B.S.) |  |  |
| Freshman |  | Hours |
| BSC 1406 |  | 4 |
| BSC 1407 |  | 4 |
| BSC 111 |  | 1 |
| CHEM 101 |  | 1 |
| CHEM 102 |  | 1 |
| CHEM 1411 |  | 4 |
| CHEM 1412 |  | 4 |
| MATH $2413,1314,142$, or $192 *$ |  | 3-4 |
| MATH 142 |  | 3 |
| ENG 1301 |  | 3 |

ENG 1302 ..... 3
Sophomore ..... Hours
BSC 301 ..... 3
BSC 303 ..... 4
BSC 304 ..... 4
CHEM 201 ..... 1
CHEM 202 ..... 1
CHEM 211 ..... 4
CHEM 212 ..... 4
PHYS 1401 ..... 4
PHYS 1402 ..... 4
HIST 1301 ..... 3
32
Junior ..... Hours
BSC 305 ..... 4
BSC 306 ..... 4
BSC 307 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
US Vis/Perf Arts ..... 3
US Humanities ..... 3
Specialization area (Adv) ..... 3
Senior ..... Hours27
BSC 401
BSC 401 ..... 1
MATH 453, PSY 302, or BSC 412 ..... 3-4
CHEM 314 ..... 3
SPC 1315 ..... 3
US Soc/Behav Sci ..... 3
US PE Activity ..... 2
Specialization area (Adv) ..... 15

Total Hours: 120-122

* This course should be used to satisfy the University Studies Requirements for Mathematics


## Pre-Medical Technology

Advisor: John Slovak, Department of Biological and Environmental Sciences, 903-886-5378
Upon the successful completion of the following recommended course of study, the student should apply to a school certified by the American Society of Clinical Pathologists. Several possible options exist for students interested in pursuing a medical technology program. Upon entering A\&M-Commerce a student should consult with the medical technology program advisers.

## Required courses in the major, minor or specialization

| BSC 1406 | Introductory Biology I | 4 |
| :--- | :--- | :--- |
| BSC 1407 | Introductory Biology II | 4 |
| BSC 254 | General Microbiology | 4 |
| BSC 303 | Cell Biology | 4 |
| BSC 305 | General Physiology | 4 |
| BSC 306 | Applied Microbiology | 4 |
| BSC 420 | Immunology | 3 |
| BSC 422 | Comparative Vertebrate Anatomy | 4 |

BSC 430 Topics in Microbiology ..... 3
Required support courses
CHEM 1411 General and Quantitative Chemistry I ..... 4
CHEM 1412 General and Quantitative Chemistry II ..... 4
CHEM 211 Organic Chemistry I ..... 4
CHEM 212 Organic Chemistry II ..... 4
CHEM 340 Quantitative and Instrumental Analysis ..... 4
PHYS 1401 College Physics ..... 4
PHYS 1402 College Physics ..... 4
Total Hours ..... 62
The following general curriculum is presented for the student's guidance:
FreshmanBSC 14064
BSC 1407 ..... 4
CHEM 1411 ..... 4
CHEM 1412 ..... 4
MATH 1314 ..... 3
MATH 142 ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 334
Sophomore ..... Hours
BSC 254 ..... 4
BSC 303 ..... 4
CHEM 211 ..... 4
CHEM 212 ..... 4
ENG 2326 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
PHYS 1401 ..... 4
PHYS 1402 ..... 4
SPC 1315 ..... 3
SPC 1321 ..... 3
39
Junior ..... Hours
BSC 305 ..... 4
BSC 306 ..... 4
BSC 420 ..... 3
BSC 422 ..... 4
BSC 430 ..... 3
CHEM 340 ..... 4

Total Hours: 95

## Pre-Optometry

Advisor: John Slovak, Department of Biological and Environmental Sciences, 903-886-5378

After completion of the suggested program outlined below, the student should apply to a school offering a degree in optometry. The student should consult the catalog of the optometry school of interest in order to insure that all admission requirements to that school have been met.

## Required courses in the major, minor or specialization

| BSC 1406 | Introductory Biology I | 4 |
| :--- | :--- | ---: |
| BSC 1407 | Introductory Biology II | 4 |
| BSC 2401 | Human Anatomy and Physiology I | 4 |
| BSC 2402 | Human Anatomy and Physiology II | 4 |
| BSC 254 | General Microbiology | 4 |
| BSC 305 | General Physiology | 4 |
| Required support courses |  | 4 |
| CHEM 1411 | General and Quantitative Chemistry I | 4 |
| CHEM 1412 | General and Quantitative Chemistry II | 4 |
| CHEM 211 | Organic Chemistry I | 4 |
| CHEM 212 | Organic Chemistry II | 4 |
| PHYS 1401 | College Physics | 4 |
| PHYS 1402 | College Physics | 4 |
| PSY 302 | Psychological Statistics: Descriptive and Inferential | 4 |
| Total Hours |  | 4 |

The suggested pre-professional program is outlined below:

## Freshman

## Hours

US PE Activity 2
BSC 1411 4
BSC 1413 4
CHEM 1411 4
CHEM 1412 4 4
ENG 1301 3
ENG 1302 3
HIST 1301 3
HIST 1302 3
MATH 1314 3
MATH 142 3
Sophomel Hous
CHEM 211 4 4

CHEM 212 4 4
PHYS 1401 4
PHYS 1402 4
BSC 24014
BSC 2402 4 4
BSC 2544
PSY 2301 3
PSY 302 4 4
Junior 35
CHEM 351 4
CHEM 414 4 4
BSC 305 4
MATH 2413 4
MATH 192 4 4
ENG 2326 3
ENG 202 3
PSCI $2301 \quad 3$

Total Hours: 103

## Pre-Osteopathy

Advisor: John Slovak, Department of Biological and Environmental Sciences, 903-886-5378
A student in the medical pre-professional programs must have a thorough understanding of the basic sciences but also must possess a broad cultural knowledge of the people with whom he/she will work. It is highly recommended that the student entering these programs formulate plans to complete the bachelor's degree since most professional schools in Texas require a bachelor's degree. The student should consult with the pre-medical advisor during the freshman year to plan a major and minor. The student should consider alternate career goals in this planning in case admission to medical school is not achieved. The student should plan to take the MCAT or DAT during the spring semester preceding the fall semester that application is made to medical school.

## The following curriculum is provided for the student's guidance:

Freshman Hours
US PE Activity ..... 2
BSC 1406 ..... 4
BSC 1407 ..... 4
CHEM 1411 ..... 4
CHEM 1412 ..... 4
MATH 1314 or 142 ..... 3
MATH 2413 ..... 4
ENG 1301 ..... 3
ENG 1302 ..... 3
SPC 1315 or 1321 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 340
Sophomore ..... Hours
US Soc/Behav Sci ..... 3
BSC 303 ..... 4
BSC 304 ..... 4
CHEM 211 ..... 4
CHEM 212 ..... 4
PHYS 2425 ..... 4
PHYS 2426 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3JuniorHours
First Major (Adv) ${ }^{\text {*** }}$ ..... 12-16
US Humanities ..... 3
Second Major ..... 12-16
US Vis/Perf Arts (Adv) *** ..... 3
30-38
Senior ..... HoursFirst Major (Adv)
Second Major (Adv) ..... 12-16
US Capstone ..... 3

Total Hours: 130-146

* Pre-medical students will elect Math 141 and/or MATH 142 Pre-Calculus, and MATH 191
** Non-biological sciences majors may choose a different biological sciences course upon consultation with advisor.
*** First and Second major course requirements will vary depending upon academic discipline selected.


## Pre-Pharmacy

Advisor: John Slovak, Department of Biological and Environmental Sciences, 903-886-5378, or the Department of Chemistry at 903-886-5392.
Pre-Pharmacy students usually take two years of general education and basic sciences courses and then transfer to a pharmacy school for three additional years of study to complete the degree. Requirements for admission differ among the various pharmacy schools. The student should obtain a catalog from the pharmacy school of his or her choice and consult the pre-pharmacy advisor.

The following general curriculum is presented for the student's guidance:
Freshman I Hours
BSC 1406 ..... 4
BSC 1407 ..... 4
CHEM 1411 ..... 4
CHEM 1412 ..... 4
MATH 1314 or 142 ..... 319
Freshman II ..... Hours
PE Activity ..... 2
HIST 1301 ..... 3
HIST 1302 ..... 3
ECO 2301 ..... 3
Sophomore I ..... Hours
BSC 254 ..... 4
CHEM 211 ..... 4
CHEM 212 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
PHYS 1401 ..... 4
PHYS 1402 ..... 4
Sophomore II ..... Hours
Elective ..... 3
PE Activity ..... 2
ENG 1301 ..... 3
ENG 1302 ..... 3
ENG 2326 ..... 3
MATH 453 or BA 302 ..... 3

Total Hours: 73

* Two Texas pharmacy schools require 3 sh of calculus.


## Pre-Physical (Therapy Biological Sciences Major)

## University Studies Courses

See the University Studies Requirements
Required courses in the major BSC 1406


## Suggested Curriculum Outline (B.S.)

| Freshman | Hours |
| :---: | :---: |
| BSC 1406 | 4 |
| BSC 1407 | 4 |
| BSC 111 | 1 |
| MATH 1314 | 3 |
| MATH 142 | 3 |
| ENG 1301 | 3 |
| ENG 1302 | 3 |
| CHEM 101 | 1 |
| CHEM 102 | 1 |
| CHEM 1411 | 4 |
| CHEM 1412 | 4 |
|  | 31 |
| Sophomore | Hours |
| US PE Activity | 2 |
| BSC 303 | 4 |
| BSC 304 | 4 |
| CHEM 201 | 1 |
| CHEM 202 | 1 |
| CHEM 211 | 4 |
| CHEM 212 | 4 |

PHYS 1401 ..... 4
PHYS 1402 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
Junior ..... Hours
US Vis/Perf Arts ..... 3
US Social and Behavioral Science ..... 3
BSC 301 ..... 3
BSC 305 ..... 4
BSC 306 ..... 4
BSC 307 ..... 4
BSC 256 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 330
Senior ..... Hours
BSc (Adv) ..... 11
US Humanities ..... 3
BSC 401 ..... 1
BSC 422 ..... 4
PSY 302 or MATH 453 ..... 3-4
SPC 1315 or 1321 ..... 3

Total Hours: 120-121

* These courses should be used to satisfy the University Studies Requirements for Natural Sciences


## Pre-Physical Therapy

Advisor: John Slovak, Department of Biological and Environmental Sciences, 903-886-5378
A student undertaking the pre-professional physical therapy program must have a thorough understanding of the basic sciences, including the evaluation, maintenance, and improvement of the functions of the musculoskeletal, neuromuscular, cardiovascular, and respiratory systems of humans. In addition, good communication skills are needed to relay instruction of treatments to patients, families and support personnel as well as other health care professionals. The student should develop a broad cultural knowledge in order to work with a broad spectrum of patients.

## The following curriculum is provided for the student's guidance:

Freshman ..... Hours
US PE Activity ..... 2
BSC 1406 ..... 4
BSC 1407 ..... 4
CHEM 1411 ..... 4
CHEM 1412 ..... 4
MATH 1314 or 142 ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
SPC 1315 or 1321 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
Sophomore36
US Soc/Behav Sci ..... 3
BSC 303 ..... 4
BSC 304 ..... 4
CHEM 211 ..... 4
CHEM 212 ..... 4
PHYS 1401 ..... 4
PHYS 1402 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
33
Junior ..... Hours
US Humanities ..... 3
US Vis/Perf Arts ..... 3
BSC 305 ..... 4
BSC 422 ..... 4
CHEM 340 ..... 4
12 sh ( 6 sh Adv) ${ }^{*}$ ..... 12Senior30BSc, 2 Adv. Courses
US Capstone ..... 3
PSY 302 ..... 4
PSY 322 ..... 3
PHYS 319 ..... 3
CSCI 126 or 151 ..... 3

Total Hours: 115

* from HHPK 154 Concepts of Physical Activity, HHPK 211 First Aid and Safety, HHPK 213 Prevention and Care of Athletic Injuries, HHPK 274 Adapted Physical Education, HHPK 335 Kinesiology and Biomechanics, HHPH 331 Nutrition.


## Notes

and SOC 111 are required. Also one course in medical terminology is required. The pre-physical therapy program leads to a degree in broadfield science which the professional schools prefer.

## Pre-Physician's Assistant

## Advisor: John Slovak, Department of Biological and Environmental Sciences, 903-886-5378

The Physician's Assistant Program requires two years of undergraduate training to gain admission to the School of Allied Health Professions, Southwest Medical School in Dallas; School of Allied Health Sciences, University of Texas Medical Branch in Galveston; and Baylor College of Medicine in Houston. Completion of the program may lead to a baccalaureate degree in health care sciences, certification as a physician's assistant, and eligibility to write the National Certification Examination administered by the National Board of Medical Examiners.

Required courses in the major, minor or specialization

| BSC 1406 | Introductory Biology I | 4 |
| :--- | :--- | :--- |
| BSC 1407 | Introductory Biology II | 4 |
| BSC 2401 | Human Anatomy and Physiology I | 4 |
| Required support courses |  | 4 |
| CHEM 1411 | General and Quantitative Chemistry I | 4 |
| CHEM 1412 | General and Quantitative Chemistry II | 4 |
| CHEM 211 | Organic Chemistry I | 24 |
| Total Hours |  | 4 |

The following curriculum is provided for the student's guidance:
ENG 1302 ..... 3
PSY 2301 ..... 3
CHEM 1411 ..... 4
CHEM 1412 ..... 4
SPC 1315 or 1321 ..... 3
20
Freshman II ..... Hours
US PE Activity ..... 2
HIST 1301 ..... 3
HIST 1302 ..... 3
BSC 1411 ..... 4
MATH 1314 ..... 3
Sophomore I ..... Hours
BSC 1413 ..... 4
BSC 2401 ..... 4
PHIL 2303 ..... 3
SPA 131 ..... 3
SPA 132 ..... 3
CHEM 211 ..... 4
Sophomore II ..... Hours
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SOC 1301 ..... 3
SOC 1306 ..... 3
PSY 322 ..... 3

## Total Hours: 71

## Chemistry

The professional degree program in the Department of Chemistry is approved by the American Chemical Society and has been designed to provide indepth chemical education for students. Five programs of study for a bachelor's degree with a major in chemistry are provided to meet the different career goals of the candidate as identified below.

Students seeking a bachelor's degree in the following major must complete:

1. degree requirements for a Bachelor of Science degrees and
2. University Studies requirements (refer to those sections of this catalog).

In addition transfer students are required to complete a minimum of CHEM 351 Physical Chemistry I and 18 semester hours of advanced Chemistry for a major and CHEM 340 Quantitative and Instrumental Analysis and 4 semester hours of advanced chemistry for a minor at A\&M-Commerce.

The department offers accelerated five-year BS and MS degrees for freshmen and three-year BS and MS degrees for transfers. Please see departmental advisers for consultation.

Chemistry B.S. - Teacher Certification Option (https://nextcoursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/chemistry/chemistry-bs-teacher-certification-option)

Chemistry B.S. (p. 263)
Chemistry B.S. - A.C.S. Professional Degree (p. 264)
Chemistry Minor (p. 267)

Chemistry Second Major (p. 267)
Pre-Medical (Chemistry Major and Second Major in Biology (p. 268))

## Chemistry B.S.

This degree provides a background in chemistry for students whose career goals are to enter the health professions, but with an option to continue graduate study in chemistry or chemistry fields. The competencies of students who elect this degree option are an understanding of the basic theory and practices of chemistry with significant research training.


* These courses may apply on a second major or minor.
** This courses fulfills the University Studies science requirement


## Suggested Curriculum Outline

Freshman ..... Hours
CHEM 101 ..... 1
CHEM 102 ..... 1
CHEM 1411 ..... 4
CHEM 1412 ..... 4
MATH 2413 ..... 4
MATH 192 ..... 4
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
Sophomore Hours
CHEM 201 ..... 1
CHEM 202 ..... 1
CHEM 211 ..... 4
CHEM 212 ..... 4
CHEM 340 ..... 4
PHYS 2425 ..... 4
PHYS 2426 ..... 4
MATH 314 ..... 4
SPC 1315 or 1321 ..... 3
Junior Hours29
Advanced CHEM courses ..... 4
US Humanities ..... 3
US Vis/Perf Arts ..... 3
US PE Activity ..... 1
Minor* ..... 8
Elective ..... 3
CHEM 351 ..... 4
CHEM 418 ..... 3
PSCI 2301 ..... 332
Senior ..... Hours
Chem (Adv) ..... 4
US Soc/Behav Sci ..... 3
US PE Activity ..... 1
Minor ..... 13
CHEM 401 (2 sh required) ..... 2
CHEM 418 ..... 3
PSCI 2302 ..... 3

Total Hours: 120

Courses can be used to receive a second major.

## Chemistry B.S. - A.C.S. Professional Degree

## A.C.S. Professional Degree

The American Chemical Society professional degree prepares students for careers in a wide variety of positions in industry, government, and education. It is recommended for those students intending to do graduate study in chemistry or seeking employment as chemists in industry. The competencies of students with this degree should meet the criteria for a professional chemist stated by the American Chemical Society.
University Studies Courses
See the University Studies Requirements ..... 43
Required courses in the major
Chem (Adv) ..... 3-4
CHEM $101 \quad$ General Chemistry Tutorial I ..... 1
CHEM 102 General Chemistry Tutorial II ..... 1
CHEM 1411 General and Quantitative Chemistry I **CHEM 1412 General and Quantitative Chemistry II*
CHEM 201 Organic Chemistry Tutorial I1
CHEM 202 Organic Chemistry Tutorial II ..... 1
CHEM 211 Organic Chemistry I ..... 4
CHEM 212 Organic Chemistry II ..... 4
CHEM 340 Quantitative and Instrumental Analysis ..... 4
CHEM 351 Physical Chemistry I ..... 4
CHEM 352 Physical Chemistry II ..... 4
CHEM 401 Chemical Science and Profession (2 sh required) ..... 2
CHEM 414 Biochemistry ..... 4
CHEM 415 Inorganic Chemistry ..... 4
CHEM 418 Undergraduate Research (6 sh required) ..... 6
CHEM 441 ..... 4
Instrumental Analysis
Required support courses
MATH 2413Calculus I**
MATH 192 Calculus II ..... 4
MATH 314 Calculus III ..... 4
PHYS 2425 University Physics I ..... 4
PHYS 2426 ..... 4
Required Second Major or Minor ..... 22-23
Total hours ..... 129-131

* These courses may apply on a second major or minor catalog. catalog.tamuc.edu/content.php.
** This courses fulfills the University Studies science requirement


## Suggested Curriculum Outline (B.S.)

## Freshman

Hours
CHEM 101
CHEM 102 ..... 1
CHEM 1411 ..... 4
CHEM 1412 ..... 4
MATH 2413 ..... 4
MATH 192 ..... 4
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 330
Sophomore ..... Hours
CHEM 201 ..... 1
CHEM 202 ..... 1
CHEM 211 ..... 4
CHEM 212 ..... 4
CHEM 340 ..... 4
MATH 314 ..... 4
Minor ..... 4
PHYS 2425 ..... 4
PHYS 2426 ..... 4Junior30
HoursUS PE Activity
Minor ..... 81
CHEM 351 ..... 4
CHEM 352 ..... 4
CHEM 418 ..... 3
CHEM 441 ..... 4
4 University Studies Courses ..... 1236
Senior ..... Hours
US PE Activity ..... 1
Advanced CHEM courses ..... 3-4
2 University Study Courses ..... 6
Minor * ..... 10-11
CHEM 401 (2 sh required) ..... 2
CHEM 414 ..... 4
CHEM 415 ..... 4
CHEM 418 ..... 3
Total Hours: 129-131

* Courses can be used to receive second major in Math or Physics.


## Chemistry B.S. - Teacher Certification Option

## Teacher Certification, 8-12 Science

University Studies Courses
See the University Studies Requirements ..... 43
Required courses in the major
PHYS 2425 University Physics I ..... 4
PHYS 2426 University Physics II ..... 4
PHYS 321 Modern Physics ..... 3-4
or PHYS 333 Wave Motion, Acoustics, and OpticsCHEM 1411CHEM 1412 General and Quantitative Chemistry IIGeneral and Quantitative Chemistry II
CHEM 101 General Chemistry Tutorial I ..... 1
CHEM 102 General Chemistry Tutorial II ..... 1
CHEM 201 Organic Chemistry Tutorial I ..... 1
CHEM 211 Organic Chemistry I ..... 4
CHEM 341 Theory and Application of Advanced Chemistry I ..... 3
CHEM 342 Theory and Application of Advanced Chemistry II ..... 4
CHEM 401 Chemical Science and Profession ..... 1
CHEM 418 Undergraduate Research (3 sh required) ..... 3
CHEM 421 Design and Implementation of Chemistry Labs I ..... 4
CHEM 422 Design and Implementation of Chemistry Labs II ..... 4
BSC 1406 Introductory Biology I ..... 4
BSC 1407 Introductory Biology II ..... 4
PHYS 441 Advanced Physics Laboratory (must repeat course twice for 4sh) ..... 4
or BSC 303 Cell Biology
Teacher Education courses
CED 412 Project-Based Learning for Secondary Mathematics/Science Teachers ..... 3
CED 421 Secondary Classroom Interactions in Mathematics/Science ..... 3
SED 300 The Teaching Profession ..... 3
SED 404 Internship in Secondary Schools Field-Based ..... 3
SED 405 Residency in Secondary Teaching ..... 6
RDG 380 Comprehension and Vocabulary in Middle and High Schools ..... 3
Required support courses

| CED 307 | Knowing and Learning in Secondary Mathematics and Science | 3 |
| :--- | :--- | :--- |
| ETEC 424 | Integrating Technology into the Middle/Secondary Curriculum | 3 |
| MATH 2413 | Calculus I | 4 |
| T |  | 4 |

Total Hours

* May also be used to satisfy other requirements.


## Chemistry Minor

| CHEM 101 | General Chemistry Tutorial I | 1 |
| :--- | :--- | :--- |
| CHEM 102 | General Chemistry Tutorial II | 1 |
| CHEM 1411 | General and Quantitative Chemistry I | 4 |
| CHEM 1412 | General and Quantitative Chemistry II | 4 |
| CHEM 201 | Organic Chemistry Tutorial I | 1 |
| CHEM 202 | Organic Chemistry Tutorial II | 1 |
| CHEM 211 | Organic Chemistry I | 4 |
| CHEM 212 | Organic Chemistry II | 4 |
| CHEM 340 | Quantitative and Instrumental Analysis | 4 |
| Plus 4 sh from the following: |  | 4 |
| CHEM 351 | Physical Chemistry I |  |
| CHEM 352 | Physical Chemistry II |  |
| CHEM 414 | Biochemistry |  |
| CHEM 415 | Inorganic Chemistry |  |
| CHEM 441 | Instrumental Analysis |  |
| Total Hours |  |  |

## Chemistry Second Major

| Required courses in the major |  |  |
| :---: | :---: | :---: |
| Advanced CHEM courses |  | 8 |
| CHEM 101 | General Chemistry Tutorial I | 1 |
| CHEM 102 | General Chemistry Tutorial II | 1 |
| CHEM 1411 | General and Quantitative Chemistry I | 4 |
| CHEM 1412 | General and Quantitative Chemistry II | 4 |
| CHEM 201 | Organic Chemistry Tutorial I | 1 |
| CHEM 202 | Organic Chemistry Tutorial II | 1 |
| CHEM 211 | Organic Chemistry I | 4 |
| CHEM 212 | Organic Chemistry II | 4 |
| CHEM 340 | Quantitative and Instrumental Analysis | 4 |
| CHEM 351 | Physical Chemistry I | 4 |
| CHEM 401 | Chemical Science and Profession | 1 |
| CHEM 418 | Undergraduate Research | 3 |
| Required support courses * |  |  |
| MATH 192 | Calculus II | 4 |
| MATH 2413 | Calculus I | 4 |
| PHYS 2425 | University Physics I | 4 |
| PHYS 2426 | University Physics II | 4 |
| Total Hours |  | 56 |

[^4]
## Pre-Medical (Chemistry Major and Second Major in Biology)

University Studies Courses
See the University Studies Requirements ..... 43
Required courses in the major
BSC (Adv) ..... 3
CHEM 101 General Chemistry Tutorial I ..... 1
CHEM 102 General Chemistry Tutorial II ..... 1
CHEM 1411 General and Quantitative Chemistry I ..... 4
CHEM 1412 General and Quantitative Chemistry II ..... 4
CHEM 201 Organic Chemistry Tutorial I ..... 1
CHEM 202 Organic Chemistry Tutorial II ..... 1
CHEM 211 Organic Chemistry I ..... 4
CHEM 212 Organic Chemistry II ..... 4
CHEM 340 Quantitative and Instrumental Analysis ..... 4
CHEM 351 Physical Chemistry I ..... 4
CHEM 401 Chemical Science and Profession ..... 1
CHEM 414 Biochemistry ..... 4
CHEM 418 Undergraduate Research ..... 2
CHEM 441 Instrumental Analysis ..... 4
BSC 1406 Introductory Biology I **
BSC 1407 Introductory Biology II **
BSC 303 Cell Biology ..... 4
BSC 304 Genetics ..... 4
BSC 305 General Physiology ..... 4
BSC 306 Applied Microbiology ..... 4
BSC 307 Ecology ..... 4
Required support courses
MATH 2413 Calculus I**
MATH 192 Calculus II ..... 4
PHYS 2425 University Physics I ..... 4
PHYS 2426 University Physics II ..... 4
Other requirement
Stat Elective ..... 3
Total Hours ..... 120

* These courses may apply on a second major or minor.
** These courses will satisfy the University Studies Requirements in Natural Sciences and Mathematics.
Suggested Curriculum Outline (B.S.)
Freshman ..... Hours
CHEM 101 ..... 1
CHEM 102 ..... 1
CHEM 1411 ..... 4
CHEM 1412 ..... 4
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
MATH 2413 ..... 4
MATH 192 ..... 430
Sophomore ..... Hours
US Soc/Behav Sci ..... 3
BSC 1406 ..... 4
BSC 1407 ..... 4
CHEM 201 ..... 1
CHEM 202 ..... 1
CHEM 211 ..... 4
CHEM 212 ..... 4
CHEM 340 ..... 4
PHYS 2425 ..... 4
PHYS 2426 ..... 4
Junior ..... Hours
US Humanities ..... 3
US Vis/Perf Arts ..... 3
US PE Activity ..... 2
CHEM 351 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
BSC 303 ..... 4
BSC 304 ..... 4
BSC 305 ..... 4
SeniorHours
BSC (Adv) ..... 3
Stats Elective
BSC 306 ..... 4
BSC 307 ..... 4
CHEM 401 ..... 1
CHEM 414 ..... 4
CHEM 418 ..... 2
CHEM 441 ..... 4
SPC 1315 ..... 3
SPC 1321 ..... 3

Total Hours: 121

## Computer Science and Information Systems

The Department of Computer Science and Information Systems offers two academic programs, the Bachelor of Science (B.S.) with a major in computer science and the Bachelor of Science in Computer Information Systems (B.S.C.I.S.).

The Bachelor of Science with a major in Computer Science degree prepares the student for a wide variety of applications found within the diverse computer science field. Students complete a core of computer science foundation courses and advanced courses such as Networking, Database Management, Programming, or Information Assurance and Security. This curriculum prepares students for a broad range of careers, including systems analyst, application software developer, software engineer, computer engineer, technical writer, system designer, security administrator, computer security specialist, database administrator, network administrator, network security specialist, simulation/modeling developer, and graphics/animation developer.

The Bachelor of Science in Computer Information Systems degree prepares the student for a wide variety of applications found within the diverse computing and information technology field. Students complete a core of computer information systems foundation courses and an area of specialization such as Networking, Database Management, or Programming or Information Assurance and Security. This curriculum prepares students for a broad
range of careers, including systems analyst, database programmer, database administrator, network administrator, business applications developer, technical writer, and systems designer.

This department also offers a Bachelor of Science in Computer Information Systems degree with secondary teacher certification in Computer Science for persons interested in teaching computer science at the secondary school or community college level. In addition, the department offers second majors in computer science and computer information systems as well as a minor in computer science so that students may acquire computer science fundamentals relevant to their respective academic majors.

Students will be trained on modern equipment having wide industry acceptance in areas such as operating systems, communications, database, simulation, networks, information security, and programming languages. Students also have access to a variety of laboratory and microcomputer equipment.

Graduates of the Bachelor of Science in Computer Science at Texas A\&M University - Commerce will...

- be able to analyze, design, implement and evaluate computer based solutions.
- be able to demonstrate an understanding of the global and local societal impact of computing, including professional, ethical and social responsibilities.
- be able to communicate, collaborate and present computing solutions using current technology in an effective and professional manner.
- be able to engage in continuing professional development and lifelong learning.

Computer Science at Texas A\&M University - Commerce emphasizes the application of scientific concepts and the principles required in the computing industry as well as current and future sustainable technologies.

Computer Science Student Outcomes:
(a) An ability to apply knowledge of computing and mathematics appropriate to the discipline
(b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.
(c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
(d) An ability to function effectively on teams to accomplish a common goal
(e) An understanding of professional, ethical, legal, security and social issues and responsibilities
(f) An ability to communicate effectively with a range of audiences
(g) An ability to analyze the local and global impact of computing on individuals, organizations, and society.
(h) Recognition of the need for and an ability to engage in continuing professional development
(i) An ability to use current techniques, skills, and tools necessary for computing practice.
(j) An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
(k) An ability to apply design and development principles in the construction of software systems of varying complexity.

Students seeking a bachelor's degree in any of the department majors must complete:

1. Degree requirements for a Bachelor of Science in Computer Science or Bachelor of Science in Computer Information Systems degree and
2. University Studies Requirements (p.39) (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown below.

## Teacher Education Program

Students seeking a bachelor's degree in the following teacher education program must also complete

1. Degree requirements for a Bachelor of Science in Computer Information Systems degree with secondary certification (refer to the bachelor's degree requirements section of this catalog),
2. University Studies Requirements (p. 39) (refer to that section of this catalog),
3. Requirements for admission to and retention in the Teacher Education Program (refer to the Center for Educator Certification and Academic Services section of this catalog), and
4. Professional development courses (refer to the Department of Secondary and Higher Education in this catalog).

In addition, core courses in the major must be completed.

Computer Information Systems B.S.C.I.S. (p. 273)
Computer Information Systems Second Major (p. 274)
Computer Information Systems B.S.C.I.S. Teacher Certification, 8-12 Computer Science (p. 271)

Computer Science B.S. (p. 274)
Computer Science Minor (p. 276)
Computer Science Second Major (p. 277)
Information Technology Minor (http://coursecatalog.tamuc.edu/undergrad/colleges-and-departments/science-engineering-agriculture/computer-science-information-systems/information-technology-minor)

## Computer Information Systems B.S.C.I.S Teacher Certification, 8-12 Computer Science

## Secondary and All-Level Education

| See for information: Secondary and All-Level Education (http://coursecatalog.tamuc.edu/undergrad/secondary-and-all-level-education) |  |  |
| :--- | :--- | :--- |
| University Studies Courses |  |  |
| See the University Studies Requiements | 43 |  |
| Required courses in the major |  | 4 |
| CSCI 151 | Introduction to Computer Science and Programming | 4 |
| CSCI 152 | Programming Fundamentals II | 3 |
| CSCI 241 | Machine Language and Computer Organization | 3 |
| CSCI 251 | Introduction to Information Security, Law, Ethics, and Applied Cryptography | 3 |
| CSCI 270 | Data Structures and Algorithms | 3 |
| CSCI 340 | Introduction to Database | 3 |
| CSCI 434 | Introduction to Local Area Networks | 3 |
| CSCI 359 | Systems Analysis and Design | 3 |
| CSCI 380 | Web Programming and Interface Design | 3 |
| CSCI 431 | Java Language Programming | 3 |
| CSCI 440 | App Software Project Dev | 3 |
| Adv. CSci |  | 3 |
| Teacher education courses |  | 3 |
| SED 200 | Education in a Global Society | 3 |
| SED 300 | The Teaching Profession | 3 |
| SED 302 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments | 3 |
| SED 401 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| SED 404 | Internship in Secondary Schools Field-Based | 3 |
| SED 405 | Residency in Secondary Teaching | 3 |
| RDG 370 | Reading and Literacy II | 3 |
| Required support courses |  | 3 |
| ENG 341 | Technical Writing | 3 |
| MATH 176 | Mathematics for Business Applications II | 3 |
| BA 302 | Business and Economic Statistics | 3 |
| or MATH 453 | Essentials of Statistics | 3 |
| MIS 328 | IS Project Management | 3 |
| PSY 300 | Learning Processes and Development | 3 |
| SPED 346 | Introduction to Exceptional Children | 3 |
| Total Hours |  | 3 |

## Other departmental requirements

For a student to enroll in a course above CSCI 241 Machine Language and Computer Organization, a minimum grade point average of 2.33 is required in the CIS course sequence CSCI 151 Introduction to Computer Science and Programming, CSCI 152 Programming Fundamentals II, CSCI 241 Machine Language and Computer Organization.

## Suggested Curriculum Outline (B.S.C.I.S.)

Freshman Hours
US Science ..... 4
US PE Activity ..... 2
CSCI 151 ..... 4
CSCI 152 ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
MATH 1324 ..... 3
MATH 176 ..... 3
Sophomore ..... Hours
US Science ..... 4
US Humanities ..... 3
US Vis/Perf Arts ..... 3
US Soc/Behav Sci ..... 3
CSCI 241 ..... 3
CSCl 251 ..... 3
CSCI 270 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1321 ..... 331
Junior ..... Hours
CSCI 340 ..... 3
CSCI 380 ..... 3
CSCI 431 ..... 3
CSCI 434 ..... 3
BA 302 or MATH 453 ..... 3
SED 200 ..... 3
SED 300 ..... 3
PSY 300 ..... 3
ENG 341 ..... 3
RDG 370 ..... 3
SeniorHours
CSci (adv) ..... 3
CSCI 359 ..... 3
CSCI 440 ..... 3
MIS 328 ..... 3
SPED 346 ..... 3
SED 302 ..... 3
SED 401 ..... 3
SED 404 ..... 3
SED 405 ..... 6

## Computer Information Systems B.S.C.I.S.

University Studies Courses
See the University Studies Requirements ..... 43
Required courses in the major
CSCI 152 Programming Fundamentals II ..... 3
CSCI 233 Application Program Development ..... 3
CSCI 241 Machine Language and Computer Organization ..... 3
CSCI 251 Introduction to Information Security, Law, Ethics, and Applied Cryptography ..... 3
CSCI 270 Data Structures and Algorithms ..... 3
CSCI 340 Introduction to Database ..... 3
CSCI 434 Introduction to Local Area Networks ..... 3
CSCI 359 Systems Analysis and Design ..... 3
CSCI 380 Web Programming and Interface Design ..... 3
CSCI 440 App Software Project Dev ..... 3
9 semester hours of advanced CSCI courses ..... 9
Required support courses *
ENG 341 Technical Writing ..... 3
or BA 303 Business Communication
MATH 176 Mathematics for Business Applications II ..... 3
BA 302 Business and Economic Statistics ..... 3
MIS 328 IS Project Management ..... 3
Required Minor
A minimum of 18 semester hours required ..... 18
Electives Required
Up to 8 semester hours of electives may be necessary ..... 8
Total Hours ..... 120

* Required support courses may be used to satisfy requirements of a minor/second major, thereby reducing the number of hours required. This program requires a minor or second major from another department; Accounting, General Business, Information Technology, or another area of business is recommended.


## Total Semester Hours: 120

## Other Departmental Requirements

For a student to enroll in a course above CSCI 241 Machine Language and Computer Organization, a minimum grade point average of 2.33 is required in the CIS course sequence CSCI 151 Introduction to Computer Science and Programming, CSCI 152 Programming Fundamentals II, CSCI 233 Application Program Development, CSCI 241 Machine Language and Computer Organization.

## Suggested Curriculum Outline (B.S.C.I.S.)

Freshman ..... Hours
US Science ..... 4
US PE Activity ..... 2
CSCI 152 ..... 3
CSCI 233 ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
MATH 1324 ..... 3
MATH 176 ..... 3
Sophomore Hours
US Science ..... 4
US Humanities ..... 3
US Vis/Perf Arts ..... 3
US Soc/Behav Sci ..... 3
CSCI 241 ..... 3
CSCI 251 ..... 3
CSCI 270 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1321 ..... 3
31
Junior ..... Hours
Minor ${ }^{*}$ ..... 9
Advanced CSCI ..... 3
CSCI 340 ..... 3
CSCI 380 ..... 3
CSCI 434 ..... 3
BA 302 ..... 3
ENG 341 ..... 3
MIS 328 ..... 330
Senior ..... Hours
Minor* ..... 9
Electives ..... 8
Advanced CSCI ..... 6
CSCI 359 ..... 3
CSCI 440 ..... 3

Total Hours: 120

## Computer Information Systems Second Major

This second major is not available to Computer Science or Computer Information Systems majors.

## Required courses in the second major

| Adv. CSci courses |  | 6 |
| :--- | :--- | :--- |
| CSCl 151 | Introduction to Computer Science and Programming | 4 |
| CSCl 152 | Programming Fundamentals II | 3 |
| CSCl 241 | Machine Language and Computer Organization | 3 |
| CSCl 251 | Introduction to Information Security, Law, Ethics, and Applied Cryptography | 3 |
| CSCl 270 | Data Structures and Algorithms | 3 |
| CSCl 428 | Object Oriented Programming | 3 |
| or CSCl 431 | Java Language Programming | 3 |
| CSCl 340 | Introduction to Database | 3 |
| Total Hours |  | 28 |

## Computer Science B.S.

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major


## Total Hours

* Required support courses may be used to satisfy requirements of a minor/second major, thereby reducing the number of hours required. The 18 sh of Math is a complete Math minor; no additional minor is required. PHYS 2425, 2426, and PHYS 332 Digital Logic and Circuitry are half of a Physics minor.
** Except MATH 301 Introductory Geometry, MATH 350 Topics in Mathematics for Elementary Teachers I, MATH 351 Topics in Mathematics for Elementary Teachers II, MATH 361 Mathematical Modeling of Science for Middle School I, MATH 362 Mathematical Modeling of Science for Middle School II, MATH 372 Mathematics Structures and Applications, MATH 380 Mathematics History, MATH 460 Technology and Topics in Mathematics for Secondary Teachers.
*** BSC 1406 and BSC 1407 at A\&M-Commerce are intended for Biology majors only. These courses will satisfy your support course lab science sequence requirement but are not recommended.


## Other Departmental Requirements

For a student to enroll in a course above , a minimum grade point average of 2.33 is required in the CSci course sequence , ,

## Suggested Curriculum Outline (B.S.)

CSCI 152 ..... 3
CSCI 241 ..... 3
MATH 2413 ..... 4
MATH 192 ..... 4
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
Sophomore ..... Hours
US Soc/Behav Sci ..... 3
US Humanities ..... 3
CSCI 251 ..... 3
CSCl 270 ..... 3
CSCI 434 ..... 3
PHYS 2425 ..... 4
PHYS 2426 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1321 ..... 3
Junior ..... Hours32
Advanced CSCI
Science ..... 4
CSCI 340 ..... 3
CSCI 380 ..... 3
CSCI 428 ..... 3
MATH 331 ..... 3
MATH 401 ..... 3
ENG 341 or BA 303 ..... 3
Senior ..... Hours28
Advanced CSCI
Math (Adv) ** ..... 3
CSCI 359 ..... 3
CSCI 430 ..... 3
CSCI 440 ..... 3
PHYS 332, 432, or 492 ..... 4
Electives ..... 11

## Total Hours: 121

* Prerequisites of MATH 1314 and MATH 142 Pre-Calculus may be necessary.
** Excluding MATH 301 Introductory Geometry, MATH 350 Topics in Mathematics for Elementary Teachers I, MATH 351 Topics in Mathematics for Elementary Teachers II, MATH 361 Mathematical Modeling of Science for Middle School I, MATH 362 Mathematical Modeling of Science for Middle School II, MATH 372 Mathematics Structures and Applications, MATH 380 Mathematics History, MATH 460 Technology and Topics in Mathematics for Secondary Teachers.


## Computer Science Minor

This minor is not available to Computer Science or Computer Information Systems majors.

## Required Courses

| CSCI 151 | Introduction to Computer Science and Programming | 4 |
| :--- | :--- | ---: |
| CSCI 152 | Programming Fundamentals II | 3 |
| CSCI 270 | Data Structures and Algorithms | 3 |
| Total Hours |  | 19 |

## Computer Science Second Major

This second major is not available to Computer Science or Computer Information Systems majors. Requirements for the second major are the same as those for the first major, Computer Science B.S. (http://coursecatalog.tamuc.edu/undergrad/programs/1722) including required support courses.

## Engineering \& Technology


#### Abstract

Mission: Practical Ingenuity The framework of the Department of Engineering \& Technology, built upon instruction, research, and infusion of real-world experiences, fosters the development of effective problem solvers.

The Department of Engineering \& Technology offers Bachelor of Science (B.S.) degree programs leading to career opportunities in technical management, supervision, engineering, manufacturing and construction. Majors offered include: Technology Management, Construction Engineering, and Industrial Engineering.

Engineering \& Technology majors are required to complete the University Studies requirements and major area requirements. For a course to transfer into an E\&T major, a grade of "C" or better must be earned in the course. A grade of " $C$ " or better is required in all E\&T major and required support courses. Courses must be repeated if a grade of " $C$ " or better is not earned in the course.


Construction Engineering (CONE) B.S. (p. 277)
Engineering Mathematics Minor (p. 280)
Engineering Statistics Minor (p. 280)
Engineering and Systems Management Minor (p. 280)
Industrial Engineering (IE) B.S. (p. 280)
Technology Management (TMGT) B.S. (p. 283)

## Construction Engineering (CONE) B.S.

The U.S. Department of Education defines a Construction Engineering educational program as:
A program that prepares individuals to apply scientific, mathematical, and management principles to the planning, design, and building of facilities and structures. Includes instruction in civil engineering, structural principles, site analysis, computer-assisted design, geology, evaluation and testing, materials, contracting, project management, graphic communications, and applicable laws and regulations.

Construction engineering is involved in the planning, management, and building of structures and facilities essential to societies and communities as well as the overall improvement in the standard of living. The availability of construction engineers is imperative to the rebuilding and maintaining of the infrastructure in the United States, while at the same time developing an emerging infrastructure to support the continued population growth and environment. Federal, state, and local agencies project a faster than average growth rate for construction engineers over the next decade.

## Graduates of the Bachelor of Science in Construction Engineering program at Texas A\&M University-Commerce will...

- Engage in life-long growth within the construction profession as evidenced by, but not limited to, continuing education, participation in professional societies and conferences, industry certifications, or graduate education.
- Serve as a catalyst for technology within the construction profession as evidenced by, but not limited to utilization of industry accepted project controls software, responsibility for developing recommendations for industry accepted systems, or serving as a liaison between company, vendors, and technology user groups.
- Meet professional requirements necessary for engineering licensure.

Construction engineering at Texas A\&M University-Commerce emphasizes the application of engineering and scientific concepts and principles required in the construction industry. In addition the program will consider current and future sustainable technologies.

Construction Engineering Student Outcomes:

- an ability to apply knowledge of mathematics, science, and engineering
- an ability to design and conduct experiments, as well as to analyze and interpret data
- 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
- an ability to function on multidisciplinary teams
- an ability to identify, formulate, and solve engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- a recognition of the need for, and an ability to engage in life-long learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice


## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
CONE $211 \quad$ Statics 3
CONE 212 Dynamics 3

CONE $221 \quad$ Construction Materials and Methods 3
CONE $231 \quad$ Construction Estimating 3
CONE $331 \quad$ Mechanics of Materials 3
CONE $341 \quad$ Engineering Hydrology and Hydraulics 3
CONE $351 \quad$ Field Engineering and Surveying 3
CONE $411 \quad$ Steel \& Concrete Design 3
CONE $412 \quad$ Structural Analysis and Design 3
CONE $421 \quad$ Construction Safety 3
CONE $422 \quad$ Construction Engineering Management 3
CONE $423 \quad$ Contracts and Specifications 3
CONE $425 \quad$ Construction Planning, Scheduling, and Control 3
CONE $431 \quad$ Sustainable Construction Methods and Processes 3
CONE $432 \quad$ Soil Engineering 3
CONE $471 \quad$ Construction Engineering Internship 3
IE $201 \quad$ Elementary Engineering Analysis 3
IE $207 \quad$ Engineering Economic Analysis 3
IE $211 \quad$ Engineering Probability and Statistics 3
IT $111 \quad$ Computer Aided Design (CAD) 3
IT $340 \quad$ Quality Management and Improvement 3
Required support courses
CHEM $1411 \quad$ General and Quantitative Chemistry I
MATH 2413 Calculus I (4 sch) * 4
MATH $192 \quad$ Calculus II 4
MATH $315 \quad$ Differential Equations 3
MATH 335 Linear Algebra 3

ECO $2301 \quad$ Principles of Macro Economics (3 sch) *
or ECO $2302 \quad$ Principles of Micro Economics
PHYS 2425 University Physics I (4 sch)*
PHYS 2426 University Physics II (4 sch) *
ENVS $403 \quad$ Environmental Ethics and Law 3
or BSC 417 Geospatial Mapping
BA 301 Legal Environment of Business
Total Hours

[^5]
## Suggested Curriculum Outline (B.S.)

Freshman Hours
CHEM 1411 ..... 4
ECO 2301 or 2302 ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
IT 111 ..... 3
MATH 2413 ..... 4
MATH 192 ..... 4
PHYS 2425 ..... 4
Sophomore ..... Hours
CONE 211 ..... 3
CONE 212 ..... 3
CONE 221 ..... 3
IE 201 ..... 3
IE 207 ..... 3
E 211 ..... 3
MATH 315 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
PHYS 2426 ..... 4
University PE Activity ..... 1
University PE Activity ..... 133
Junior ..... Hours
BA 301 ..... 3
CONE 231 ..... 3
CONE 331 ..... 3
CONE 341 ..... 3
CONE 351 ..... 3
IT 340 ..... 3
MATH 335 ..... 3
SPC 1315 or 1321 ..... 3
University Studies Visual/ Performing Arts ..... 3
University Studies Humanities ..... 330
Senior ..... Hours
CONE 411 ..... 3
CONE 412 ..... 3
CONE 421 ..... 3
CONE 422 ..... 3
CONE 423 ..... 3
CONE 425 ..... 3
CONE 431 ..... 3
CONE 432 ..... 3
CONE 471 ..... 3

| ENVS 403 or BSC 417 | 3 |
| :--- | :--- |
| 30 |  |

Total Hours: 127

## Engineering Mathematics Minor

| Required Courses |  |  |
| :--- | :--- | :--- |
| IE 101 | Introduction to Industrial Engineering |  |
| MATH 2413 | Calculus I | 4 |
| MATH 192 | Calculus II | 4 |
| MATH 315 | Differential Equations | 3 |
| MATH 335 | Linear Algebra | 3 |
| IE 312 | Industrial Operations Research I | 3 |
| IE 313 | Industrial Operations Research II | 3 |
| Total Hours |  | 23 |

## Engineering Statistics Minor

## Required Courses

IE $101 \quad$ Introduction to Industrial Engineering 3
MATH 2413 Calculus I ..... 4
MATH 192 Calculus II ..... 4
IE 211 Engineering Probability and Statistics ..... 3
IE 311 Advanced Engineering Statistics ..... 3
IE 314 Statistical Quality Control ..... 3
IE 410 Systems Simulation ..... 3
Total Hours ..... 23
Engineering and Systems Management Minor

| Required Courses |  |  |
| :--- | :--- | :--- |
| IE 101 | Introduction to Industrial Engineering | 3 |
| BA 302 | Business and Economic Statistics | 3 |
| MGT 305 | Management and Organizational Behavior | 3 |
| IT 340 | Quality Management and Improvement | 3 |
| or MGT 340 | Quality Management and Improvement |  |
| IE 411 | Engineering Management | 3 |
| IE 444 | Systems Engineering | 3 |
| IE 486 | Service Systems Analysis | 3 |
| Total Hours |  | 21 |

## Industrial Engineering (IE) B.S.

The Institute of Industrial Engineers (IIE) defines Industrial Engineering as:
Industrial engineering is concerned with the design, improvement, and installation of integrated systems of people, materials, information, equipment, and energy. It draws upon specialized knowledge and skill in the mathematical, physical, and social sciences together with the principles and methods of engineering analysis and design, to specify, predict, and evaluate the results to be obtained from such systems.

Industrial Engineering is emerging as one of the vital professions that would be counted on for solving complex problems in a highly technological world. Industrial engineers are confronted with a host of challenging situations ranging from manufacturing and cost estimating to the design of complex systems. They are needed in all kinds of industries and are employed by a variety of organizations including hospitals, banks, engineering firms, petrochemical industries, airline companies, government and military agencies, computer and software firms, and manufacturing.

Industrial Engineering at Texas A\&M University-Commerce emphasizes the application of concepts, principles, and managerial skills required in contemporary business and industry. The program of study:

- reflects current and future business and industry practices and competencies
- prepares students for the high-tech engineering world of today and of the future
- develops analytical, critical, and problem-solving skills
- develops leadership skills
- promotes student and faculty interaction with business, industry, and professional organizations
- promotes student and faculty research activities

Graduates of the Bachelor of Science in Industrial Engineering program at Texas A\&M University-Commerce will...
Function effectively within an engineering profession or graduate program by drawing upon IE skills and knowledge, as evidenced by, but not limited to, continuous employment or successful progress towards a graduate degree.

Progress within the engineering profession as evidence by, but not limited to leaderships roles, value added within a team, increased responsibility with decision making, or creation of better or more effective products, processes, technologies, or ideas.

Engage in life-long growth with in the industrial engineering profession as evidence by, but not limited to, company training, industry certifications, professional conferences, and graduate work.

## IE Student Outcomes

a) An ability to apply knowledge of mathematics, science, and engineering
b) An ability to design and conduct experiments, as well as to analyze and interpret data
c) 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
d) An ability to function on multi-disciplinary teams
e) An ability to identify, formulate, and solve engineering problems
f) An understanding of professional and ethical responsibility
g) An ability to communicate effectively
h) The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
i) A recognition of the need for, and an ability to engage in life-long learning
j) A knowledge of contemporary issues
k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

The Bachelor of Science in Industrial Engineering is accredited by: The Engineering Accreditation Commission of ABET, http://www.abet.org

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
IE $101 \quad$ Introduction to Industrial Engineering 3

IE $201 \quad$ Elementary Engineering Analysis 3
IE $207 \quad$ Engineering Economic Analysis 3
IE $211 \quad$ Engineering Probability and Statistics 3
IE $305 \quad$ Facilities Planning and Management 3
IE $311 \quad$ Advanced Engineering Statistics 3
IE $312 \quad$ Industrial Operations Research I 3
IE 313 Industrial Operations Research II 3
IE 314 Statistical Quality Control 3
IE $316 \quad$ Manufacturing Systems Design and Control 3
IE $403 \quad$ Human Factors Engineering 3
IE $407 \quad$ Production Systems Operations 3

| IE 410 | Systems Simulation | 3 |
| :---: | :---: | :---: |
| IE 411 | Engineering Management | 3 |
| IE 431 | Principles of Programmable Automation | 3 |
| IE 444 | Systems Engineering | 3 |
| IE 471 | Planning for Industrial Systems Design | 3 |
| IE 486 | Service Systems Analysis | 3 |
| IE 495 | Industrial Systems Design | 4 |
| IT 111 | Computer Aided Design (CAD) | 3 |
| IT 112 | Product Design and Development | 3 |
| IT 340 | Quality Management and Improvement | 3 |
| or MGT 340 | Quality Management and Improvement |  |
| Required support courses |  |  |
| CHEM 1411 | General and Quantitative Chemistry I | 4 |
| CSCI 151 | Introduction to Computer Science and Programming | 4 |
| MATH 2413 | Calculus I (4 sch) * |  |
| MATH 192 | Calculus II | 4 |
| MATH 315 | Differential Equations | 3 |
| MATH 335 | Linear Algebra | 3 |
| ECO 2301 | Principles of Macro Economics (3 sch) * |  |
| or ECO 2302 | Principles of Micro Economics |  |
| PHYS 2425 | University Physics I (4 sch) * |  |
| PHYS 2426 | University Physics II (4 sch)* |  |

## Total Hours

* These courses should be used to satisfy the University Studies Requirements in Social and Behavioral Science, Natural Sciences, and Mathematics, respectively; otherwise, the credit hours required to earn the B.S. in IE will exceed 129.


## Total Semester Hours: 129 <br> Suggested Curriculum Outline (B.S.)

Freshman ..... Hours
IT 111 ..... 3
IT 112 ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
IE 101 ..... 3
CHEM 1411 ..... 4
MATH 2413 ..... 4
MATH 192 ..... 4
Sophomore ..... Hours
University Studies PE Activity ..... 1
University Studies PE Activity ..... 1
IE 201 ..... 3
IE 207 ..... 3
IE 211 ..... 3
CSCI 151 ..... 4
MATH 315 ..... 3
MATH 335 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
PHYS 2425 ..... 4
PHYS 2426 ..... 4JuniorHours
IE 305 ..... 3
IE 313 ..... 3
IE 311 ..... 3
IE 312 ..... 3
IE 316 ..... 3
IE 314 ..... 3
IE 410 ..... 3
IT 340 or MGT 340 ..... 3
ECO 2301 or 2302 ..... 3
SPC 1315 or 1321 ..... 330
Senior ..... Hours
US Vis/Perf Arts ..... 3
US Humanities ..... 3
IE 403 ..... 3
IE 431 ..... 3
IE 407 ..... 3
IE 411 ..... 3
IE 444 ..... 3
IE 471 ..... 3
IE 486 ..... 3
IE 495 ..... 4

## Technology Management (TMGT) B.S.

The Bachelor of Science (B.S.) degree in Technology Management is an online and/or classroom taught program of study designed to integrate technology, applied engineering, project management, cost engineering, quality, construction management, business management, leadership and design into a variety of business, construction, and industrial careers. Graduates are suited for professional positions where the solving of complex technological problems; management of the environment, processes and workforce; controlling cost and resources; and ensuring a safe and ergonomically correct workplace are essential. Leadership, communication skills, group collaboration, managing and understanding cultural differences, construction, sustainability, increasing value, technological skills and the effective management of current and future global enterprises are emphasized throughout the program. Program graduates are prepared for and encouraged to continue their education after the awarding the B.S. degree by obtaining the Master of Science degree in Technology Management.

## Student Outcomes for BS Technology Management Program

- an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined technology management activities;
- an ability to select and apply a knowledge of mathematics, science, management, and technology to technology management 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 technology management problems;
- an ability to function effectively as a member or leader on a technical team;
- an ability to identify, analyze, and solve broadly-defined technology management 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 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 technology management solutions in a societal and global context; and
- a commitment to quality, timeliness, and continuous improvement.

* These courses should be used to satisfy the University Studies Requirements in Social and Behavioral Science, Natural Sciences, and Mathematics, respectively; otherwise, the credit hours required to earn the B.S. in TMGT will exceed 121.


## Total Semester Hours: 121

Suggested Curriculum Outline (B.S.)
Freshman ..... Hours
CSCI 126 or MIS 128 ..... 3
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
IT 111 ..... 3
MATH 1314 ..... 3
MATH 142 ..... 3
University Studies PE Activity ..... 1
University Studies PE Activity ..... 1
University Studies Visual/Performing Arts ..... 3
29
Sophomore ..... Hours
ACCT 221 ..... 3
ECO 2301 or 2302 ..... 3
PHYS 1401 ..... 4
PHYS 1402 ..... 4
PSCI 2301 ..... 3
PSCI 2302 ..... 3
SPC 1315 or 1321 ..... 3
Technical Elective ..... 3
Technical Elective ..... 3
University Studies Humanities ..... 3
32
Junior ..... Hours
BA 301 ..... 3
BAAS 345 ..... 3
BAAS 355 ..... 3
IT 303 ..... 3
IT 340 ..... 3
TMGT 311 ..... 3
TMGT 335 ..... 3
TMGT 336 ..... 3
TMGT 350 ..... 3
TMGT 352 ..... 3
30
Senior ..... Hours
BAAS 444 ..... 3
MGT 394 ..... 3
TMGT 351 ..... 3
TMGT 411 ..... 3
TMGT 439 ..... 3
TMGT 454 ..... 3
TMGT 455 ..... 3
TMGT 456 ..... 3
TMGT 457 ..... 3
TMGT 458 ..... 3

Total Hours: 121

## Mathematics

The Department of Mathematics offers the Bachelor of Science and Bachelor of Arts degree with a major in mathematics. This major prepares graduates for careers in industry, government, business, scientific and technological fields, computing and information science, actuarial work, and education. A graduate with a major in mathematics should possess the following competencies: calculus, discrete mathematics, and abstract algebra, as well as advanced electives.

The Bachelor of Science or Bachelor of Arts degree with a major in mathematics with teacher certification also is offered by the department. A student may select a broadfield major or select a field outside mathematics as a minor. This major prepares graduates for careers in teaching at the secondary level. A graduate with a major in mathematics should possess the following competencies: calculus, discrete mathematics, geometry, abstract and linear algebra, history of mathematics, and number theory.

Students seeking a bachelor's degree in the following major must complete:

1. degree requirements for a Bachelor of Arts or Science degree and
2. University Studies Requirements (p. 39) (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown below.

## Teacher Education Programs

Students seeking a bachelor's degree in any of the following teacher education programs must complete:

1. degree requirements for a Bachelor of Arts or Science degree (refer to the bachelor's degree requirements section of this catalog),
2. University Studies Requirements (p. 39) (refer to that section of this catalog),
3. requirements for admission to and retention in the Teacher Education Program (refer to the Center for Educator Certification and Academic Services section of this catalog), and
4. professional development courses (refer to the appropriate departmental section in this catalog, i.e. Department of Elementary Education or Department of Secondary and Higher Education).

In addition, courses in the major must be completed as shown below.

## Guide for Initial Enrollment in Mathematics

The Texas Higher Education Coordinating Board has ruled that a mathematics course taught in a college or university may count toward the baccalaureate degree requirements only if it has a prerequisite of high school Algebra II. Generally, students not taking Algebra II in high school will need remediation in college. A diagnostic test will be given to each entering student for initial placement in mathematics courses. (See "Basic Skills Policy.")

Mathematics B.A./B.S. (p. 286)
Mathematics Minor (p. 287)
Mathematics Second Major (p. 288)
Mathematics, 8-12 Teacher Certification B.A./B.S. (p. 288)

## Mathematics B.A./B.S.

University Studies Courses
See the University Studies Requirements 43
Required courses in the major
(Adv) exclusive of 301, 350, 351, 361, 362, 380, 372, 453 18

| MATH 2413 | Calculus I * $^{*}$ |
| :--- | :--- |
| MATH 192 | Calculus II |

MATH 314 Calculus III 4
MATH $331 \quad$ Discrete Mathematics $\quad 3$
MATH $334 \quad$ Introduction to Abstract Algebra 3

## Required support courses

These courses may apply on a second major or minor.
CSCI $151 \quad$ Introduction to Computer Science and Programming 4
CSCI $152 \quad$ Programming Fundamentals II 3
or CSCl 241 Machine Language and Computer Organization
or CSCI 270 Data Structures and Algorithms
PHYS $2425 \quad$ University Physics I
or PHYS $2426 \quad$ University Physics II
Additional Electives Requred
Electives required to meet minimum program hours. ..... 34A minor or second major is strongly suggestedTotal Hours120
Suggested Curriculum Outline (B.S.)
Freshman ..... Hours
US Science ..... 4
MATH 2413 ..... 4
MATH 192 ..... 4
ENG 1301 ..... 3
ENG 1302 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
CSCI 151 ..... 4
CSCI 152, 241, or 270 ..... 3
Sophomore Hours
S Humanities ..... 3
US Vis/Perf Arts ..... 3
US Soc/Behav S ..... 3
US PE Activity ..... 2
US Science ..... 4
Electives (Second Major/Minor Suggested) ..... 3
MATH 314 ..... 4
MATH 331 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
Junior ..... Hours
Math (Adv.) excl of 301, 350, 351, 361, 362, 372, 380, 453, 460 ..... 9
Electives (Second Major/Minor Suggested) ..... 14
SPC 1315 or 1321 ..... 3
PHYS 2425 or 2426 ..... 4
Senior ..... Hours
(Adv.) excl. of: 301, 350, 351, 361, 362, 372, 380, 453 ..... 9
Electives (Second Major/Minor Suggested) ..... 16
MATH 334 ..... 3
Total Hours: 120
Mathematics MinorA student in the College of Science, Engineering, and Agriculture who elects a minor in mathematics must complete:A minimum of 18 sh :
Math (Adv.) ..... 10
MATH 2413 Calculus I ..... 4
Total Hours ..... 18

## Note

The following courses may not be used to satisfy mathematics requirements for a major or minor in non-education programs:
MATH 301 Introductory Geometry
MATH 350 Topics in Mathematics for Elementary Teachers I
MATH 351 Topics in Mathematics for Elementary Teachers II
MATH 361 Mathematical Modeling of Science for Middle School I
MATH 362 Mathematical Modeling of Science for Middle School II
MATH 372 Mathematics Structures and Applications
MATH 380 Mathematics History
MATH 460 Technology and Topics in Mathematics for Secondary Teachers

## Mathematics Second Major

Selection of courses should be determined by the student's interests. More than eight courses is strongly recommended, especially for those students who plan to do graduate study in mathematics. Please consult mathematics staff members for advice.

| MATH 2413 | Calculus I |
| :--- | :--- | ---: |
| MATH 192 | Calculus II |
| MATH 314 | Calculus III |
| Plus 12 sh chosen from: |  |
| MATH 315 | Differential Equations |
| MATH 317 | Numerical Analysis |
| MATH 321 | College Geometry |
| MATH 331 | Discrete Mathematics |
| MATH 334 | Introduction to Abstract Algebra |
| MATH 335 | Linear Algebra |
| MATH 401 | Introduction to Mathematical Statistics |
| MATH 426 | History of Mathematics |
| MATH 436 | Introduction to Analysis |
| MATH 437 | Elementary Number Theory |
| MATH 438 | Complex Analysis |
| MATH 440 | Introduction to Topology |
| MATH 453 | Essentials of Statistics |
| Total Hours |  |

## Mathematics, 8-12 Teacher Certification B.A./B.S.

## Secondary and All-Level Education

See for information: Secondary and All-Level Education (http://coursecatalog.tamuc.edu/undergrad/secondary-and-all-level-education)

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
MATH $2413 \quad$ Calculus I 4
MATH $192 \quad$ Calculus II 4
MATH $321 \quad$ College Geometry 3
MATH $331 \quad$ Discrete Mathematics 3
MATH $334 \quad$ Introduction to Abstract Algebra 3
MATH $335 \quad$ Linear Algebra 3
MATH $401 \quad$ Introduction to Mathematical Statistics 3

| or MATH 453 | Essentials of Statistics |  |
| :---: | :---: | :---: |
| MATH 426 | History of Mathematics | 3 |
| MATH 437 | Elementary Number Theory | 3 |
| MATH 460 | Technology and Topics in Mathematics for Secondary Teachers | 3 |
| Plus 4 sh from: |  | 4 |
| MATH 314 | Calculus III |  |
| MATH 315 | Differential Equations |  |
| MATH 317 | Numerical Analysis |  |
| MATH 401 | Introduction to Mathematical Statistics |  |
| MATH 436 | Introduction to Analysis |  |
| MATH 438 | Complex Analysis |  |
| MATH 440 | Introduction to Topology |  |
| Teacher Education Courses |  |  |
| SED 300 | The Teaching Profession | 3 |
| SED 404 | Internship in Secondary Schools Field-Based | 3 |
| SED 405 | Residency in Secondary Teaching | 3-6 |
| ETEC 424 | Integrating Technology into the Middle/Secondary Curriculum | 3 |
| RDG 380 | Comprehension and Vocabulary in Middle and High Schools | 3 |
| CED 412 | Project-Based Learning for Secondary Mathematics/Science Teachers | 3 |
| CED 421 | Secondary Classroom Interactions in Mathematics/Science | 3 |
| Required support courses |  |  |
| PSY 300 | Learning Processes and Development | 3 |
| SPED 346 | Introduction to Exceptional Children | 3 |
| or SPED 475 | Collaboration, Accommodation and Modification |  |
| PHYS 2425 | University Physics I | 4 |
| or PHYS 2426 | University Physics II |  |
| CSCI 151 | Introduction to Computer Science and Programming | 4 |
| CED 307 | Knowing and Learning in Secondary Mathematics and Science | 3 |
| Plus 3 sh from: |  | 3 |
| CSCI 152 | Programming Fundamentals II |  |
| CSCI 241 | Machine Language and Computer Organization |  |
| CSCI 270 | Data Structures and Algorithms |  |

Total Hours

## Physics and Astronomy

The Department of Physics \& Astronomy offers majors and minors for the Bachelor of Science and the Bachelor of Arts degrees. The programs have been designed for degrees with or without teacher certification. The department provides instruction in physics, applied physics, astronomy and astrophysics, computational physics, and microelectronics.

The physics and applied physics major programs are designed for students wishing careers as professional physicists or who wish to continue their studies at the graduate level in a number of technical areas including engineering. This program prepares students for industrial employment or other careers which utilize analytical or problem solving skills. The various teacher education curriculums are designed for pre-college teachers of science.

The physics department and computer science department jointly offer a series of courses in the fields of microcomputers, electronics, and signal processing for students who wish to prepare for careers in scientific data analysis, computer or computer-based scientific instrumentation, or telecommunications.

Students seeking a bachelor's degree in the following majors must complete:

1. degree requirements for a Bachelor of Arts or Science degree and
2. University Studies Requirements (p. 39) (refer to those sections of this catalog).

In addition, courses in the major must be completed as shown below.

## Teacher Education Programs

Secondary certification to teach physics, chemistry, and mathematics is achieved through completing the Major in Physics program.
The physics department participates fully in certification programs for K-4 teachers in cooperation with the elementary education department. Students interested in grades 4-8 certification in science and math-science are also directed to the appropriate advisor in elementary education.

Students seeking a bachelor's degree in any of the following teacher education programs must complete:

1. Degree requirements for a Bachelor of Arts or Science degree (refer to the bachelor's degree requirements section of this catalog),
2. University Studies Requirements (p. 39) (refer to that section of this catalog),
3. Requirements for admission to and retention in the Teacher Education Program (refer to the Center for Educator Certification and Academic Affairs section of this catalog), and
4. Professional development courses (refer to the appropriate departmental section in this catalog, i.e. Department of Elementary Education or Department of Secondary and Higher Education).

In addition, courses in the major must be completed as shown below.

Astronomy Minor (p. 290)
Broadfield Science with a Major in Physical Science B.A./B.S. (p. 290)
Physics B.A./B.S. (p. 292)
Physics Minor (p. 294)
Physics Second Major (p. 295)
Pre-Engineering (p. 295)

## Astronomy Minor

A minor in Astronomy provides another option especially for students majoring in Arts and Social Sciences to get a degree in science that is not math intensive but very interesting and appealing.

## Required Courses

| ASTR 1411 | Astronomy of Solar System | 4 |
| :--- | :--- | :--- |
| ASTR 1412 | Introduction to Stars and the Universe | 4 |
| ASTR 260 | Archaeoastronomy | 3 |
| ASTR 310 | Observational Astronomy | 4 |
| ASTR 337 | Introduction to Astrophysics | 3 |
| PHYS 401 | Current Problems (This course must be repeated twice for 2 sh) | 1 |
| PHYS 401 | Current Problems | 1 |
| Total Hours |  | 20 |

## Broadfield Science with a Major in Physics B.A./ B.S.

## University Studies Courses

See the University Studies Requirements *
Teacher Certification, 8-12 Physics
Required courses in the major

| PHYS 1401 | College Physics |  |
| :--- | :--- | :--- |
| PHYS 1402 | College Physics |  |
| PHYS 2425 | University Physics I | 4 |
| PHYS 2426 | University Physics II | 4 |
| PHYS 341 | Broadfield Physics I | 4 |
| PHYS 342 | Broadfield Physics II | 4 |
| CHEM 101 | General Chemistry Tutorial I | 1 |
| CHEM 102 | General Chemistry Tutorial II | 1 |


| CHEM 1411 | General and Quantitative Chemistry I | 4 |
| :---: | :---: | :---: |
| CHEM 1412 | General and Quantitative Chemistry II | 4 |
| CHEM 201 | Organic Chemistry Tutorial I | 1 |
| CHEM 202 | Organic Chemistry Tutorial II | 1 |
| CHEM 211 | Organic Chemistry I | 4 |
| CHEM 212 | Organic Chemistry II | 4 |
| Teacher Education courses |  |  |
| CED 307 | Knowing and Learning in Secondary Mathematics and Science | 3 |
| CED 412 |  | 3 |
| CED 497 | Special Topics | 3 |
| ETEC 424 | Integrating Technology into the Middle/Secondary Curriculum | 3 |
| RDG 380 | Comprehension and Vocabulary in Middle and High Schools | 3 |
| SED 300 | The Teaching Profession | 3 |
| SED 302 | Teaching Styles and Learning Styles in Pluralistic Field-Based Environments | 3 |
| SED 401 | Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments | 3 |
| SED 404 | Internship in Secondary Schools Field-Based | 3 |
| SED 405 | Residency in Secondary Teaching | 6 |
| Support courses |  |  |
| PSY 300 | Learning Processes and Development | 3 |
| MATH 2413 | Calculus I |  |
| MATH 192 | Calculus II | 4 |
| Total hours |  | 120 |
| Freshman |  | Hours |
| PHYS 1401 |  | 4 |
| PHYS 1402 |  | 4 |
| MATH 2413 |  | 4 |
| MATH 192 |  | 4 |
| ENG 1301 |  | 3 |
| ENG 1302 |  | 3 |
| CHEM 101 |  | 1 |
| CHEM 102 |  | 1 |
| CHEM 1411 |  | 4 |
| CHEM 1412 |  | 4 |
|  |  | 32 |
| Sophomore |  | Hours |
| PHYS 2425 |  | 4 |
| PHYS 2426 |  | 4 |
| CHEM 201 |  | 1 |
| CHEM 202 |  | 1 |
| CHEM 211 |  | 4 |
| CHEM 212 |  | 4 |
| HIST 1301 |  | 3 |
| HIST 1302 |  | 3 |
| US Vis/Perf Art |  | 3 |
| US PE Activity |  | 1 |
|  |  | 28 |
| Junior |  | Hours |
| PHYS 341 |  | 4 |
| PHYS 342 |  | 4 |
| CED 307 |  | 3 |
| PSY 300 |  | 3 |
| PSCI 2301 |  | 3 |

PSCI 2302 ..... 3
SPC 1315 or 1321 ..... 3
RDG 380 ..... 3
US Humanities ..... 3
US PE Activity ..... 1
30
Senior ..... Hours
CED 412 ..... 3
CED 497 ..... 3
ETEC 424 ..... 3
SED 300 ..... 3
SED 302 ..... 3
SED 401 ..... 3
SED 404 ..... 3
SED 405 ..... 6
US Soc/ Behav Sci ..... 3

Total Hours: 120

* See the University Studies Requirements (https://nextcoursecatalog.tamuc.edu/undergrad/university-studies-requirements)


## Physics B.A./B.S.

This program is recommended for students who wish to obtain industrial employment or who wish to continue their studies for an advanced degree in physics, engineering, science or applied mathematics. Students who successfully complete this program should have a good understanding of the role of physics within the sciences and within society. Graduates of this program should have a solid understanding of the principles and foundations of classical and modern theories of physics. They will have practiced the methods and techniques of experimental physics; they will have practical experience in utilizing the analytical and modeling tools of physics. This rigorous program of study develops analytical, problem solving and communication skills which are valuable in a wide range of employment areas. This program requires a second major or minor.

## University Studies Courses

See the University Studies Requirements 43
Required courses in the major
PHYS 2425 University Physics I 4
PHYS $2426 \quad$ University Physics II 4
PHYS $317 \quad$ Mathematical Physics I 3
PHYS $321 \quad$ Modern Physics 3
PHYS $132 \quad$ Basic Electronics for Scientists and Engineers 4
or PHYS 332 Digital Logic and Circuitry
PHYS $333 \quad$ Wave Motion, Acoustics, and Optics 4
PHYS $401 \quad$ Current Problems (1 sh, must be repeated for total of 2 sh) 2
PHYS $441 \quad$ Advanced Physics Laboratory (2 sh, must be repeated for total of 4 sh ) 4
PHYS $411 \quad$ Mechanics I 3
PHYS $412 \quad$ Advanced Electricity and Magnetism 3
PHYS $420 \quad$ Quantum Mechanics 3
PHYS or ASTR (Adv) 6
Required support courses **
CSCI $151 \quad$ Introduction to Computer Science and Programming 4
MATH $2413 \quad$ Calculus I* 4
MATH $192 \quad$ Calculus II 4
MATH $314 \quad$ Calculus III 4
CHEM $1411 \quad$ General and Quantitative Chemistry I * 4
CHEM $1412 \quad$ General and Quantitative Chemistry II * 4
Second Major or Minor or Electives Required
18-22 semester hours required in second major or minor or electives ..... 18-22
Total hours ..... 120

* This course should be taken to fulfill University Studies requirement.
** These courses may apply on the second major or minor.
Total Semester Hours: 120
Suggested Curriculum Outline (B.S.)
Freshman ..... Hours
US PE Activity ..... 1
PHYS 2425 ..... 4
PHYS 2426 ..... 4
MATH 2413 ..... 4
MATH 192 ..... 4
CHEM 1411 ..... 4
CHEM 1412 ..... 4
ENG 1301 ..... 3
ENG 1302 ..... 331
Sophomore ..... Hours
US Soc/Behav Sci ..... 3
US PE Activity ..... 1
PHYS 132 or 332 ..... 4
PHYS 321 ..... 3
PHYS 333 ..... 4
CSCI 151 ..... 4
SPC 1315 or 1321 ..... 3
HIST 1301 ..... 3
HIST 1302 ..... 3
MATH 314 ..... 4
32
Junior ..... Hours
Second Major, Minor, or Electives ..... 7-8
US Humanities ..... 3
US Vis/Perf Arts ..... 3
PHYS 317 ..... 3
PHYS 411 ..... 3
PHYS 412 ..... 3
PSCI 2301 ..... 3
PSCI 2302 ..... 3
28-29
Senior ..... Hours
PHYS or ASTR (Adv) ..... 6
Second Major, Minor, or Electives Courses ..... 14
PHYS 401 ( 1 sh, must be repeated for a total of 2 sh) ..... 2
PHYS 420 ..... 3
PHYS 441 (2 sh, must be repeated for total of 4 sh) ..... 4

[^6]
## Notes

- MATH 142 Pre-Calculus is required of all students who do not qualify for advanced standing.
- Suggested second majors include mathematics, chemistry, computer science, and biology. Other choices are possible.
- Planning for a second major should not be delayed beyond the middle of the sophomore year. A minor in a second subject may be chosen instead of a second major. The choice of mathematics as second major allows for four additional courses to be elective. Many students select minors in both mathematics and computer science.


## Physics Minor

The 20 semester hours ( 6 courses) required for a minor in Physics are selected with a view toward contributing to the individual student's educational goals.

## Most physics minors take one of the following tracks <br> Non-Calculus

| 6 sh (Adv) on approval of departmental advisor | 6 |  |
| :--- | :--- | :--- |
| PHYS 1401 | College Physics | 4 |
| PHYS 1402 | College Physics | 4 |
| PHYS 132 | Basic Electronics for Scientists and Engineers | 4 |

Total Hours 18

## Calculus Required

| PHYS 2425 | University Physics I | 4 |
| :---: | :---: | :---: |
| PHYS 2426 | University Physics II | 4 |
| PHYS 317 | Mathematical Physics I | 3 |
| PHYS 321 | Modern Physics | 3 |
| PHYS 333 | Wave Motion, Acoustics, and Optics | 4 |
| Plus 3 sh from: |  |  |
| PHYS 319 | Scientific Computing |  |
| PHYS 420 | Quantum Mechanics |  |
| PHYS 430 | Optics |  |
| PHYS 411 | Mechanics I |  |
| PHYS 412 | Advanced Electricity and Magnetism |  |

Total Hours

## Electronics and/or Computer Science

| PHYS 1401 | College Physics | 4 |
| :---: | :---: | :---: |
| or PHYS 2425 | University Physics I |  |
| PHYS 1402 | College Physics | 4 |
| or PHYS 2426 | University Physics II |  |
| PHYS 132 | Basic Electronics for Scientists and Engineers | 4 |
| or PHYS 332 | Digital Logic and Circuitry |  |
| Plus 6 sh (Adv) from: |  | 6 |
| PHYS 319 | Scientific Computing |  |
| PHYS 321 | Modern Physics |  |
| PHYS 333 | Wave Motion, Acoustics, and Optics |  |
| PHYS 397 |  |  |
| PHYS 432 | Advanced Electronics |  |
| PHYS 492 | Instrumentation and Control |  |

Total Hours

## Physics Second Major

A student who elects a second major in physics must complete a minimum of eight courses including four advanced courses. The student will consult the department head to choose the specific courses to fit his/her needs and interests.

## Pre-Engineering

Advisor: Boa-An Li, Physics
The curriculum listed below is equivalent to approximately two years of course work in engineering. The advisor for pre-engineering should be consulted by each student for advisement on an individual program that meets the requirements of the engineering schools in which the student is considering enrolling. Transfer agreements are continuously updated with Texas A\&M University to assure guaranteed admission into specific programs at College Station.

## The following curriculum is presented for the student's guidance:

| First Year | Hours |
| :--- | ---: |
| MATH 2413 | 4 |
| MATH 192 | 4 |
| CHEM 1411 | 4 |
| CHEM 1412 | 4 |
| PHYS 2425 | 4 |
| PHYS 2426 | 4 |
| ENGR 111 | 3 |
| ENGR 211 | 3 |
|  | 3 |
| Second Year | 3 |
| HIST 1301 | 3 |
| HIST 1302 | 3 |
| PSCI 2301 | 3 |
| PSCI 2302 | 3 |
| MATH 314 | 3 |
| MATH 315 | 3 |
| ENG 1301 | 3 |
| ENG 1302 | 3 |

Total Hours: 55

## Notes

An additional 18-20 sh will be selected upon advisement from MATH 315 Differential Equations, MATH 335 Linear Algebra; PHYS 321 Modern Physics, PHYS ; Eco 231 ; Spc 245 ; Chem , CHEM , Engr 211 **.

## Total Semester Hours: 69-71

* If a student lacks training in algebra and trigonometry in high school, he/she should plan to take Math 141 and MATH 142 Pre-Calculus prior to enrolling in 191.
** Required for students transferring to Texas A\&M University at College Station. See the engineering web site for more detailed information: http:// www.tamuc.edu/physics/advising/engineeradvisor.html.


## Courses

## Accounting

Accounting (ACCT (p. 298))

## Agricultural Sciences

Agricultural Economics (AEC) (p. 300)
Agriculture (AG) (p. 301)
Agricultur Sci \& Tech (AGED) (p. 299)
Agricultural Mech (AMC) (p. 301)
Animal Science (ANS) (p. 302)
Equine Science (EQSC) (p. 336)
Food Science (FDSC) (p. 341)
Plant and Soil Science (PLS) (p. 375)

## Applied Sciences

Applied Arts \& Sciences (BAAS) (p. 304)
Bachelor of General Studies (BGS) (p. 311)

## Art

Art (ART) (p. 305)
Photography (PHO) (p. 371)
Biological and Environmental Sciences
Biological Sciences (BSC) (p. 312)
Environmental Sci (ENVS) (p. 335)
Earth Science (ESCI) (p. 327)
Business Administration and Management Information Systems
Business Administration (BA) (p. 316)
Management Informa Sys (MIS) (p. 360)
Chemistry
Chemistry (CHEM (p. 317))

## Computer Science and Information Systems

Computer Science and Information Systems (CSCI (p. 319))
Curriculum and Instruction
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## Accounting Courses

## ACCT 221. Principles of Accounting I. 3 Hours.

(Acct 2301) Principles of Accounting I. Three semester hours. (1, 2; 3 or 4) An introduction to financial accounting concepts and financial reporting, with the focus being on how decision makers analyze, interpret, and use accounting information. Emphasis is given to how accounting measures, records, and reports economic activities for corporations and on the relationship between accrual and cash flow measures in interpreting accounting information. Prerequisite: Completion or concurrent enrollment in MIS 128 or CSci 126.

## ACCT 222. Principles of Accounting II. 3 Hours.

(Acct 2302) Principles of Accounting II. Three semester hours. (1, 2; 3 or 4) A study of the role of management accounting and control in business firms with an emphasis on organizational activities that create value for customers. Topics include activity based costing, cost behavior, cost allocation, pricing and product mix decisions, capital budgeting, compensation, benchmarking and continuous improvement, and behavioral and organizational issues. Prerequisite: Acct 221.

## ACCT 303. Business Comm for Accountants. 3 Hours.

Business Communications for Accountants - Three semester hours This course focuses on developing students' abilities to research, analyze and communicate topics in accounting and/or tax by using qualitative and/or quantitative research methodology. Students also learn various effective methods to communicate and will use online accounting and tax research services. Course Embedded Assessment Objectives: • Demonstrate the effective use of research tools available for accounting and tax. •Demonstrate effective analysis of complex issues in tax and accounting. •Effectively present findings, clearly, and concisely in a professional format using APA guidelines.

ACCT 311. Financial Statement Analysis for Global Entrepreneurship. 3 Hours.
Financial Statement Analysis for Global Entrepreneurship - Three semester hours This course is designed to provide an overview of financial statement analysis with a focus on global entrepreneurship. It presents a framework for analyzing business opportunities and risks through the use of financial statement analysis, ratio analysis, trend analysis and valuation methods. Prerequisite: ACCT 222.

## ACCT 321. Intermediate Accounting I. 3 Hours.

Financial Accounting I. Three semester hours. (1, 2) A study of accounting principles and procedures essential to the preparation of financial statements with particular emphasis on the corporate form. Topics of coverage include current assets and liabilities, investments and property, plant and equipment. Prerequisites: Acct 222 and a minimum of 55 sh credit or Acct 501.

## ACCT 322. Intermediate Accounting II. 3 Hours.

Financial Accounting II. Three semester hours. (2) A continuation of the detailed study of financial accounting principles and procedures begun in Accounting 321. Emphasis will be given to accounting for long-term liabilities and investments, stockholders $¿$ equity, income recognition, leases, accounting changes and errors, and financial reporting and analysis. Prerequisite: Acct 321.

ACCT 326. Accounting Information Systems. 3 Hours.
Accounting Information Systems - Three semester hours. (1, 2) The Accounting Information Systems course introduces students to how accounting activities are integrated into manual and computer-based accounting information systems. The course explores in detail the revenue and expenditure cycles, the general ledger, financial reporting, and management reporting systems. Internal control, fraud, and ethics are integrated throughout the curriculum. Students will be required to solve cases utilizing problem solving techniques and critical thinking. Prerequisites: Acct 222 and MIS 128 or CSci 126 or equivalent, and a minimum of 55 sh credit or Acct 501.

## ACCT 412. Cost Accounting. 3 Hours.

Cost Accounting - Three semester hours Cost accounting focuses on understanding cost management concepts and how management controls and analyzes costs for performance measures as well as aid in decision-making and achieving organizational goals. Course Embedded Assessment Objectives: • Calculate and analyze appropriate product costs within a designated business environment. - Prepare and interpret budgets and operating results through variance analysis. - Understand cost calculations and prepare projections in order to assist with decision- making. Pre-requisites : ACCT 221, ACCT 222.

## ACCT 421. Advanced Accounting. 3 Hours.

Financial Accounting III. Three semester hours. (1, 2) A continuation of the financial accounting sequence. The course emphasizes business combinations and consolidations and will also cover other selected financial accounting topics. Prerequisite: Acct 322 or approval of faculty.

## ACCT 427. Auditing. 3 Hours.

Financial Auditing. Three semester hours. (1) Principles and practices used by public accountants and internal auditors in examining financial statements and supporting data. Special emphasis is given to assets and liabilities. Prerequisite: Acct 322 or approval of faculty.

## ACCT 430. Business Ethics for Accountants. 3 Hours.

Business Ethics for Accountants. Three semester hours. The course will provide a background in the process of ethical reasoning, the ethical environment, application of ethical rules and guidelines to case problems, and a framework for ethical decision-making. The focus will be on the ethical environment within which professional accountants and business operate. The objective is to provide the student with an educational background in what constitutes ethical conduct in businesses and accounting. Prerequisites: Acct 222 and a minimum of 55 sh credit.

## ACCT 431. Internship in Accounting. 3 Hours.

Internship in Accounting. Three semester hours. This course provides an opportunity for selected students to earn elective credits in accounting through supervised work experience with area business firms under the supervision of a faculty member. Prerequisites: Twelve hours of accounting and permission of the department head.

## ACCT 433. Internal Control Systems. 3 Hours.

Internal Control Systems. Three semester hours. (1 or 2) This course explores information systems that provide accounting and other information to make effective and efficient decisions. Emphasis is given to the interaction between the systems analyst, the financial accountant, the internal auditor, the external auditor, and other decision-makers. Overall data flow in systems is studied with an emphasis on flow and logic concepts and designing appropriate internal controls for these systems. Prerequisites: Acct 222 and a minimum of 55 sh credit.

## ACCT 437. Government and Non-Profit Accounting. 3 Hours.

Government and Not-For-Profit Accounting. Three semester hours. A study of accounting principles and procedures as they apply to governmental units and to private non-profit organizations. Prerequisites: Acct 222 and a minimum of 55 sh credit.

## ACCT 439. Advanced Income Tax Accounting. 3 Hours.

Advanced Income Tax Accounting. Three semester hours. (1) A study of taxation of partnerships, corporations, estates, and trusts under current federal income tax laws. An emphasis will be on solving practical problems using tax research tools and software. Prerequisites: Acct 440 and a minimum of 55 sh credit.

## ACCT 440. Income Tax Accounting. 3 Hours.

Income Tax Accounting. Three semester hours. (2) A study of income tax laws. Emphasis is given to the impact of the federal income tax on the individual taxpayer. Various research software and tools are utilized to solve practical tax problems. Prerequisites: Acct 222 and a minimum of 55 sh credit.

## ACCT 442. Corporate Taxation. 3 Hours.

Corporate Taxation - Three semester hours The federal income taxation of corporations and their shareholders with emphasis on the creation of the corporation, establishment of its capital structure, operational alternatives, distribution to shareholders, stock dividends and redemptions, personal holding company, and accumulated earnings tax. Pre-requisites: ACCT 441 Course Embedded Assessment Objectives: • Understand income taxation of corporations. - Understand the accounting treatment for distributions and dividends to shareholders. • Understand the carryover of tax attributes, capitalization and liquidation rules for corporations.

## ACCT 461. Fraud Examination. 3 Hours.

Fraud Examination - Three semester hours This course is designed to provide an introduction to fraud examination and covers the principles and methodologies of detecting and deterring fraud using accounting, auditing, and investigative skills. Topics include skimming, larceny, misappropriations, fraudulent financial statements, interviewing witness and support for litigation. The objectives include understanding the principles and practices used by public accountants, internal auditors, and others used to examine financial and related information.
ACCT 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.
ACCT 490. H Honors Thesis. 3-6 Hour.
ACCT 491. H Honors Readings. 3 Hours.
ACCT 497. Special Topics. 1-4 Hour.
Special Topics. Three semester hours. Organized class. May be repeated when topics vary.
ACCT 499. Internship in Accounting. 3 Hours.
Internship in Accounting - Three semester hours This course provides an opportunity for selected students to earn elective credits in accounting through supervised work experience with area business firms under the supervision of a faculty member. Prerequisites: Twelve hours of accounting and permission of the department head.

## Agricultur Sci \& Tech Courses

## AGED 297. Special Topics. 1-4 Hour.

AGED 371. Agricultural and Youth Leadership. 3 Hours.
Agricultural and Youth Leadership. Three semester hours. Application of leadership principles with emphasis on interpersonal and personal skills, organizational structure, and FFA and 4-H Club activities.

## AGED 404. Supervised Experience Programs. 3 Hours.

Supervised Experience Programs - Three semester hours Theories and practices associated with experiential learning models used in secondary agricultural science programs and community-based youth programs.

## AGED 465. Student Teaching in Secondary Schools. 6 Hours.

Student Teaching in the Secondary School. Six semester hours. (2) The student will teach in a selected school for a continuous period of 14 weeks under the joint supervision of local school officials and personnel of the University. The student teacher will engage in and develop, as nearly as possible, all professional competencies deemed essential in teaching an Agricultural Science and Technology program. Senior standing required. Prerequisite: SED 300, PSY 300.

## AGED 470. Methods of Teaching Agricultural Science and Technology. 3 Hours.

Methods of Teaching Agricultural Science and Technology. Three semester hours. (3 lecture, 0 lab) (2) Professional skills deemed appropriate to and essential in the teaching of all phases of a local program of Agricultural Science and Technology will be developed. This course is taken during the student teaching residency semester. Senior standing required. Prerequisites: AgED 371.

AGED 471. The Program of Instruction in Agricultural Science and Technology. 3 Hours.
The Program of Instruction in Agricultural Science and Technology. Three semester hours. A "Comprehensive Program of Instruction" will be planned for each student, including courses of study for the secondary school, programs of activities for th FFA, resource use and parent/community relations. Philosophy and administration of secondary and community-based Agricultural Science and Technology programs will be emphasized. This course is taken during the student teaching residency semester. Senior standing required. Prerequisites: SED 300.

AGED 489. Independent Study. 1-6 Hour.
AGED 497. Special Topic. 1-4 Hour.

## Agricultural Economics Courses

## AEC 219. Agricultural Economics. 3 Hours.

(AGRI 2317) US-Agricultural Economics. Three semester hours. A study of economic principles, with emphasis on their application to the solution of farm, agribusiness, and agricultural industry problems.

## AEC 297. Special Topics. 1-4 Hour.

## AEC 314. Farm Management. 3 Hours.

Farm Management. Three semester hours. Techniques and procedures used for decision making in the farm business. Determination of optimum enterprise choice, resource combination and techniques of financial management, budgeting, and whole farm/ranch planning.

AEC 316. Agricultural Marketing. 3 Hours.
Agricultural Marketing. Three semester hours. A broad view of marketing; food markets and consumption; marketing functions and institutions. Applications of economic theory to agricultural price estimation, discovery, and determination.

AEC 340. Agricultural Finance. 3 Hours.
Agricultural Finance. Three semester hours. Analysis of capital investments, interpretation of financial statements, capital structure considerations for agricultural firms, farm real estate pricing, and financial intermediation in agriculture.

AEC 360. Agricultural Law. 3 Hours.
Agricultural Law. Three semester hours. Survey of law and legal decisions that impact agriculture including farm and preservation, water rights, pollution abatement standards, workers' rights, externalities, pesticide/insecticide regulation, product inspection, development of legislation, mineral rights and employer liability. Prerequisite: Junior standing.
AEC 380. Agricultural Statistics. 3 Hours.
Agricultural Statistics - Three semester hours Principles and estimation techniques used in the analysis of agricultural data including measures of central tendency and dispersion, probability, sampling, hypothesis testing, analysis of variance, correlation coefficient, and regression. Pre-requisites : Math 141 or Math 175 or Higher Math.

## AEC 435. Agricultural Policy. 3 Hours.

Agricultural Policy. Three semester hours. Analytical treatment of historical, recent and current economic problems, and governmental policies influencing American agriculture and rural America. The focus is on developing an historical and conceptual understanding of the economics of agriculture and how public policy has and does influence the nature and performance of American agriculture.

AEC 445. Resource and Environmental Economics. 3 Hours.
Resource and Environmental Economics. Three semester hours. This course explores the approach that economists take to environmental and resource problems. It examines both the economic roots of environmental problems and the solutions that economists suggest. The course focuses on questions a policymaker must face in deciding how and when to regulate, including issues of efficiency and distribution.
AEC 455. Commodity Futures Marketing. 3 Hours.
Commodity Futures Marketing. Three semester hours. The objectives of this course are to understand why futures exchanges and commodity futures contracts exist; understand and be able to forecast basis; understand hedging and be able to design hedging strategies for various commodity producers and users; understand both put and call options and their potential use in a commodity risk management program; and understand the usefulness and shortcomings of fundamental and technical analysis.
AEC 489. Industrial Agriculture Economics. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## AEC 497. Special Topics. 1-4 Hour.

Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## Agricultural Mech Courses

## AMC 297. Special Topics. 1-4 Hour.

AMC 315. Agricultural Systems Technology Management. 3 Hours.
Agricultural Systems Technology Management. Three semester hours (2 lecture, 2 lab). Preliminary study to acquaint student professionals with the principles and theories needed to comprehend and manage agricultural and environmental technology; introduce the application of information technology to agricultural and environment systems; develop mathematical concepts and unit analysis skills associated with machinery and equipment, industry and marketing, energy, structural and environmental and natural resource systems. Focus shall be on basic knowledge rather than on in-depth analysis of the systems covered. Prerequisites: Math 141 or consent of the instructor.

## AMC 423. Natural Resources Management. 3 Hours.

Natural Resources Management. Three semester hours An investigation of best management practices and conservation techniques used by land owners and managers to protect renewable natural resources from intensive agricultural production methods. Emphasis will be on preventing soil loss and contamination, maintaining water quality, and protecting wildlife habitat. Prerequisite: Junior standing or instructor approval.

AMC 424. Agricultural Safety. 3 Hours.
Agricultural Safety. Three semester hours (2 lecture, 2 lab). Principles and strategies for implementing safety training and reducing risk of injuries in agricultural enterprises including shop and machinery operations, chemical applications, livestock handling, transportation, and farm-based recreation. Prerequisite: Junior or instructor approval.
AMC 425. Agricultural Structures and Material Handling Systems. 3 Hours.
Agricultural Structures and Material Handling Systems. Three semester hours (2 lecture, 2 lab) A study of the principles and theories needed to comprehend and manage agricultural environmental technology associated with structural systems. Reduction and synthesis of natural and applied science principles which involve structural materials and their selection; heating, ventilation, and cooling of structures; processing and handling of biological materials; and knowledge of entrepreneurship, client relations, communications, economics, safety, service, planning, and regulation of technologies associated with agriculture and the environment. Prerequisites: AMc 315 and junior standing.

AMC 426. Agricultural Power and Energy Systems Management. 3 Hours.
Agricultural Power and Energy Systems Management. Three semester hours (2 lecture, 2 lab). A study of the principles and theories needed to comprehend and manage agricultural and environmental technology associated with machinery/equipment and energy systems. Reduction and synthesis of natural and applied science principles which involve mechanical, electrical, chemical power systems; the adjustments, fabrication, maintenance, repair and man agement of machines and equipment utilized in said systems; knowledge of entrepreneurship, client relations, communications, economics, safety, service, planning, and regulation of technologies associated with agriculture and the environment. Prerequisites: AMc 315 and junior standing.

## AMC 428. Laboratory Management in Agricultural Mechanization. 3 Hours.

Laboratory Management in Agricultural Mechanization. Three semester hours. Principles and techniques for planning, organizing, and supervising instructional activities in agricultural mechanization. Topics include lab safety, inventory control, equipment selection, skill development, and assessment methods.
AMC 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.
AMC 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## Agriculture Courses

## AG 100. Introduction to Agriculture. 1 Hour.

Introduction to Agriculture. One semester hour. Introduction to agriculture and its relationship to the sciences. Also explores careers and opportunities in agriculture. Insights into the agriculture curriculum and course content are also presented. Required of all agriculture majors.

## AG 297. Special Topics. 4 Hours.

AG 300. Writing for Publication. 1 Hour.
Agricultural Communications Seminar. One semester hour. Techniques of agricultural communication emphasizing principles involved in job search. Techniques of interviewing, resume writing, letters of inquiry, etc. For agriculture majors. Prerequisites: Nine hours of English and junior standing.

## AG 335. Wildlife Management I. 3 Hours.

Wildlife Management I. Three semester hours. (Cross listed with BSc 335) The purpose of this course is to introduce students to the many aspects of wildlife and conservation science. It will provide an introduction to the history of wildlife management and conservation, ecosystems and ecology, population modeling, animal behavior, food and cover, wildlife diseases, predators and predation, and hunting and trapping. Offered: FALL.

## AG 336. Wildlife Management II. 3 Hours.

Wildlife Management II. Three semester hours. (Cross listed with BSc 336) This course is designed to complement Wildlife Management I and provides an introduction to the many aspects of wildlife ecology and conservation science. Topics covered include water and soils, farmlands, rangelands, and forests, parks and refuges, urban wildlife management, and non-game and endangered species. Students are required to participate in field trips designed to give practical experience in wildlife management techniques. Offered: SPRING.

AG 392. Applied Ethics: US and World Agriculture. 3 Hours.
Applied Ethics: U.S. and World Agriculture. Three semester hours. This course examines major, contemporary issues in agriculture and food policy with emphasis on the ethical aspects of each issue. Discussion focuses on assessing the particular economic, cultural, geographic, political, religious, technological and scientific principles with a moral and ethical framework. Course scope is approximately half U.S. domestic issues and half international issues. Prerequisite: Junior standing.

## AG 397. SPECIAL TOPICS. 1-4 Hour.

Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.
AG 400. Seminar. 1 Hour.
Seminar. One semester hour. Techniques involved in presenting scientific and technical oral reports. Oral presentations required. Prerequisites: Spc 111 or 245 and senior standing.
AG 405. Internship in Agri-Industries. 3-6 Hour.
Internship in Agri-Industries. Three to six semester hours. This course provides the opportunity for students to gain on-the-job experience in the preparation for careers in the rapidly growing agri-related areas of industry and business. Assignments will be at an approved work situation under supervision of a designated faculty member. Ten to twenty hours per week will be required.

## AG 407. General Biochemistry. 3 Hours.

General Biochemistry - Three semester hours Nomenclature, structure, and function of major biomolecules and study of life processes involving them. Topics include enzymology, metabolism, molecular genetics, and biosynthesis. Treatment is qualitative, with very few quantitative considerations. Whenever appropriate, biochemistry is related to biological and health issues. Prerequisite BSc 1406, 1407; and Chem 212; or consent of the instructor. Note: For majors in life sciences and students interested in health professions such as veterinary medicine, osteopathic medicine, pharmacy, and dentistry.

## AG 408. Nutritional Biochemistry. 3 Hours.

Nutritional Biochemistry - Three semester hours A course in biochemistry using nutrition as a model. Topics will include the energetics of metabolism, the structure and metabolism of proteins, carbohydrates, lipids and the integration of metabolic systems. Included also will be the chemistry of nitrogenous bases and how transcription and translation is accomplished on the cellular level. The course is 3 -credit-hour class with 3 hours lecture and no lab (3,0). Prerequisites are ANS 407, CHEM 212, CHEM 314.

AG 489. Industrial Agriculture Sciences. 3 Hours.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## AG 490. H Honors Thesis. 6 Hours.

AG 490 - H Honors Thesis Hours: 6 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

## AG 491. H Industrial Honors Readings. 3 Hours.

AG 491 - H IND HONORS RDGS Hours: 3 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

## AG 495. Undergraduate Research in the Agricultural Sciences. 3 Hours.

Undergraduate Research in the Agricultural Sciences. Three semester hours. Undergraduate research for those students pursuing a bachelors degree in the agricultural sciences. May not be taken if an honors thesis is being completed. Prerequisites: Junior status and a 2.7 cumulative grade point average with a 3.0 major grade point average. Must have prior acceptance by a faculty member in the agricultural sciences.

## AG 497. Special Topics. 1-5 Hour.

Special Topics. One to five semester hours. Organized class. May be repeated when topics vary.

## Animal Science Courses

ANS 118. Introduction to Animal Science. 4 Hours.
(AGRI 1419) Introduction to Animal Science. Four semester hours (3 lecture, 2 lab). Preliminary study of the selection, reproduction, nutrition and marketing of beef and dairy cattle, swine, sheep, horses and poultry.

## ANS 205. Livestock Selection and Evaluation. 3 Hours.

(AGRI 2321) Livestock Selection and Evaluation. Three semester hours (1 lecture, 4 lab) Selection and evaluation of breeding and market animals, breed characteristics, and carcass evaluation as it relates to live animal evaluation. Occasional field trips required. Prerequisites: AnS 118 or concurrent enrollment.

ANS 297. Special Topics. 1-4 Hour.

## ANS 307. Animal Feeds and Feeding. 3 Hours.

Animal Feeding. Three semester hours (2 lecture, 2 lab). Chemical composition of feedstuffs, requirements of domestic animals, utilization of nutrients, formulating and balancing rations. Prerequisites: AnS 118, Chem 1405 or 1411, Math 1314.

## ANS 308. Animal Nutrition. 3 Hours.

Animal Nutrition - Three semester hours Functions of carbohydrates, proteins, vitamins, lipids, minerals and water. Chemistry and physiology of nutrients and their metabolites.

## ANS 310. Genetics of Livestock Improvement. 3 Hours.

Genetics of Livestock Improvement. Three semester hours. Introduction to genetic principles involved in domestic animal improvement. Methods available to the animal breeder and their effectiveness. Gene action, crossbreeding, inbreeding and other mating plans. Prerequisites: BSC 1407 or ANS 118 or PLS 1415 or PLS 115.
ANS 311. Reproductive Physiology of Domestic Animals. 3 Hours.
Reproductive Physiology of Domestic Animals. Three semester hours (2 lecture, 2 lab). Comparative anatomy and physiology of the male and female reproductive systems of domestic animals, endocrinology of reproduction, gestation and parturition. Prerequisites: AnS 118, BSc 1407, Chem 1411.
ANS 312. Artificial Breeding of Domestic Animals. 3 Hours.
Artificial Breeding of Domestic Animals. Three semester hours (3 lecture, 2 lab). Principles of artificial breeding of farm animals. Semen collection and evaluation, gamete freezing and storage, reproduction management techniques and pregnancy diagnosis. Prerequisite: AnS 311.

ANS 313. Dairying. 3 Hours.
Dairying. Three semester hours (2 lecture, 2 lab). Dairy breeds and their selection, milk secretion, composition and handling, milking equipment and facilities. Prerequisites: AnS 118.

## ANS 317. Livestock Management Techniques. 3 Hours.

Livestock Management Techniques. Three semester hours (1 lecture, 4 lab). Application of animal handling and management techniques for dairy, beef, sheep, swine and poultry. Prerequisites: AnS 118.

## ANS 319. Anatomy and Physiology of Domestic Animals. 3 Hours.

Anatomy and Physiology of Domestic Animals. Three semester hours. Structure and function of organ systems with special reference to domestic animals. Prerequisites: Chem 1407 or 211.

## ANS 397. Special Topics. 4 Hours.

Special Topic.
ANS 409. Ultrasound Techniques. 3 Hours.
Ultrasound Techniques for Body Composition in Livestock - Three semester hours Basic knowledge and techniques of real-time ultrasound to measure body composition in livestock. Cross list with: ANS 510.
ANS 411. Small Ruminant Management. 3 Hours.
Sheep and Goat Management. Three semester hours. Types, breeds and usefulness of sheep and goats in the U.S. Management systems, production schemes, and general husbandry. Prerequisites: AnS 118, 307, 310, 311.

## ANS 412. Beef Cattle Management. 3 Hours.

Beef Cattle Management. Three semester hours. Concepts and principles of breeding, feeding and management of beef cattle in the U.S. A survey of the past, present and future ideas of the beef cattle industry. Prerequisites: AnS 118, 307, 310, 311.
ANS 413. Swine Management. 3 Hours.
Swine Management. Three semester hours. Commercial and purebred swine operations. Feeding, breeding, and management practices, production efficiency and waste management facilities. Prerequisites: AnS 307, 310, 311, 317, 319.
ANS 415. Companion Animal Management. 3 Hours.
Companion Animal Management. Three semester hours. Anatomy, physiology, nutrition, genetics and health of companion animals including cats, dogs, rabbits, rats, mice, reptiles, amphibians and fish. Problem solving and enterprise management. Occasional field trips required. Prerequisites: AnS 118, 307, 310, and 311 or consent of instructor.

## ANS 416. Animals and Society. 3 Hours.

Animals and Society. Three semester hours. (Capstone) This course is designed to provide a thorough understanding of how animals (companion animals, livestock, wild animals) impact and effect our daily lives, our society, and our economy and their impacts on national security. Topic areas include: Introduction; Animals in History; Animals in Other Societies; Animal-Human Relationships; Animals in Prison Industries; Animal Rights/Animal Welfare; and Management and various unique aspects of species of Companion Animals, including dogs, cats, and horses; and birds reptiles and other pets.
ANS 419. Diseases and Parasites of Livestock. 3 Hours.
Diseases and Parasites of Livestock. Three semester hours. A study of the control and prevention of common infectious and non-infectious diseases of livestock. The common parasites, their prevention, and control. Prerequisites: AnS 118, BSc 1407, BSc 1413 and 254.
ANS 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## ANS 490. H Honors Thesis. 3 Hours.

Honors Thesis - Three semester hours.
ANS 491. H Honor Reading. 3 Hours.
Honors Readings in Animal Science. Three semester hours.
ANS 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## Anthropology Courses

## ANTH 450. Gender in Cross-Cultural Perspective. 3 Hours.

Gender in Cross-Cultural Perspective. Three semester hours. (Capstone) This course examines issues and theories of gender cross-culturally. Ethnographic and interdisciplinary materials will be used to explore the diversity of gender roles and gender belief systems in the contemporary world. Emphasis will be on encouraging students to critically examine the social, cultural, and historical underpinnings of gender inequality.
ANTH 2351. World Cultures: Perspectives from Anthropology. 3 Hours.
(ANTH 2351) World Cultures: Perspectives from Anthropology. Three semester hours. This course undertakes the study of culture and society from a cross-cultural perspective. It provides an introduction to the major concepts, research methods, and theoretical frameworks of cultural anthropology. Topics focus on marriage and family practices, gender roles and identities, subsistence strategies, political and economic systems and religion. The course will help students to better understand variations in behaviors and beliefs cross-culturally while also providing important insights into U.S. culture.

## Applied Arts \& Sciences Courses

## BAAS 301. Principles of Applied Science. 3 Hours.

Principles of Applied Science. Three semester hours This course is designed to provide students enhanced development opportunities for a broad array of principles, practices and application skills common to contemporary business and industry. Emphasis on communication practices, techniques and skills; career and educational building activities; and readings and writing activities related to the literature in the field of study. Students will be expected to participate in course activities, read related literature, conduct research on an assigned topic and to prepare written documents for evaluation.

## BAAS 305. Effective Corporate Communications. 3 Hours.

Effective Corporate Communication. Three semester hours This course is a study of effective exchange of information between individuals and organizations including email, reports, memorandums, letters, presentations, webpage design, advertising, marketing, and public relations. Emphasis will be placed on professionalism, etiquette, and cultural relationships in both internal and external communications. MS Word, MS Excel Spreadsheets, MS Power Point, and E-mail will be reviewed as tools of information exchange.
BAAS 306. Org Change, Creat \& Div. 3 Hours.
Organizational Change, Creativity \& Diversity - Three semester hours This course will focus on building managerial skills to successful achieve organizational change through creativity, innovation and cultural diversity. Included in the course will be an in-depth business case analysis with issues related to the causes, effects, and implementation of organizational change. Students will be required to research several organizations and make a formal presentation regarding the successful or unsuccessful organization change events. Pre-requisite: BAAS 301, ENG 1302 and BAAS 305.

## BAAS 345. Organizational Leadership. 3 Hours.

Organizational Leadership. Three semester hours. Study of contemporary leadership trends in business and industry. Students will research and study of the body of literature with an emphasis on formulation of current leadership practices and future trends. A formal research paper is required. Prerequisite: Junior standing.

BAAS 350. Knowledge Management. 3 Hours.
Knowledge Management. Three semester hours. Study of the process of creating value from an organization's intangible assets with an emphasis on intellectual capital, including human, structural and customer capital. A formal research paper or project is required. Prerequisite: Junior standing.

## BAAS 355. Sustainability in Contemporary Enterprises. 3 Hours.

Sustainability in Contemporary Enterprises - Three semester hours An advanced course on creating sustainability in the contemporary enterprise. Including what consideration of human and material resources are required for maintaining, supporting, and managing a business or industry in the global environment. Emphasis on the principles and strategies for maintaining sustainable practices and materials over the long-term. Additional topics may include: resource management, consumption, product development and production, distribution, packaging and waste management, and other ecological issues and concerns. Student will be expected to conduct research on assignment topic(s) and to prepare written documents for evaluation.

BAAS 397. Special Topics. 3 Hours.
Special Topics. Three semester hours. Organized class. May be repeated when topics vary.

## BAAS 409. Global Technology and Society. 3 Hours.

This course is a comprehensive survey and analysis of societal and ethical implications of contemporary technological innovations. Special emphasis is placed on cultural, social, economic, and environmental effects resulting from advances and future trends in science and technology on a global scale. A formal research paper or project is required. Prerequisite: Junior standing.

## BAAS 444. Strategies for Decision Making. 3 Hours.

Strategies for Decision Making. Three semester hours. The study of strategies and interpersonal communication systems that provide today's management with accurate and quality information on which to base decisions and to be effective in the day to day negotiations within the business environment. Prerequisite: Junior Standing.
BAAS 489. Independent Studies. 3 Hours.
Independent Studies - Three semester hours Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

BAAS 497. Special Topics. 3 Hours.
Special Topics. Three semester hours. Organized class. May be repeated when topics vary.

## Art Courses

## ART 110. Drawing I. 3 Hours.

Drawing I. Four semester hours. (3 lecture, 3 studio) The development of perceptual and descriptive skills through an introduction to a variety of drawing media, techniques and subject matter.

## ART 111. Two-Dimensional Design and Color Theory. 3 Hours.

Two-Dimensional Design and Color Theory. Three semester hours. (3 lecture, 3 studio) An exploration of the fundamental elements and organizing principles of two-dimensional design.

## ART 112. Drawing II. 3 Hours.

Drawing II. Four semester hours. (3 lecture, 3 studio) A continuation of Drawing I, this course reinforces basic rendering skills and introduces additional drawing media and techniques. Emphasis is placed on the development of expressive and conceptual capabilities.

ART 140. Three-Dimensional Design and Color Theory. 3 Hours.
Three-Dimensional Design and Color Theory. Three semester hours (3 lecture, 3 studio) Students tackle a variety of challenging 3-D Design projects while expanding upon their knowledge of color theory. Students must consider craftsmanship, color and texture while completing projects that involve prototype making and invention, product parameters and marketing, shape, scale and material construction.
ART 141. Intro to Shop Safety. 1 Hour.
Introduction to Practical Woodworking Applications and Woodshop Safety - One semester hour. Students are introduced to woodshop tools, methods and shop safety practices. In the process of learning how to use the shop and tools safely and effectively, students will complete basic projects that will assist them in future, more advanced studio classes. Such projects include frame, stretcher, pedestal and shelf building. All students must complete this course prior to taking upper-level art courses in order to gain access to the woodshop.

ART 211. Introduction to Visual Communication. 3 Hours.
Introduction to Visual Communication - Three semester hours An introduction to visual communication in computer based electronic media. Emphasis on typography, design, and visual concept development through software application methods and techniques. 3 lecture/2 lab.

## ART 213. Figure Drawing. 3 Hours.

Figure Drawing. Four semester hours (6 lecture/studio). The solving of total compositional problems, through drawing media. Emphasis is placed upon the figure, with additional concentration upon other subject matter and nonobjective image-making.

ART 216. Sophomore Studio: Introduction to Communication Design. 3 Hours.
Sophomore Studio: Introduction to Communication Design - Three semester hours This course provides an introduction to the aesthetic and pragmatic fundamentals of contemporary communication design through the mediums of print and electronic graphics.

ART 227. Sophomore Studio: Introduction to Painting. 3 Hours.
Sophomore Studio:US-Introduction to Painting - Three semester hours Introduction to the fundamentals of painting with an expanded practical investigation of color interactions beyond the basics introduced in Two-Dimensional Design and Three-Dimensional Design. Exploration of traditional and contemporary techniques and methodologies through a variety of subjects including still life, figure, self-portrait and landscape from direct observation or imagination.

## ART 240. Sophomore Studio: Introduction to Sculpture. 3 Hours.

Sophomore Studio: US-Introduction to Sculpture - Three semester hours This course provides an introductory exposure to woodworking, moldmaking and casting. Students will learn basic methods and techniques while discussing how specific mediums and processes are being used in a sculptural and art making context. Gallery and museum visits will be incorporated into the class as students research and discuss the work of contemporary artists.

ART 250. Sophomore Studio: Introduction to Ceramics. 3 Hours.
Sophomore Studio:US-Introduction to Ceramics - Three semester hours This course provides an introductory exposure to the history of ceramics and a beginning level experience in the use of clay as a fine art medium. Forming techniques, surface development and glazing, and kiln firing practices will be introduced. Both the functional and sculptural ceramic traditions will be explored.

## ART 300. Typography. 4 Hours.

Typography. Four semester hours. (6 lecture/studio) (formerly Art 260) This course emphasizes the utilization of type design in the broader arenas of printed and electronic media. Initial emphasis is placed on hand-eye skills and accurate visual judgments, while later topics include letter-spacing, overall visual order, positive/negative space, and historical and original usage of type design and design concepts. Students will sometimes work in groups to simulate the team efforts found among professionals in the Communication Arts. Course may be repeated for up to 8 sh. Prerequisite: Junior or Senior standing.

## ART 305. Integrated Arts for Elementary Teachers. 3 Hours.

Integrated Arts for Elementary Teachers. Three semester hours. (Same as Mus 305 and The 305) This course is designed to introduce students to various creative theatre, visual, and musical arts content and experiences in the elementary school classroom.

## ART 306. History of Ancient Art. 3 Hours.

History of Ancient Art - Three semester hours History of the visual arts in the ancient world comprising the civilizations of The Near East, Egypt, Greece, and Rome. Emphasis on the study of art within historical and cultural contexts.

## ART 309. Digital Imaging for Communication Art. 4 Hours.

Digital Imaging for Communication Art. Four semester hours. (6 studio/lecture) Introduction to digital photo manipulation and the manipulation of other images. Students will learn the preparation of images for use with print production, animation and web-based applications. Prerequisite: Pho 111 and Junior or Senior standing.

## ART 310. Electronic Media. 4 Hours.

Electronic Media. Four semester hours. (6 lecture/studio) (formerly Art 216) A broad-based practicum in computer-based electronic media with emphasis on advanced applications in the graphic arts. Area of emphasis will include typography, graphic design, illustration, digital imaging, and pre-press preparation. Prerequisite: Junior or Senior standing. Course may be repeated for up to 8 sh.

## ART 311. Multimedia I. 4 Hours.

Multimedia I. Four semester hours. (6 lecture/studio) (same as CSci 311) An introduction to producing multimedia presentations. Students learn authoring techniques to incorporate digital imagery, audio and video into a running interactive presentation. Prerequisites: Art 300, 309, 310.

ART 312. Internet Development I. 4 Hours.
Internet Development I. Four semester hours. (6 lecture/studio) (same as CSci 312) Introduction to web site design and publishing. Students learn the basics of HTML programming to incorporate graphics into functional interactive sites, including HTML tags, frames and scripting. Prerequisites: Art 300, 309, 310.
ART 313. Interactive Vector Graphics and Animation. 4 Hours.
Interactive Vector Graphics and Animation. Four semester hours. (6 lecture/studio). Vector-based graphics for the implementation of internet applications ranging from a navigational interface to 2D animation. Prerequisites: Art 300, 309, 310.

## ART 316. Advanced Drawing. 3 Hours.

Advanced Drawing. Three semester hours (3 lecture/3 studio). Emphasis on experimental and individually based, expressive statements using drawing media. A variety of subjects, including the figure, will be used.

## ART 317. Three-Dimensional I. 4 Hours.

Three-Dimensional I. Four semester hours. (6 lecture/studio) Overview of 3D modeling, texturing, lighting, and animation. Exploration of the toolsets involved in creating and animating the 3D scene. Prerequisite: Art 365 or permission of the instructor.

## ART 318. History of Medieval Art. 3 Hours.

History of Medieval Art - Three semester hours History of the visual arts in Europe and Byzantium in the Middle Ages. The course begins with the origins of Christian art in the Roman Empire and concludes with the art of the Gothic Age.

## ART 320. Airbrush Painting. 3 Hours.

Airbrush Painting. Three semester hours (2 lecture/2 studio). Introduction to fundamentals of painting with an airbrush, and operation and maintenance of the basic airbrush. Stencils, frisket, and freehand techniques are explored. May be repeated to a maximum of 8 sh. Prerequisites: Art 111 and 212.

## ART 321. Watercolor I. 3 Hours.

Watercolor I. Four semester hours (6 lecture/studio). Exploration of a variety of traditional and contemporary experimental watercolor processes and concepts. Ongoing evaluation of development of personal expression. May be repeated to a maximum of 8 sh .

## ART 326. Painting II: Introduction to Basic Concept in Painting. 3 Hours.

Painting II (3) Introduction to Basic Concepts in Painting Exploration of traditional and contemporary techniques and methodologies through a variety of subjects including still life, landscape, the figure and imagination. Repeatable. Pre-requisites : ART 111 - 2D Design + Color ART 140 - 3D Design + Color ART 225 - Soph Studio: Introduction to Painting or permission of the instructor.

## ART 330. Printmaking. 3 Hours.

Printmaking. Three semester hours (3 lecture/3 studio). A technical and conceptual exploration of fine art printmaking that may include relief, intaglio, planographic, and stencil processes and collographic prints. Emphasis is placed on the development of the student's personal expression. Screenprinting may be a follow-up for the course.
ART 331. Screenprinting. 3 Hours.
Screenprinting. Three semester hours. A technical and conceptual exploration of fine art printmaking using screenprinting techniques. Emphasis is placed on the development of the student's personal expression.

## ART 332. Printmaking II. 3 Hours.

Printmaking II - Three semester hours - (3 Lec/3 Lab) This course is intended for students who have previous experience with printmaking and wish to continue exploring various print media. It is also open to those who wish to work independently on printmaking projects or would like to incorporate printmaking into other media. Monoprinting, etching, and all kinds of relief printing are covered in this course with a leaning towards experimentation and idea development. Students will work with colour, choose their own subject matter, and will be instructed in the non-hazardous use of printmaking materials. Pre-requisites : ART 330 Printmaking 1 or equivalent.

## ART 334. Topics in Renaissance Art. 3 Hours.

Topics in Renaissance Art - Three semester hours Examines specific topics in painting, sculpture, and architecture in Western Europe from the end of the 13th to the late 16 th Century. May be repeated up to 12 semester hours.

## ART 336. Topics in Baroque Art. 3 Hours.

Topics in Baroque Art - Three semester hours Explores topics in art from 1600 to 1750 across Western Europe, which will be examined in terms of historical context, formal content, and cultural developments. May be repeated up to 12 semester hours.
ART 338. Topics in Non-Western Art. 3 Hours.
Topics in Non-Western Art - Three semester hours Art will be presented as an integral aspect of culture, focusing on areas such as China, Japan, Africa, Oceania, Native America, and pre-Columbian Mexico and Central and South America. Aesthetic appreciation will be enhanced through a presentation of various philosophies, customs and values.

## ART 340. Sculpture I A: Introduction to Fabric, Video, Performance and Public Art. 3 Hours.

Sculpture I: Introduction to Fabric, Video, Performance and Public Art - Three semester hours Students will be introduced to fabric and video as sculptural mediums while learning basic patterning, sewing, camera and editing techniques. Additionally, students will study the role of public and performance art by researching and discussing a variety of contemporary artists who use this exhibition format to communicate ideas. Museum and gallery trips will be incorporated into this class.

## ART 341. Sculpture I B: Introduction to Metals and Mechanical Systems. 3 Hours.

Sculpture I: Introduction to Metals and Mechanical Systems - Three semester hours Students will use metal as a sculptural medium as they are introduced to basic welding and cutting techniques. Additionally, students will begin to study kinetic sculpture by creating motor and handleoperated cam and pulley systems as an introduction to making mechanical and electro-mechanical systems. Students will study the role of kinetic art by researching and discussing a variety of contemporary artists who use this approach to communicate ideas. Museum and gallery trips will be incorporated into this class. Pre-requisite: Art 140.

## ART 350. Ceramics I. 3 Hours.

Ceramics I. Three semester hours ( $3 \mathrm{Lec} / 3$ Studio) An exploration of ceramic techniques, processes, and concepts pertinent to the use of clay as a fine art medium. The focus of the course is on the ceramic vessel as functional form and as a vehicle for creative expression. Handbuilding, wheelthrowing, surface options including slip and glaze, and experience in firing kilns will be covered. Clay body and glaze formulation will be introduced. Prerequisite: ART 250 or permission of instructor.

## ART 360. Illustration I. 4 Hours.

Illustration I. Four semester hours (6 lecture/studio). Exploration of a variety of contemporary and traditional approaches to illustration. May be repeated to a maximum of 8 sh . Prerequisite: Art 300, 309, 310.

## ART 365. Design Communications I. 4 Hours.

Design Communications I. Four semester hours ( 6 lecture/studio). Introduction to, and resolution of, graphic design problems, including posters, logos, letterheads, billboards, and ad campaigns. Emphasis upon creative solutions and concepts. Includes layout and prepress preparation. Illustration students will do related projects from the perspective of the illustrator. May be repeated to a maximum of 8 sh. Prerequisite: Art 300, 309, 310.
ART 380. Experimental Concepts. 3 Hours.
Experimental Concepts. Three semester hours (3 lecture/3 studio). In-depth experimentation with concepts that address the creative process. Media selection is up to the individual students with the intent of arriving at innovative and effective individual expressions that explore the relevant concepts. May be repeated to a maximum of 8 sh .
ART 389. Independent Study. 1-4 Hour.
ART 397. Special Topics. 4 Hours.
ART 403. Practicum in Art. 3 Hours.
Practicum in Art. Three semester hours This course prepares students for the job market in the visual arts through exercises in resumé writing, artist's statements, and grant writing. It also provides information to help students in compiling and organizing portfolios, presenting slide lectures, entering into gallery and sales contracts, and understanding copyright and IRS laws. Generally to be offered every third semester.

## ART 404. Contemporary Issues. 3 Hours.

Contemporary Issues. Three semester hours. This course considers criticism, theory, styles, processes and other issues relevant to an understanding of contemporary art.

## ART 405. History of Modern Art. 3 Hours.

History of Modern Art. Three semester hours. This course surveys the major developments in the visual arts of Europe and North America from the latter half of the nineteenth century to the 1960s.

## ART 407. History of Graphic Design. 3 Hours.

History of Graphic Design A survey of the evolution of graphic arts as they relate to the history of art. Topics include formal, stylistic, social, political, economic, and historical aspects. Emphasis on art movements, schools of thought, individuals, and technology as they interrelate with graphic arts. 3 semester hours.

## ART 408. History of Advertising and Consumerism. 3 Hours.

History of Advertising and Consumerism This course is designed to give a broad overview of the nature of a consumerist society. Lectures will explore the history, causes, and types of consumerism, the significance of some purchase categories, America's evolving definition of "the good life," the impact of advertising, and the role of the individual in this complex socio-economic dynamic. 3 semester hours.

ART 409. History of New Media. 3 Hours.
History of New Media A survey of the technology, ideas, and movements of new media as used in visual communication. Course focuses on new media technologies in historical and social contexts. 3 semester hours.

## ART 410. Three-Dimensional II. 4 Hours.

Three-Dimensional II. Four semester hours. (6 lecture/studio) The creation of complex mechanical and organic 3D objects. Students explore the fundamentals of lighting, mapping, and rendering of 3D models. Prerequisites: Art 317 and 365.

## ART 411. Multimedia II. 4 Hours.

Multimedia II. Four semester hours. (6 lecture/studio) (same as CSci 411) An introduction to producing multimedia presentations. Students learn authoring techniques to incorporate digital imagery, audio and video into a running interactive presentation. Prerequisites: Art 310 and 313.

## ART 412. Video in Visual Communications. 4 Hours.

Video in Visual Communication - Four semester hours Description : An introduction to the preparation of video files for use on the internet. This course explores video in the context of visual communication. Students learn basic videography skills and editing techniques with the goal to incorporate video components into advanced course projects.

## ART 414. Motion Graphics. 4 Hours.

Motion Graphics. Four semester hours. (6 lecture/studio) Exploration of linear animation. Students will learn the basics of how to composite and apply special effects to graphics, audio, and video over a time sequence. Prerequisite: Art 313.

## ART 416. Advanced Electronic Media. 4 Hours.

Advanced Electronic Media. Four semester hours. (6 lecture/studio) Advanced study in electronic media with emphasis on complex illustration and graphic design, focusing, too, on creative problem-solving and individual style. Student may repeat for a maximum of 8 sh. Prerequisites: Art 300, 309, 310.

## ART 417. Three-Dimensional III. 4 Hours.

Three-Dimensional III. Four semester hours. (6 lecture/studio) Creation of complex environments with multiple 3D objects. Emphasis on the creation of realism through the use of custom mapping, lighting and rendering. Prerequisite: Art 410.

ART 418. Three-Dimensional IV. 4 Hours.
Three-Dimensional IV. Four semester hours. (6 lecture/studio) Animation of three-dimensional environments and incorporation of special effects in time based sequence. Prerequisite: Art 417 or permission of the instructor.

ART 420. Painting III: Intermediate Concepts in Painting. 3 Hours.
Painting III - Intermediate Concepts in Painting Investigation of a personal direction and sensibility utilizing various painting materials and techniques that emphasize the relationship between form and content. Develops greater understanding of painting as a language through observation, invention, problem-solving, technique and media experimentation. Repeatable up to 4 times. 3 semester hours. Pre-requisites : ART 111 -2D Design + Color ART 140 - 3D Design + Color ART 225 - Soph Studio: Introduction to Painting, or permission of the instructor.

## ART 422. Painting IV: Advanced Concepts in Painting. 3 Hours.

Painting IV: Advanced Concepts in Painting - Three semester hours Emphasis on developing a personal, creative, articulate, visual language. Focus on the conception and completion of a series of paintings involving the development of personal direction and sensibility. Study and reference to artists who relate to the student's project will be emphasized. Course divided into (A) Tutorial Practice: Basic Studio Problems; (B) Tutorial Practice: Studio Emphasis; (C) Tutorial Practice: Advanced Problems. Prerequisites: Art 111, Art 140, and Art 225; or permission of the instructor. Repeatable up to 4 times.

## ART 432. The Art of the Book. 4 Hours.

The Art of the Book. Four semester hours (6 lecture/studio). Study and development of original books, with emphasis upon unifying aesthetic relationships between visual and literary contents. The class will address original concepts, and both contextual and practical aspects of visual imagery, design, writing and production. May be repeated to a maximum of 12 sh . Prerequisite: Permission of the department head.

## ART 433. Screenprinting II. 3 Hours.

Screenprinting II - Three semester hours Expanded study of the technical and conceptual practices and uses of this fine art medium. The student will be encouraged to expand and broaden their own views related to the creation of imagery as well as honing their technical skills. Pre-requisites: ART 331.

## ART 436. Women and Art. 3 Hours.

Women and Art - Three semester hours This course is a survey of women's involvement in the art world from the Middle Ages to the contemporary world. Focusing primarily on the work of artists who are women, this course explores inequities in the field, the development of feminism, and the various and distinct artistic practices of women that are often overlooked in the historical canon.

## ART 438. History of Architecture. 3 Hours.

History of Architecture - Three semester hours This is an historical analysis of the built environment. Various styles and types of buildings are related to time and place, defining and identifying central characteristics, social function, cultural expression, technology, and changes in architectural practice.

## ART 440. Sculpture II A. 3 Hours.

Sculpture II A - Three semester hours (6 lecture/studio). Students will create advanced projects while learning large-scale, site-specific, installation techniques. Prior to this course, students will have learned to use a variety of materials and methods, which will allow them to more accurately problemsolve when planning, creating and installing room-sized works. Students will research and discuss a variety of contemporary artists who effectively communicate ideas using large-scale and site-specific installations. Museum and gallery trips will be incorporated into this class. Prerequisite: Art 140.

## ART 441. Sculpture II B. 3 Hours.

Sculpture II B - Three semester hours Students will continue to create advanced sculptural objects, performances, and/or installations using knowledge about a variety of materials and methods gained from previous coursework. Students will continue to study and discuss the work of contemporary artists while learning to place their own work in an art and art history context. Each student will be required to design, build and advertise a solo exhibition of recent works. Museum and gallery trips will be incorporated into this class. Pre-requisite: Art 340, and Art 341.

## ART 450. Ceramics II. 3 Hours.

Ceramics II. Three semester hours ( $3 \mathrm{lec} / 3 \mathrm{lab}$ ). This course offers further exposure to ceramic forming processes; surface treatment; and firing processes, including oxidation, reduction, raku, soda, and wood. Increased attention will be given to the conceptual and aesthetic aspects of ceramics and the development of an expressive, individual direction. Increased emphasis on critical research in contemporary and historical ceramics. May be taken up to 9 sch for credit. Prerequisites: ART 250.

## ART 451. Ceramics III. 3 Hours.

Ceramics III. Three semester hours (3 lecture/3 studio). Advanced studio practice emphasizing the development of a personal approach to the creation of expressive objects using clay. Continued research in historical and contemporary ceramic trends and issues. Increase experience with clay body formulation, glaze formulation, and a variety of firing methods. May be taken up to 9 sch for credit. Prerequisite: ART 250.

## ART 460. 3-D Painting. 4 Hours.

Three Dimensional Painting - Four semester hours An introduction to painting using three dimensional software as the tool. Emphasis in conceptual thinking applied to the production of dimensional artifacts and environments.

## ART 462. Visual Communication Branding. 4 Hours.

Visual Communication Bran - Four semester hours(6 lecture/studio). Continuation of advanced problems in illustration, combined with an introduction to the network of illustrators and publishers in the Dallas-Fort Worth area. Visits to the studios of established illustrators. May be repeated to a maximum of 8 sh. Prerequisites: Art 310 and 360 or permission of the instructor.

## ART 463. Advanced Typography. 4-8 Hour.

Advanced Typography - Four semester hours Advanced study of typography and it's application in visual communication. Students learn through concept development, typographical refinements and polished execution of projects focusing on type as the main design element. Repeatable up to 8 hours. Pre-requisites : Art 365 or permission of instructor.

## ART 464. Advanced Processes. 4-8 Hour.

Advanced Processes - Four semester hours Hands on, practical application of advanced fabrication processes as applied to packaging, direct mail, brochure and promotional visual communication projects with intent of developing industry knowledge. Course will use a broad base of techniques, including letterpress and bookbinding. Repeatable up to 8 hours.
ART 465. Letterpress. 4 Hours.
Letterpress - Four semester hours. Course will address letterpress history, type anatomy, terminology, formal and aesthetic issues, tools, materials of the trade, and safety issues. Thumbnail ideation, writing, type setting, and linoleum carving will also be explored. 4 semester hours. Pre-requisites : Art 365 or permission of instructor.

## ART 466. Design Communications II. 4 Hours.

Design Communications II. Four semester hours (6 lecture/studio). Development of portfolio pieces using a variety of design concepts, methods, and technologies. Emphasis upon the visual and thematic relationship between design and headline or simple body copy. May be repeated to a maximum of 8 sh. Prerequisite: Art 365 or permission of the instructor.

## ART 467. Design Communications III. 4 Hours.

Design Communications III. Four semester hours (6 lecture/studio). Advanced problems in design communications for students in design, art direction, and advertising art. Assignments in design and advertising concepts will emphasize brainstorming and problem-solving. May be repeated to a maximum of 8 sh. Prerequisites: Art 310 and 365 or permission of the instructor.

## ART 468. Design Communications IV. 4 Hours.

Design Communications IV - Four semester hours Continuation of advanced problems in design communications for students in design and art direction. Emphasis upon conceptual design applications to branding across a broad range of products for a single client. Pre-requisites : Art 365 or permission of instructor.

## ART 472. Art Direction. 4 Hours.

Art Direction. Four semester hours (6 lecture/studio). Problems in advertising art from the perspective of an art director. Emphasis upon contemporary trends in advertising, brainstorming and group concept-forming techniques. Relationships between concept, design, and copy will be emphasized. May be repeated to a maximum of 8 sh. Prerequisites: Art 310 and 365 or permission of the instructor.

## ART 473. Advertising Art Concepts and Copywriting I. 4-12 Hour.

Advertising Art Concepts and Copywriting I. Four semester hours (6 lecture/studio). Problems in advertising art concepts and copywriting, with emphasis on brainstorming and group collaboration. May be repeated to a maximum of 8 sh. Prerequisites: Art 365 and 472 , or permission of the instructor.
ART 474. Advertising Art Concepts and Copywriting II. 4 Hours.
Advertising Art Concepts and Copywriting II. Four semester hours ( 6 lecture/studio). Advanced problems in advertising art concepts and copywriting. May be repeated to a maximum of 8 sh. Prerequisites: Art 365 and 472, or permission of the instructor.

## ART 475. Visual Communication Senior Studio. 4 Hours.

Visual Communication Senior Studio Students prepare for the job market with a focus on portfolio completion, interview skills and resume presentation with the application of professional series of critiques. Student also conceptualize, design and produce all collateral for their senior exit show, including invitations and websites. 4 semester hours. 3 lecture/2 lab. Pre-requisites : permission of instructor.

## ART 482. Theories and Methods. 3 Hours.

Theories and Methods of Art History - Three semester hours Study of the theories and methods applied to the study of the visual arts with emphasis on approaches taken in art history and the related areas of art theory, aesthetics, and art criticism.

## ART 489. Independent Study. 1-6 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of art faculty and department head.

## ART 490. H Honors Thesis. 3-6 Hour.

Honors Thesis.

## ART 491. H Ind Honors Research. 3 Hours.

Honors Research.

## ART 495. Internship. 1-4 Hour.

Internship. Four semester hours. Supervised work in the field of Communication Arts. Terms and conditions of the internship must be approved before enrollment. Prerequisite: Permission of the instructor.

## ART 497. Special Topics. 1-4 Hour.

Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## ART 1301. Art, Technology and Civilization. 3 Hours.

(ARTS 1301) Art, Technology and Civilization. Three semester hours. This course examines the relationships between the visual arts and other expressions of human imagination and invention. Special attention is given to parallel developments in the histories of ideas, technology and art.

## ART 1303. History of Art I. 3 Hours.

(ARTS 1303) History of Art I. Three semester hours. A survey of the visual arts in Western Europe from prehistory to the Renaissance. Both the form and content of major works of art will be examined in relation to their social and cultural contexts. Art 1303 meets the University Studies Visual/ Performing Arts requirement.

ART 1304. History of Art II. 3 Hours.
ART 1304 (ART 301) - History of Art II. Three semester hours. A survey of the visual arts from Early Renaissance to 1900. Major examples of architecture, sculpture and painting will be examined in relation to their social and cultural context. Art 1304 meets the University Studies Visual/ Performing Arts requirement.

## Astronomy Courses

## ASTR 260. Archaeoastronomy. 3 Hours.

Archaeoastronomy - Three semester hours A course designed to study specific ancient structures and their associations with astronomical events. Topics will include many ancient sites including Paleolithic structures like Stonehenge, Mayan, Aztec, Native American culture, and the pyramids of Egypt.

## ASTR 310. Observational Astronomy. 4 Hours.

Observational Astronomy - Four semester hours (3 lecture, 2 lab) This class focuses on astronomical observation techniques and analysis of data including practical experience with modern telescopes and imaging devices, computer-based reduction and analysis, and interpretation of astronomical data. Pre-requisite: ASTR 1411 or ASTR 1412.

ASTR 337. Introduction to Astrophysics. 3 Hours.
Introduction to Astrophysics - Three semester hours This class provides an introduction to the physical laws governing the celestial mechanics of the planets, stars, galaxies, and structure of the universe. It will include a study of star formation, interstellar medium, orbital dynamics, stellar evolution. Prerequisite: ASTR 1411 or ASTR 1412 or Instructor's approval.

## ASTR 450. Nuclear Astrophysics. 3 Hours.

Nuclear Astrophysics - Three semester hours Nuclear astrophysics describes the elemental and energy production in stars via nuclear reactions. It explains the occurrence of all the naturally occurring chemical elements in the universe from the simplest elements to the most complex. It also explains how astrophysical neutrinos [from the sun, cosmic rays and supernovae] are produced and detected and what they have to say about both neutrinos and the universe. Nuclear astrophysics also describes how the structure of compact stars (e.g. neutron stars) arises due to the interactions of protons, neutrons, electrons, and quarks and gluons. The course will also explain how the Universe evolved from a primordial state to the present epoch and will focus on the predictions that nuclear physics offers for the observed astronomical data of the ratio between matter and radiation and the abundances of the observed elements. Pre-requisites: PHYS 321.

## ASTR 489. Independent Study. 4 Hours.

## ASTR 490. Honors Thesis. 3 Hours.

ASTR 491. H Ind Honors Readings. 3 Hours.
ASTR 497. Special Topics. 4 Hours.
Special Topics. One to Four semester hours. Organized class. May be repeated when topics vary. Some sections are graded on a Satisfactory (S) or Unsatisfactory (U) basis.

## ASTR 1411. Astronomy of Solar System. 4 Hours.

ASTR 101(PHYS 1411) Four semester hours (3 lecture, 2 lab) A basic introductory course in the astronomy of the solar system. Included are a study of the sun, the planets and their satellites, comets, and other members of the solar system, and the inter-planetary medium. The use of appropriate scientific tools for the study of the solar system will be examined. Theories on the evolution and origin of the solar system will be examined within the context of supporting evidence. One two-hour laboratory per week, including night telescope viewing sessions.

ASTR 1412. Introduction to Stars and the Universe. 4 Hours.
ASTR 102 (1412) - Fours semester hours A descriptive survey of astronomy with emphasis on modern developments in stellar and galactic astronomy and the role of physical science in the measurement and interpretation of astronomical data. Included are studies of structure and evolution of stars and galaxies and of current cosmological theories. Prerequisite No.

## Bachelor of General Studies Courses

## BGS 401. Ceaseless Industry - Globalization. 3 Hours.

Ceaseless Industry - Globalization - Three semester hours Course provides coverage of a broad survey of global business issues; analyzes the environment in which global businesses operate. Pre-requisites : Junior/Senior.

## BGS 402. Fearless Investigation - Research. 3 Hours.

Fearless Investigation - Research - Three semester hours Students will complete a project incorporating all disciplines from their individualized program, consisting of research, literature reviews, and information analysis resulting in a written or media product. Pre-requisites : Junior/Senior.

## BGS 403. Unfettered Thought - Sustainability. 3 Hours.

Unfettered Thought - Sustainability - Three semester hours Study of principles of development to include discussions of how consideration of human and materials resources are needed for maintaining, supporting, and managing a business in the global world today. Pre-requisites : Junior/Senior.
BGS 404. Unselfish Service to Others - Diversity. 3 Hours.
Unselfish Service to Others - Diversity - Three semester hours Course will focus on building managerial skills to successful achieve organizational change through creativity, innovation and cultural diversity. Pre-requisites : Junior/Senior.

BGS 497. Special Topics. 4 Hours.

## Bilingual Education Courses

## BLED 401. Foundations of Bilingual/ESL (English as a Second Language) Education. 3 Hours.

Foundations of Bilingual/ESL (English as a Second Language). Three semester hours. Introduction to the philosophies and theories of bilingual schooling with emphasis on language policy and the sociological, psychological, and legal aspects involved. Provides students with opportunities to reflect on their own language learning and schooling experiences in bilingual settings and compare them to programs and practices shown by research to be effective.

## BLED 402. Bilingual Oral Language and Biliteracy Instruction: Methods, Materials, and Assessment. 3 Hours.

Bilingual Oral Language and Biliteracy Instruction: Methods, Materials, and Assessment. Three semester hours. An examination of the theories, instructional approaches, curricula, texts, materials, and assessment instruments used for oral language and literacy development in elementary bilingual classrooms. Opportunities to evaluate commercial and research based programs and to create/adapt materials for students with varying degrees of bilingualism and biliteracy. Offered in Spanish and English. Prerequisites/co-requisites BIEd 401, and high intermediate.

## BLED 403. Bilingual Instruction for the Content Areas: Methods, Materials and Assessment. 3 Hours.

Bilingual Instruction for the Content Areas: Methods, Materials and Assessment. Three semester hours. An examination of the theories, instructional approaches, curricula, texts, materials, and assessment instruments used for teaching language arts, math, science and social studies in elementary bilingual classrooms. Opportunities to evaluate commercial and research-based programs and to create/adapt materials for students with varying degrees of bilingualism and biliteracy. Offered in Spanish and English. Prerequisites/co-requisites BIEd 401 and high intermediate to advanced proficiency in Spanish.

## BLED 412. Second Language Literacy for English Language Learners. 3 Hours.

Second Language Literacy for English Language Learners. Three semester hours. Current approaches to the teaching of reading and writing in English to bilingual and ESL students in grades PK-12. Students will assess the oral language and literacy skills of English Language Learners and design, evaluate, and modify/adapt commercial and research-based instructional materials to meet identified needs. Prerequisite and/or Corequisite Rdg 350 .

## BLED 413. Sheltered Content Area Instruction for English Language Learners. 3 Hours.

Sheltered Instruction. Three semester hours. The application of second language acquisition research, theory, and pedagogical approaches to the teaching of math, science, social studies, and language arts in English to bilingual and ESL students in grades PK-12. Content-based ESL and sheltered instructional approaches, methods, and materials that meet state and local standards will be among those explored and experienced.

## BLED 497. Special Topics. 4 Hours.

Special Topic.

## Biological Sciences Courses

## BSC 105. Natural History of Texas. 4 Hours.

The Natural History of Texas - (3 lecture, 2 lab) An introduction to the plants, invertebrates, and animals of Texas. Topics include the geography and climate of Texas and how these factors result in the various ecological regions of the state. In addition to describing the biodiversity of Texas, students will also be exposed to the on-going conservation and wildlife issues within the state of Texas. Laboratory exercises will involve identification and learning about local plants, invertebrates, and animals.
BSC 111. Introduction to Biology. 1 Hour.
Introduction to biological sciences and its relationship to other sciences. Explores careers and opportunities in biology and research methodology in the biological sciences. Required by anyone majoring in Biology, Environmental Science, Pre-Med and all other Pre-professional majors (excluding pre-vet) related to the life sciences.

## BSC 254. General Microbiology. 4 Hours.

(BIOL 2420) General Microbiology. Four semester hours (3 lecture, 3 lab). (1) Study of microbiology emphasizing fundamental principles and applications (not interchangeable with BSc 306).

## BSC 256. Medical Terminology. 3 Hours.

Medical Technology. Three semester hours. (1) This course will study the basic structure of medical words. Included will be prefixes, suffixes, roots, combining forms, and plurals. Emphasis will be placed on pronunciation and spelling. This course cannot be used or substituted for any course in any degree program in Biological Sciences.

BSC 297. Special Topic. 1-4 Hour.
BSC 301. Biological Literature. 3 Hours.
Biological Literature and Techniques - Three semester hours This course provides students with the fundamentals of scientific thinking and scientific writing. The course starts with a brief overview of the history and philosophy of science as it pertains to biology. Students will learn about empiricism, parsimony, and how to apply the scientific method to developing and testing hypotheses. Students will be taught how to write in scientific style; naming conventions, how to cite scientific names, how to avoid obfuscatory scrivenry, establishing flow, organizing a scientific document, how to write an abstract, how to present scientific data and statistics, how to cite figures and tables, how to cite scientific sources, how to avoid plagiarism, and how to find scientific information using databases and the internet. The final part of this class deals with bioethics and the use of ethics in biological research.
BSC 303. Cell Biology. 4 Hours.
Cell Biology - Four semester hours ( $3 \mathrm{lec} / 3 \mathrm{lab}$ ) This course is intended for biology and pre-professional majors with a solid understanding of general biology and general chemistry. This course covers the chemical nature of the cell. It deals with the variety of chemicals found in cells as well as the subcellular structures and components. It includes an extensive review of enzymes, cell membranes and transport, cell signalling, motility of cells and within cells, and extracellular adhesion and signals. The regulation, chemical synthesis, and transport of both RNA and proteins are also covered. Prerequisites: BSc-1406 and 1407 and Chem 1412 Note All courses carrying four semester hours have labs. Students must register for both lecture and lab sections.

## BSC 304. Genetics. 4 Hours.

Genetics - Four semester hours (3 lec / 3 lab ) This course is intended for biology and pre-professional majors with a solid understanding of general biology and general chemistry. Cell Biology is very helpful, and may be taken concurrently. This course covers essentially DNA, studying it at the molecular, organismal, and population levels. Students will cover the mechanisms of inheritance at the organismal level, including Mendelian and nonMendelian inheritance and genetic recombination in viruses through humans. At the molecular level, topics include the structure and organization of DNA, DNA replication, techniques of DNA analysis (including recombinant DNA and DNA sequencing), and transgenic organisms. The final section of the course covers an introduction to population genetics with a thorough treatment of the Hardy-Weinberg equation and evolution. Prerequisites: BSc-101 and 102 and Chem 112; BSc-303 strongly suggested Offered: SPRING ONLY Note All courses carrying four semester hours have labs. Students must register for both lecture and lab sections.

BSC 305. General Physiology. 4 Hours.
General Physiology - Four semester hours (3 lec/3 lab) This course is designed for majors with a well-rounded background in biology. It provides students with an understanding of basic physiological principles and the functional organization of living systems. Emphasis will be placed on human physiology and the integrated functions of organ systems. Students are expected to learn the basic principles and concepts of human physiology both at the molecular and cellular levels, to learn to reason scientifically, and to understand and describe the cooperative function of multiple organ systems in the human body Pre-requisite: BSC 301 and 303. Offered: FALL ONLY Note All courses carrying four semester hours have labs. Students must register for both lecture and lab sections.

BSC 306. Applied Microbiology. 4 Hours.
Applied Microbiology. Four semester hours (3 lecture, 3 lab). (2) Comprehensive course in microbiology emphasizing modern applications.

## BSC 307. Ecology. 4 Hours.

Ecology. Four semester hours (3 lecture, 2 lab). (1) Ecology is the study of living things and their interaction with their environment. This class takes a hierarchical look at ecological processes from ecosystems to populations. Specific topics include the flow of energy and matter through global and local ecosystems, factors affecting production and biodiversity, zones of tolerance, ecological succession, ecotones and ecoclines, community ecology, niche theory, population models, and evolutionary arms races. Prerequisite: BSc 301 and BSc 1407 or BSc 1413. Offered: FALL ONLY Note All courses carrying four semester hours have labs. Students must register for both lecture and lab sections.

## BSC 310. Animal Behavior. 3 Hours.

An introduction to the principles of animal behavior with an emphasis on Methods of Observation and the proximate and ultimate causes of behavior. Aspects of physiology and development of behavior, instinct and learning and modern cognitive ethology will be addressed. Prerequisite: BSC 1407 or BSC 1413, and BSC 301.

## BSC 335. Wildlife Management I. 3 Hours.

Wildlife Management I. Three semester hours. The purpose of this course is to introduce students to the many aspects of wildlife and conservation science. It will provide an introduction to the history of wildlife management and conservation, ecosystems and ecology, population modeling, animal behavior, food and cover, wildlife diseases, predators and predation, and hunting and trapping. Offered: FALL.

## BSC 336. Wildlife Management II. 3 Hours.

Wildlife Management II. Three semester hours. This course is designed to complement Wildlife Management I and provides an introduction to the many aspects of wildlife ecology and conservation science. Topics covered include water and soils, farmlands, rangelands, and forests, parks and refuges, urban wildlife management, and non-game and endangered species. Students are required to participate in field trips designed to give practical experience in wildlife management techniques. Offered: SPRING.

## BSC 337. Field Methods in Wildlife and Conservation Science. 4 Hours.

Field Methods in Wildlife and Conservation Science. Three semester hours. (3 lecture, 3 lab) This course provides students with training in the methods used to collect quantitative data on plant and animal populations, animal movements and home ranges, habitat associations, and animal behavior. Field exercises are supplemented with lecture material emphasizing study design, statistics, and data interpretation. Attendance of field trips is mandatory. Pre-requisite: Psy 302.

## BSC 397. Special Topics. 1-4 Hour.

BSC 401. Senior Seminar. 1 Hour.
Senior Seminar. One semester hour. Discussions and presentations of issues of current interest in the biological sciences and of related career opportunities. Prerequisites: BSc 304, 305, 306, 307, concurrent enrollment in one or more of these classes or permission of instructor. When Offered (Spring).

## BSC 402. Ornithology. 3 Hours.

Ornithology. Three semester hours. This course begins with an overview of current theories regarding the origins of birds and flight. This is followed by a brief survey the living orders and their biogeography. Other topics include the mechanics and adaptations for flight, avian physiology and anatomy, migration, communication and behavior, ecology, and avian conservation. Pre-requisite BSc 301. Offered SPRING, EVEN YEARS.

## BSC 404. Vertebrate Biology. 3 Hours.

Vertebrate Biology. Three semester hours. This course takes a systematic approach to understanding vertebrate evolution, diversity and biology. It will follow the development of each vertebrate taxon through the fossil record from late Cambrian to the present. This is followed by discussions of vertebrate zoogeography, habitat and foraging, feeding modes, dispersal and migration, mating systems and parental care. Pre-requisite BSc 301. Offered: SPRING, ODD YEARS.

## BSC 405. Biology Internship. 3-6 Hour.

Internship Description : This course, intended for Wildlife and Conservation Science Majors, provides the opportunity for students to gain handson experience in preparation for careers in wildlife management and biological research. Assignments will be at an approved work situation under supervision of a designated faculty member. A minimum of 140 hours of experience is required for 3 sh of credit. May be retaken for a total of 6 sh of credit.

## BSC 406. Mammalogy. 3 Hours.

Mammalogy - Three semester hours The objective of this course is to survey the phylogenetic relationships, diversity, biology, and ecology of mammals, including an understanding of the characterization of the orders and families of the extant mammals based on morphological traits, evolutionary.

## BSC 410. Behavioral Ecology. 3 Hours.

Behavioral Ecology - Three semester hours This course examines the adaptive and evolutionary basis of animal behavior. It begins with an economic approach to behavior: optimality models and evolutionary stable strategies. This is followed by looking at predator-prey strategies, behavioral adaptations for competition, social behavior, aggression and fighting, sexual conflict and sexual selection, parental care and mating systems, alternate reproductive strategies, and altruism. Pre-requisite 301.

## BSC 412. Quantitative Biology. 3 Hours.

Quantitative Biology. Three semester hours. The objective of this course is to provide students with the knowledge and understanding of the methods of statistical analysis applicable to biological research. Emphasis will be placed on the concepts and application of statistical thinking. Basic probability theory, parametric and non-parametric statistics including t-tests, analysis of variance, correlation, regression, and other quantitative methods will be introduced. Prerequisite: Math 1314.

## BSC 414. Evolutionary Biology. 3 Hours.

Evolutionary Biology. Three semester hours. In-depth view of evolutionary theory including gene flow, genetic drift, mutation, molecular evolution, mechanisms of speciation, phylogenies, and the evolution of sex, and sexual selection. Pre-requisite: BSc 301.

BSC 416. Wildlife Population Biology. 3 Hours.
Wildlife Population Biology - Three semester hours This course outlines processes governing the abundance and distribution of animals and plants, and the consequences for natural resource management. Practical applications lie in wildlife management, sustainable harvesting of resources, pest control and conservation of endangered species. Topics will include mathematical models of population growth, population viability analysis, and metapopulations, dispersal, population harvesting, predation, population cycles, and competition. Prerequisites: Math 142, BSc 335, BSc 336 , BSc 307 . BSc 412 is strongly recommended.

## BSC 417. Geospatial Mapping. 3 Hours.

Geospatial Mapping. Three semester hours. (3 lecture, 0 lab) The course will provide basic knowledge of the fundamentals of Geographic Information Systems (GIS), including GIS theory and applications. The course will take a hands-on and problem solving approach to learning GIS and will cover basic GIS including map characteristics and projections, spatial data models, relational databases, and spatial analysis with a focus on natural resource research and management and environmental science. Prerequisite: BSc 1407 or BSc 1413.

## BSC 419. Gene Regulation. 3 Hours.

Gene Regulation - Three semester hours This course will provide a rigorous knowledge in regulation of gene expression so that students will be ready for graduate level courses. Although this course will introduce students to prokaryotic gene transcription and gene regulation the emphasis will be on the molecular biology of gene expression in eukaryotes. This course will familiarize the student with current technology and driving principles of the field of gene regulation. Pre-requisites: BSc 303.

## BSC 420. Immunology. 3 Hours.

Immunology. Three semester hours. This course is designed for majors with a well-rounded background in biology. Therefore, this course provides students with an understanding of basic immunological principles and the functional organization of living systems. Emphasis will be placed on human physiology and the cooperative interplay between innate and acquired immunity. Students are expected to learn the basic principles and concepts of immunology both at the molecular and cellular levels, to learn to reason scientifically, and to understand and describe the function of immune systems in the human body. Prerequisites: BSc 301 and 305.

## BSC 421. Reproductive Physiology. 3 Hours.

Reproductive Physiology. Three semester hours. A study of the development and function of the male and female reproductive systems of humans. Prerequisites: BSc 301 and 305.

## BSC 422. Comparative Vertebrate Anatomy. 4 Hours.

Comparative Vertebrate Anatomy. Four semester hours. (3 lecture, 4 lab) The lecture material in this course explore the evolution of vertebrate structure and design among vertebrate taxa. Emphasis is placed on the integument, skeletal, muscular, digestive, urogenital, respiratory, circulatory and nervous systems. Laboratory dissections, using the dogfish and the cat as models, are used to complement the lecture material.

## BSC 423. Endocrinology. 3 Hours.

Endocrinology. Three semester hours. This course is designed for undergraduate students with a solid background in biology and cell biology. Therefore, this course provides students with a greater understanding of molecular, developmental, and network mechanisms of endocrine function. After a basic introduction of endocrinology and basic mechanisms, emphasis and focus will be placed on individual tissues and their respective hormones including the pituitary, hypothalamus, neurohypophysial, gastrointestinal, pancreatic, adrenal, thyroid and reproductive systems. Students are expected to gain an in-depth understanding of basic principles and concepts of hormones, their various activities and ultimate outcomes including feedback systems. In addition students will continue to learn to reason scientifically, and understand and describe the cooperative function of tissues in this universal system. Prerequisites: BSc 301 and 305.

## BSC 424. Toxicology. 3 Hours.

Toxicology. Three semester hours. An overview of the basic science of poisons, including the disposition of chemicals in the body, the role of metabolism in enhancing or reducing their toxicity, mechanisms of toxicity and the effects of toxicants on major organ systems. Prerequisites: BSc 301, 305 and Chem 211.

## BSC 425. Fundamentals of Neuroscience. 3 Hours.

Fundamentals of Neuroscience. Three semester hours. This course is intended for advanced undergraduate biology students who understand genetics and cell biology/biochemistry. The course is a survey introducing various aspects of neuroscience and is textbook based. The cell types of the nervous system are introduced, with emphasis on the molecular specializations used for these cells to function and develop connections to other cells. The structure, function, and processing of all 6 senses (including kinesthesia) are covered, as are muscle control circuits. More complex functions of the nervous system, including control of eye movements, hunger, sleep, addiction, speech, and learning and memory are also covered. Prerequisite: BSc 301 and 304.

## BSC 426. Histology: Architecture and Function of Human Organ Systems. 3 Hours.

This three hour course examines basic human histology from the cellular to the organ system levels using a set of prepared slides, texts, videos and other media. In this way students learn the relationship between cell structure and cell function, how tissues types differentiate and how organ architecture facilitates its function. Students in this class will learn normal histology as a prerequisite for understanding pathology. The emphasis is on classical histology of normal human tissues rather than diseased tissues, though some pathologies will be examined by comparison to normal tissues. Students will learn technical skills concerning microscopy and slide preparation.

## BSC 427. Pharmacology. 3 Hours.

Pharmacology This course is designed for undergraduate students with a background in biology, cell biology and chemistry. Therefore, this course provides students with a greater understanding of general concepts of pharmacology. Next, specific drugs and sites of drug action are further examined beginning with the peripheral, followed by the central nervous system. We then will focus on the pharmacology of the heart, the vascular and renal systems, followed by pharmacology of the respiratory system, then endocrine system and drugs affecting the immune system. Finally we examine the pharmacology of infectious disease. Pre-requisites: BSC 303/CHEM 1411.

## BSC 430. Topics in Microbiology. 3-3 Hour.

Topics in Microbiology. Three semester hours. Studies of contemporary knowledge in the areas of: (A) virology and (B) pathogenic microbiology. Course may be repeated if topic varies. Prerequisites: BSc 301 and 306.

## BSC 431. Eukaryotic Cell Biology. 3 Hours.

Eukaryotic Cell Biology. Three semester hours. (2) This course is the study of advanced knowledge of the eukaryotic cell including contemporary concepts of membranes, signal transduction mechanisms, messengers and receptors, extracellular structures, cell adhesions and attachment proteins, cell cycle and regulation, protein synthesis, sorting and targeting, cytoskelton and cell movements. Pre-requisite: BSc 301 .
BSC 436. Plant Diversity and Conservation. 3 Hours.
Plant Diversity and Conservation. Three semester hours. The course focuses on patterns and distribution of plant diversity and threats to plant diversity. Range of strategies and approaches used in plant conservation will be discussed.
BSC 437. Ecological Restoration of Plant Communities. 3 Hours.
Ecological Restoration of Plant Communities - Three semester hours The class is an introduction to landscape scale, process-oriented approaches to ecological restoration. Topics include enhancing resource capture, techniques in re-vegetation and restoration of historic vegetation. Prescribed fire and grazing as restoration and management techniques will also be addressed.
BSC 461. Biology for Middle School Teachers. 3 Hours.
Biology for Middle School Teachers. Three semester hours. (2) This course will examine the necessary content for students wishing to teach at the fourth through eighth grade level. This course will combine both content and pedagogy. Emphasis will be placed on the content as expressed the Texas Essential Knowledge and Skills. This course cannot be used for advanced credit for a biology major or minor. Prerequisites: Math 1314 and 8 sh of biological science or consent of instructor.
BSC 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a consenting faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

BSC 490. H Honors Thesis. 3 Hours.
Honors Thesis.
BSC 491. H Ind Honors Readings. 4 Hours.
Individual Honors Reading.

## BSC 497. Special Topics. 1-4 Hour.

Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## BSC 1406. Introductory Biology I. 4 Hours.

BSC 1406 (BSC 101) - Introductory Biology I - Four semester hours (3 lec / 3 lab) This course is the first half of the Introductory Biology series. It is designed for the following majors: Broadfield Biology, Pre-Med, Pre-Allied Health, and Pre-Vet. Topics covered include biological evolution, biochemistry, cellular and molecular biology, genetics, and microbiology. Note All courses carrying four semester hours have labs. Students must register for both lecture and lab sections.

## BSC 1407. Introductory Biology II. 4 Hours.

BSC 1407 (BSC 102) - US: Zoology - Four semester hours (3 lec/ 3 lab) This course is designed for students in Agricultural Science, Plant and Soil Science, Animal Science, Wildlife and Conservation Science, and in Environmental Science. Students are introduced to animal cellular biology and physiology, animal diversity and classification, and the biogeography and ecology of animal populations. Topics covered include cellular metabolism, animal physiology and genetics, developmental biology and architectural patterns, evolution, and the diversity of animal life. Pre-requisites: a grade of C or better in BSC 101 or 1406.

## BSC 1409. Human Biology: Structure and Function. 4 Hours.

(BIOL 1409) Human Biology: Structure and Function. Four semester hours (3 lecture, 3 lab). This (University Studies) course is designed to apply the principles of biology to man as a functional unit of our social organization.

## BSC 1411. Botany. 4 Hours.

BSC 1411 (BSC 131) - US: Botany - Four semester hours (3 lec/ 2 lab ) This course is designed for students majoring in Agricultural Science, Plant and Soil Science, Wildlife and Conservation Science, and in Environmental Science. Students are introduced to the structure and function of plants as well as their diversity and ecology. Topics covered include plant cellular and gross anatomy, plant physiology and biochemistry, genetics, evolution, classification, and biogeography.
BSC 1413. Zoology. 4 Hours.
BSC 1413 (BSC 132) - Zoology - Four semester hours 3/Lec, 2/Lab This course is designed for students in Agricultural Science, Plant and Soil Science, Animal Science, Wildlife and Conservation Science, and in Environmental Science. Students are introduced to animal cellular biology and physiology, animal diversity and classification, and the biogeography and ecology of animal populations. Topics covered include cellular metabolism, animal physiology and genetics, developmental biology and architectural patterns, evolution, and the diversity of animal life.
BSC 2401. Human Anatomy and Physiology I. 4 Hours.
(BIOL 2401) Human Anatomy and Physiology. Four semester hours (3 lecture, 3 lab). (1) Study of the structure and functions of human organ systems.
BSC 2402. Human Anatomy and Physiology II. 4 Hours.
(BIOL 2402) Human Anatomy and Physiology II. Four semester hours (3 lecture, 3 lab). (2) Study of the structure and function of human organ systems (continuation of BSc 251). Pre-requisite: BSC 2401.

## Business Administration Courses

## BA 125. Elementary Computer Keyboarding. 3 Hours.

(OFAD 1311) Elementary Computer Keyboarding. Three semester hours. (1, 2) Introduction to the operation of the microcomputer keyboard, development of touch keyboarding, development of speed and accuracy, and basic skill for computer keyboarding competency.

BA 195. Introduction to Business. 3 Hours.
Introduction to the operation of the microcomputer keyboard, development of touch keyboarding, development of speed and accuracy, and basic skill for computer keyboarding competency.

BA 301. Legal Environment of Business. 3 Hours.
A study of the legal environment and aspects of commerce, including administrative law, trade restraints, price discrimination, labor and employment law, common and statutory liability and regulation of professionals, elements of contract and tort law, as well as an analysis of basic principles of the foreign and international aspects of business and commerce. Prerequisite: Junior standing.

## BA 302. Business and Economic Statistics. 3 Hours.

This course introduces students to descriptive statistics (measures of central tendency and variation and representing data graphically), and statistical inference. Inference will involve sampling techniques, estimation, hypothesis testing and simple regression. Applications emphasize continuous improvement of products and services. Prerequisites: Junior standing and Math 1314 or 1324.

## BA 303. Business Communication. 3 Hours.

A study of the fundamentals of writing both formal and informal reports, utilizing primary and secondary research. A team approach is used for problem solving and process improvement. Included is the study of life-long learning skills as related to interpersonal communication and intercultural business communication Prerequisite: Junior standing.

BA 312. Advanced Statistics. 3 Hours.
Design of experiments, model building, multiple regression, non parametric techniques, contingency tables and introduction to response surfaces, decision theory and time series data. Prerequisites: BA 302.

## BA 341. Internship in BA. 3 Hours.

Internship in Business Administration This course provides an opportunity for selected students to earn elective credits in Business Administration through supervised work experience with area business firms under the supervision of a faculty member. Pre-requisites : Twelve hours of Business Administration.

## BA 345. Information Management for Business Professionals. 3 Hours.

This course provides an overview of the field of records and information management. The course identifies the skills that are applicable to the management of records in all fields, including those in specialized areas ¿medical, legal, financial, and archived records management, as well as records center and depository management and records management consulting. Information is provided about employment and career opportunities as records management professionals. The legal and ethical issues in the records management field are addressed. This course will cover the basics for both manual filing and electronic record keeping.
BA 357. Legal Organizations and Business Transactions. 3 Hours.
A course in commercial law, including a study of negotiable instruments, agency, partnerships, corporations, real estate, wills, sales and secured transactions. Prerequisite: Junior standing.

## BA 384. Real Estate Principles. 3 Hours.

A survey of economic legal and business aspects of real estate related to the functioning of real estate markets. Includes brokerage, finance, real estate law, insurance, property management, valuation, and land use controls. Prerequisite: Junior standing.

## BA 385. Principles of Risk and Insurance. 3 Hours.

A survey of the general principles of risk management and insurance. Includes coverage of life, health, automobile, property, fire, and casualty insurance for both the family and business sectors. Prerequisite: Junior standing.

## BA 394. Real Estate Law. 3 Hours.

A course devoted to the legal aspects of the real estate industry including a study of fixtures, easements, brokerage, land titles, and documents used in real estate financing and transfers. Prerequisite: Junior standing.

## BA 420. International Business. 3 Hours.

This course provides coverage of a broad survey of international business issues; analyzes the environment in which international businesses operate; introduces multinational enterprises, global competition, international organizations, treaties and international law, national trade policies and the determinants of competitiveness of U.S. firms in international markets. Prerequisites: Eco 2301 and 2302 and Junior Standing.

BA 430. Organizational Ethics. 3 Hours.
Foundations of ethical principles and their application in contemporary organizational settings. Included are theories of moral philosophy and the development of professional business codes and laws. Special emphasis on emerging ethical challenges in business technology and culture.
Prerequisite: Junior standing.
BA 431. Internship in Business Administration. 3 Hours.
Internship in Business Administration This course provides an opportunity for selected students to earn elective credits in Business Administration through supervised work experience with area business firms under the supervision of a faculty member. Pre-requisites : twelve hours of business administration.

## BA 444. Strategies for Decision Making. 3 Hours.

The study of strategies and interpersonal communication systems that provide today's management with accurate and quality information on which to base decisions and to be effective in the day to day negotiations within the business environment. Prerequisite: Junior Standing.

## BA 475. Statistics for Decision Making. 3 Hours.

Coverage of statistical techniques basic to business decision making including tests of hypotheses, regression, correlation, forecasting, ANOVA, non parametric procedures, and decision theory. Prerequisites: Math 176, BA 302, and junior standing.
BA 489. Independent Study. 1-3 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of the department head.

BA 490. Honors Thesis. 3-6 Hour.
BA 491. Honors Reading. 3 Hours.
BA 497. Special Topics. 3 Hours.
Special Topics. One to four semester hours. Organized Class. May be repeated when topics vary.

## Chemistry Courses

CHEM 101. General Chemistry Tutorial I. 1 Hour.
(CHEM 1104) General Chemistry Tutorial I. One semester hour. (1) Practice in chemical reasoning and solving of conceptual and numerical problems in general chemistry. Review and application of mathematical skills in chemistry. Corequisite: Chem 1411.
CHEM 102. General Chemistry Tutorial II. 1 Hour.
General Chemistry Tutorial II. One semester hour. (2) A continuation of Chemistry 101. Further practice in chemical reasoning and solving of conceptual and numerical problems in general chemistry, especially those concerning chemical equilibrium and reactions. Corequisite: Chem 1412.

## CHEM 201. Organic Chemistry Tutorial I. 1 Hour.

Organic Chemistry Tutorial I. One semester hour. (1) Practice in chemical reasoning and problem solving in organic chemistry. Review and application of relevant facts and principles of general chemistry and organic chemistry. Corequisite: Chem 211.
CHEM 202. Organic Chemistry Tutorial II. 1 Hour.
Organic Chemistry Tutorial II. One semester hour. (2) Practice in chemical reasoning and Problem solving in organic chemistry. Review and application of relevant facts and principles in organic chemistry. Corequisite: Chem 212.
CHEM 211. Organic Chemistry I. 4 Hours.
(CHEM 2423) Organic Chemistry. Four semester hours (3 lecture, 4 lab). (1) An integrated introductory course in organic chemistry. The reactions of aliphatic and aromatic compounds are considered in terms of molecular orbital theory; carboniumion, carbanion and free radical reaction mechanisms; stereo-chemistry and molecular conformation; and transition state theory and techniques of organic synthesis. Credit will not be given for both Chem 1407 and 211. Prerequisite: Chem 1412 with a grade of " C " or better or consent of the instructor. Co-requisite: 201.

## CHEM 212. Organic Chemistry II. 4 Hours.

(CHEM 2425) Organic Chemistry. Four semester hours (3 lecture, 4 lab). (2) A continuation of chemistry 211. The chemistry of polyfunctional aliphatic compounds, amino acids and proteins, sugars, and carbohydrates, polycyclic and heterocyclic compounds. Prerequisite: Chem 211 with a grade of C or better. Co-requisite: 202.
CHEM 314. General Biochemistry. 3 Hours.
Introductory Biochemistry. Three semester hours. This is a one-semester course that serves as an introduction to the nomenclature and function of the major classes of molecules associated with living organisms. The subject matter is tailored for students interested in pharmacy, dentistry, medicine, and related health science disciplines that need a lecture course in Biochemistry with no laboratory. The course topics will be presented along with examples where basic knowledge in the field of biochemistry is relevant for the practice of modern medicinal chemistry and pharmacy.
CHEM 340. Quantitative and Instrumental Analysis. 4 Hours.
Quantitative and Instrumental Analysis. Four semester hours (2 lecture, 8 lab). (1) The theories and techniques of classical quantitative analysis and modern instrumental analysis will be covered. Prerequisite: Chem 1412.

CHEM 341. Theory and Application of Advanced Chemistry I. 3 Hours.
Theory \& Application of Advanced Chemistry I - Three semester hours The course is one of the two courses that combine the basic theory and applications of existing advanced chemistry courses, including $212,340,351,352,414,415,441$ into two courses that meet the needs of high school teachers. Pre-requisites: Chem 112 \& 211.
CHEM 342. Theory and Application of Advanced Chemistry II. 3 Hours.
Theory and Application of Advanced Chemistry II - Four semester hours The course is one of the two courses that combine the basic theory and applications of existing advanced chemistry courses, including $212,340,351,352,414,415,441$ into two courses that meet the needs of high school teachers. Pre-requisites: Chem 341.

## CHEM 351. Physical Chemistry I. 4 Hours.

Physical Chemistry. Four semester hours (3 lecture, 4 lab ). (1) This course introduces the student to the field of physical chemistry, and consists of a presentation of the fundamental theories of chemistry, involving a detailed study of the properties of matter in the gaseous, liquid, and solid states. Properties of solutions, colloids, and elementary principles of thermodynamics and thermochemistry are given extensive consideration. Prerequisites: Chem 1412 or equivalent; Math 192; Math 314 (may be taken concurrently), or consent of the instructor.

## CHEM 352. Physical Chemistry II. 4 Hours.

Physical Chemistry. Four semester hours (3 lecture, 4 lab ). (2) A continuation of Chemistry 351 including a detailed study of chemical kinetics, atomic structure, and quantum mechanics. Prerequisites or Co-requisites: Chemistry 351; Math 314; Physics 2425, 2426; or consent of the instructor.

## CHEM 397. Special Topics. 1-4 Hour.

Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## CHEM 401. Chemical Science and Profession. 1 Hour.

Chemical Science and Profession. One semester hour. (1,2) Topics in chemical research, professional concerns, and employment trends are treated in seminar format. The course may be taken as many as four times for credit. This course integrates students' knowledge from other chemistry courses and prepares student for future careers. Chem 351 is corequisite or prerequisite. Instructor's consent is prerequisite.

## CHEM 414. Biochemistry. 4 Hours.

Biochemistry. Four semester hours (3 lecture, 4 lab). (1) Structure and function of large and small biomolecules involved in metabolism and information transfer in living organisms. The course treats both chemical and biological processes and their mechanisms. For students majoring in chemistry and life sciences, especially those interested in scientific, medical, or similar professional career. Working knowledge of college algebra is sufficient for success. Prerequisites or co-requisites: Chem 212, Chem 351, and Math 192 or consent of the instructor.
CHEM 415. Inorganic Chemistry. 4 Hours.
Advanced Inorganic Chemistry. Four semester hours. (3 lecture, 4 lab ) (2, odd years) A study of inorganic reactions and mechanisms based on modern structural concepts. Prerequisite: Chem 351 or concurrently.

CHEM 418. Undergraduate Research. 1-3 Hour.
Undergraduate Research. One to three semester hours. (1, 2, 3, 4) Prerequisite: Consent of the faculty prior to registration. Restricted to those students taking the professional chemistry sequence. May be repeated for up to six (6) hours credit.

## CHEM 421. Design and Implementation of Chemistry Labs I. 4 Hours.

Design \& Implementation of Chemistry Labs I-Four semester hours ( $1 \mathrm{Lec} / 9 \mathrm{Lab}$ ) The course is one of the two courses that combine the design, development, setup, and operation of laboratories of existing chemistry courses, including 212, 340, 351, 352, 414, 415, 441 into two courses which meet the needs of high school teachers. Pre-requisites: Chem 341.

## CHEM 422. Design and Implementation of Chemistry Labs II. 4 Hours.

Design \& Implementation of Chemistry Labs II - Four semester hours (1Lec/6Lab) The course is one of the two courses that combine the design, development, setup, and operation of existing chemistry courses, including $212,340,351,352,415,415,441$, into two courses which meet the needs of high school teachers.

CHEM 441. Instrumental Analysis. 4 Hours.
Instrumental Analysis. Four semester hours. (3 lecture, 4 lab) (2, even years) Instrumentation and laboratory techniques that are used in the modern analytical laboratory are discussed. The lecture presents the phenomenological basis for the techniques, applicability of the technique, and the instrument design. The laboratory demonstrates the use of some of the instruments. Some of the techniques that are discussed are: ultraviolet and visible, fluorescence and phosphorescence, flame emission and atomic absorption, infrared and Raman, X-ray, nuclear magnetic resonance, and mass spectroscopy. Chromatography and electroanalytical methods are also discussed. Prerequisite: Chem 340 and 351, or consent of the instructor.
CHEM 489. Independent Study. 1-6 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

CHEM 490. H Honors Thesis. 1-6 Hour.
Honors Thesis. One to six semester hours.
CHEM 491. H Ind Honors Readings. 1-3 Hour.
Honors Readings. One to three semester hours.
CHEM 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.
CHEM 1405. Survey of General Chemistry. 4 Hours.
(CHEM 1405) Survey of General Chemistry. Four semester hours (3 lecture, 3 lab). (1) A one semester survey of the fundamentals of chemistry, covering the basic physical principles and the descriptive chemistry of the metals and non-metals, with applications to related fields. This course is not suitable for biological science majors or minors. (Students planning to enter professional and/or graduate schools should elect Chemistry 1411-1412.) Prerequisites: Math 1314, 1324, or 179 (concurrently).
CHEM 1407. Survey of Organic and Biochemistry. 4 Hours.
(CHEM 1407) Survey of Organic and Biochemistry. Four semester hours (3 lecture, 3 lab). (2) A one semester survey of organic chemistry. The course treats the principles, nomenclature, reactions and methods of synthesis of organic compounds. Special attention is given to the chemistry of biological processes. This course is not suitable for biological science majors or minors. (Students planning to enter professional and/or graduate schools should elect Chemistry 211-212.) Prerequisite: Chem 1405 or 1411 or 1412.
CHEM 1411. General and Quantitative Chemistry I. 4 Hours.
(CHEM 1411) General and Quantitative Chemistry. Four semester hours (3 lecture, 4 lab). (1, 3) This course is primarily for students majoring in the sciences or in pre-professional programs. The lecture covers the fundamental laws, theories, and descriptive aspects of chemistry. Problem solving is stressed. Prerequisite: Math 1314 (concurrently or adequate high school mathematical preparation). Co-requisite: Chem 101.

CHEM 1412. General and Quantitative Chemistry II. 4 Hours.
(CHEM 1412) General and Quantitative Chemistry. Four semester hours (3 lecture, 4 lab). (2, 4) A continuation of Chemistry 111. Prerequisite: Math 1314 and Chem 101 and 1411 with a grade of "C" or better or the consent of the instructor. Co-requisite: Chem 102.

## College of Arts \& Sci Courses

## Computer Science and Information Systems Courses

## CSCI 126. Introduction to Computing. 3 Hours.

(COSC 1301) Introduction to Computing. Three semester hours. (1, 2, 3) An introduction to computers, network communications, and information systems. This course provides the student with knowledge about hardware, software and data management systems. The student is provided experience with an operating system environment, application software including productivity tools, and the use of the internet to communicate and search for information. This course will not count toward a major or minor in computer science or computer information systems.
CSCI 131. Visual Basic Net Programming. 3 Hours.
Visual Basic.Net Programming. Three semester hours. This course is designed to provide the student with introductory computer programming skills using an object-oriented computer language. Topics to be covered are algorithms and problem-solving, fundamental programming constructs such as sequence, selection, iteration, and functions, object-oriented interface and program design, and event-driven computer programming with an emphasis on business applications. Prerequisite: MIS 128, Math 1314 or 1324. This course will not count toward a major or minor in computer science or computer information systems.

## CSCI 141. Introduction to Computer Systems Hardware and Software Components. 4 Hours.

Introduction to Computer Systems Hardware and Software Components. Four semester hours (3 lecture, 2 lab). This course is equivalent to the A+ PC Maintenance Semester I and II in preparation for A+Certification. It involves the study of computer hardware systems and the configuration of computer systems and subsystems. The course emphasizes the distinction between hardware and software failures in computing systems. Topics include an introduction to computer organization, computing components, troubleshooting of hardware as related to software systems. Prerequisite: CSci 126. Corequisite: CSci 151.

## CSCI 151. Introduction to Computer Science and Programming. 4 Hours.

(COSC 1336) Introduction to Computer Science and Programming. Four semester hours. (1, 2, 3) Introduces the fundamental concepts of structured programming. Topics include software development methodology, data types, control structures, functions, arrays, files, and the mechanics of running, testing, and debugging. This course assumes computer literacy (CSci 126).

## CSCI 152. Programming Fundamentals II. 3 Hours.

(COSC 1337) Programming Fundamentals II. Three semester hours. (1, 2, 3) Review of control structures and data types with emphasis on structured data types. Applies the object-oriented programming paradigm, focusing on the definition and use of classes along with the fundamentals of objectoriented design. Includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering. Prerequisite: CSci 151.

## CSCI 189. Independent Study. 4 Hours.

CSCI 197. Special Topics. 4 Hours.
Special Topics.

## CSCI 233. Application Program Development. 3 Hours.

(BCIS 2332) Object-oriented Business. Three semester hours. (1, 2) Computer programming for business applications; emphasis on design, development, testing, implementation, and documentation of software. Prerequisite: CSci 151 or equivalent.

## CSCI 237. Introduction to Graphical Rendering. 3 Hours.

Introduction to Graphical Rendering. Three semester hours. This course will teach students how to use a high end 3D graphics package. It will familiarize students with the layout of the screen(s) and the terminology used in the 3D graphics community. Students will be expected to have experience working with windows and other 2D graphics packages. Specifically, the Softlmage graphics package will be used. Prerequisite: CSci 151 or consent of instructor.
CSCI 241. Machine Language and Computer Organization. 3 Hours.
(COSC 2325) Machine Language and Computer Organization. Three semester hours. (1, 2, 3) Basic computer organization; machine cycle, digital representation of data and instructions; assembly language programming, assembler, loader, macros, subroutines, and program linkages. Prerequisite: CSci 151.
CSCI 251. Introduction to Information Security, Law, Ethics, and Applied Cryptography. 3 Hours.
Introduction to Information Security, Law, Ethics, and Applied Cryptography-Three semester hours Security is becoming one of the core requirements in the design of critical systems. This course is divided into two parts, Part I: Introduce students to various technical and administrative aspects of Information Security and Assurance as it relates to computing, and ethics. We will Define ethics, morality, and moral system and recognize the distinction between ethical theory and professional ethics. Part II: introduce students to the intro-level fundamental knowledge of computer security and applied cryptography. Students will learn the basic concepts in computer security including software vulnerability analysis and defense, networking and wireless security, and applied cryptography. Students will also learn the fundamental methodology for how to design and analyze security critical systems.

## CSCI 270. Data Structures and Algorithms. 3 Hours.

(COSC 2336) Data Structures and Algorithms. Three semester hours. (1, 2, 3) Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), and algorithmic analysis. Prerequisite: CSci 152.

## CSCI 311. Multimedia I. 4 Hours.

Multimedia I. Four semester hours. (6 lecture/studio) (Same as Art 311) An introduction to producing multimedia presentations. Students learn authoring techniques to incorporate digital imagery, audio and video into a running interactive presentation. Prerequisite: Permission of the instructor or Art 310.
CSCI 312. Internet Development I. 4 Hours.
Internet Development I. Four semester hours. (6 lecture/studio) (Same as Art 312) Introduction to website design and publishing. Students learn the basics of HTML programming in order to incorporate graphics into functional interactive sites, including HTML tags, frames and scripting. Prerequisite: Art 1304 and Art 309 or Pho 250 or permission of the instructor.
CSCI 317. Numerical Analysis. 3 Hours.
Numerical Analysis. Three semester hours. (Same as Math 317) Computer algebra systems will be introduced. Topics include methods for approximate solutions of equations in one variable, polynomial approximation methods, numerical calculus, numerical solutions to ordinary differential equations, linear systems of equations and difference equations. Prerequisites CSci 151 and 152 and Math 192.
CSCI 319. Scientific Computing. 3 Hours.
Scientific Computing. Three semester hours. (Same as Phys 319) Applications of computers in scientific research. Topics to be covered include molecular dynamics simulations, Monte Carlo simulations, genetic algorithms, and animations for visualization of results. Prerequisites: Phys 2425, 2426 and CSci 151 or consent of instructor.

## CSCI 321. Survey of Algorithmic Languages. 3 Hours.

Survey of Algorithmic Languages. Three semester hours. (1) An introduction to syntax and semantic issues in existing algorithmic languages. Topics include data specification and handling, storage management, and sequence control in programs. Specific languages covered in the course may vary. Prerequisite: CSci 270.

## CSCI 322. Computer Organization. 3 Hours.

Computer Organization. Three semester hours. (1). A study of the interconnected components of a digital computing system, particularly with regard to current technology. Computer buses; memory organization; input/output subsystems and interrupts; CPU designs; instruction sets; RISC and CISC machines. Operating system considerations; microprogramming; superscalar and parallel machines. Prerequisite: CSci 241.

## CSCI 340. Introduction to Database. 3 Hours.

Introduction to Database. Three semester hours. (1, 2, 3) This course is an introduction to database systems and information management. It is designed to develop entry-level knowledge and skills in data modeling, design, and the representation of information in relational database systems. Structured Query Language and advanced features of relational database systems will be utilized to develop database applications. In addition, this course will include topics on the physical characteristics of databases, techniques for improving access to information, and improving performance and reliability with relational database systems. Prerequisite: CSci 233 or co-requisite CSci 270 or departmental approval.

## CSCI 341. Introduction to Networking Basics. 4 Hours.

Introduction to Networking Basics. Four semester hours (3 lecture, 2 lab). (1) The course focuses on network terminology and protocols, local-area networks (LANs), wide-area networks (WANs), Open System Interconnection (OSI) models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing and basic network standards. Hands-on labs are used to reinforce concepts, provide a skill set, and enhance learning. Prerequisite: CSci 151 or permission of instructor.
CSCI 342. Routers and Routing Basics. 4 Hours.
Routers and Routing Basics Four semester hours (3 lecture, 2 lab). (2) This course is a continuation of CSci 341. Topics include initial router configuration, Cisco IOS Software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Students will develop skills on router configuration and creating and applying access control lists. Prerequisite: CSci 341 or equivalent.

## CSCI 343. Switching, Intermediate Routing, and WAN Technologies. 4 Hours.

Switching, Intermediate Routing, and WAN Technologies. Four semester hours (3 lecture, 2 lab). Students enrolled in this class will focus on advanced IP addressing techniques (Variable Length Subnet Masking ¿VLSM), intermediate routing protocols (RIP v2, single-area OSPF, EIGRP), command-line interface configuration of switches, Virtual LANs (VLANs), Spanning Tree Protocol (STP), VLAN Trunking Protocol (VTP), Network Address Translation (NAT), Port Address Translation (PAT) and DHCP, WAN technologies and terminology, PPP, ISDN, DDR, Frame Relay, network management, and an introduction to optical networking. Hands-on labs are used to reinforce concepts, provide a skill set, enhance learning, and prepare students for taking the CCNA exam. Prerequisite: CSci 342 or equivalent.
CSCI 351. Foundations of Information Security. 3 Hours.
Foundations of Information Security. Three semester hours. This course provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing a consistent, reasonable information security system, with appropriate intrusion detection and reporting features. Prerequisites: CSci 434.
CSCl 352. Introduction to Computer Law and Forensics. 3 Hours.
Introduction to Computer Law and Forensics. Three semester hours. This course will introduce 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. The course combines theory and hands-on learning. Prerequisite: Junior standing and CSci 351.

## CSCI 359. Systems Analysis and Design. 3 Hours.

Systems Analysis and Design. Three semester hours. (1, 2) Traditional and Object-Oriented methods for analysis, design, and implementation of computer based information systems; also includes project management and Computer Assisted System Engineering (CASE) tools. Prerequisites: CSci 270, 340, or concurrent enrollment in CSci 340.

## CSCI 375. Introduction to Computer Gaming. 3 Hours.

Introduction to Computer Gaming - Three semester hours This course introduces various computer gaming platforms and gaming programming techniques. The course will emphasize the XNA gaming platform and aspects of the $\mathrm{C} \#$ programming language that pertain to gaming. Other topics include Open GL and DirectX as related to computer gaming. Pre-requisites : CSCI 270.
CSCI 380. Web Programming and Interface Design. 3 Hours.
Web Programming and Interface Design. Three semester hours. (1,2) This course provides students with a hands-on overview of current Web programming languages and Web multimedia technologies. Client/Server concepts will be discussed and implemented into student Web projects. Concepts relating to good interface design will be covered. The course will also explore how multimedia tools and features can be used to enhance Web sites. Co-requisite: CSci 270 or consent of instructor.
CSCI 397. SPECIAL TOPICS. 4 Hours.

## CSCI 405. Internship. 3 Hours.

Internship. Three semester hours. This course is offered to students having work internships within a computing, information technology, or related type of enterprise. Students are supervised by employing personnel and by CSci faculty. This course gives students the opportunity to earn course credit for the application of computing knowledge and skills used in the working environment. Prerequisites: Junior or Senior standing in CSci and departmental approval.

## CSCI 411. Multimedia II. 4 Hours.

Multimedia II. Four semester hours. (6 lecture/studio) (Same as Art 411) An introduction to producing multimedia presentations. Students learn authoring techniques to incorporate digital imagery, audio and video into a running interactive presentation. Prerequisite: Art 1304 or permission of the instructor.
CSCI 412. Internet Development II. 4 Hours.
Internet Development II. Four semester hours. (6 lecture/studio) (Same as Art 412) Introduction to web site design and publishing. Students learn the basics of HTML programming to incorporate graphics into functional interactive sites, including HTML tags, frames and scripting. Prerequisites: Art 1304 and Art 309 or Pho 250 or permission of the instructor.
CSCI 414. UNIX Software Development and Networking. 3 Hours.
UNIX Software Development and Networking - Three semester hours In this course students will be presented with the standard set of tools and software development methodologies that are supported by the Unix programming environment. Students will learn to use standard Unix tools, such as debuggers, compilers, automated build systems and revision control systems. These tools will be applied to the development of applications using standard Unix systems programming, to explore the Posix socket libraries for Unix based low level networking applications.

## CSCI 416. Windows Programming. 3 Hours.

Windows Programming. Three semester hours. Windows Programming is a practical application course which provides students with the basic knowledge required for designing, developing, testing, debugging, and documenting applications within the Windows environment. Topics covered include Unicode, basic drawing (not DirectX), messages, text input/output, interfaces, menus, and dialog boxes. Prerequisite: CSci 270.
CSCI 428. Object Oriented Programming. 3 Hours.
Object Oriented Programming. Three semester hours. This course emphasizes current techniques in object oriented design, analysis, and programming. Such topics as encapsulation, information hiding, inheritance and polymorphism are studied in class assignments and programming exercises. The C++ programming language is utilized along with the UML modeling language. Prerequisite: CSci 270 or permission of instructor.
CSCI 430. Operating Systems. 3 Hours.
Operating Systems. Three semester hours. (2) A study of operating systems with emphasis on a multiprogramming environment; concentrates on principles involved in resource management; topics such as job scheduling and memory management are also studied. Prerequisites: CSci 241 and 270.

## CSCI 431. Java Language Programming. 3 Hours.

Java Language Programming. Three semester hours. This course introduces the Java programming language. It is intended for advanced students and is a fast-paced course moving rapidly from basic concepts to more complex concepts. Topics covered will include: Basics (Data Types, Classes, File I/ O), Graphical User Interface (Swing), Layout of GUI (Layout managers, Borders), Advanced concepts (Threads, Processes). Prerequisite: CSci 270.

CSCI 434. Introduction to Local Area Networks. 3 Hours.
Introduction to Local Area Networks - Three semester hours This course covers the basic principles and operations of Local Area Networks (LANs). Topics include basic data communications, the OSI model, protocols and topologies. In addition, students will have the opportunity to gain practical experience with the installation and administration of various IPX/SPX and TCP/IP platforms. Those wishing to take networking certification exams will find this course helpful. Pre-requiste: CSCI 241 or permission of instructor.

## CSCI 440. App Software Project Dev. 3 Hours.

Applied Software Project Development. Three semester hours. $(1,2)$ A capstone project to provide the student with experience with analysis, design and implementation of a semester project as a member of a systems development team. Prerequisite: CSci 359, 380; (MIS 328 or permission of instructor).

## CSCI 444. Networking II Routers and Switches. 3 Hours.

Networking II Routers and Switches - Three semester hours This course is designed to introduce networking devices, the Cisco 2500 series router and the 1900 series data communications switch. Students will gain experience in the use and configuration of routers and switches through laboratory exercises. Also, such common network security techniques as Virtual Local Networks (VLANs) and Access Control Lists (ACLs) will be presented along with other network security topics. The class is organized such that $50 \%$ of the class time is spent in the networking laboratory and $50 \%$ of the class time will be lecture. Pre-requisites: CSCI 434.

## CSCI 449. Automata Theory. 3 Hours.

Automata Theory. Three semester hours. This course teaches the general theory, concepts, and techniques related to the theory of automata. Practical examples related to programming languages are emphasized. Students will have the opportunity to utilize theoretical aspects of automata theory by performing a medium-scale design project. Topics include Finite Automata, Transition Graphs, Nondeterminism, Finite Automata with Output, ContextFree Grammars, Regular Grammars, Chomsky Normal Form, Pushdown Automata. Context-Free Languages, Non-Context-Free Languages, parsing, and Turing Machines. Prerequisites: CSci 270, Math 192.

## CSCI 454. Introduction to Network Security. 4 Hours.

Introduction to Network Security. Four semester hours. (3 lecture, 2 lab). The Introduction to Network Security domain encompasses the structures, transmission methods, transport formats, and security measures used to provide integrity, availability, authentication, and confidentiality for transmissions over private and public communications networks and media. This course will give the student both knowledge and hands-on practice in network security software, including preventive, defective, and corrective measures. Prerequisite: CSci 342 or consent of instructor.

## CSCI 470. Database Programming. 3 Hours.

Database Programming. Three semester hours. (1,2) A course on the development of database applications with an emphasis on programming for database access. It includes data storage and manipulation, information presentation with database connectivity using such application programming interfaces as stored procedures, embedded SQL, server pages and servlets. Topics in XML programming for data exchange are also included.
Prerequisite: CSci 340.

## CSCI 471. Database Administration. 3 Hours.

Database Administration. Three semester hours. A course on the installation, management and control of database management system software, the database structures and data repository. It includes a study of database architecture, configuration control, security and integrity, recovery management, system performance measurement, and database tuning. Prerequisite: CSci 340.

## CSCI 489. Independent Study. 3 Hours.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

CSCI 490. H Honors Thesis. 3-6 Hour.
CSCI 491. H Independent Honors Rdgs. 3 Hours.
Independent Study - Hours: One to four Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisites Consent of department head. Note May be repeated when the topic varies.
CSCI 497. Special Topics. 1-7 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## Construction Engineering Courses

## CONE 211. Statics. 3 Hours.

Statics - Three semester hours General principles of mechanics; concurrent force systems; statics of particles; equivalent force/moment systems; centroids and center of gravity; equilibrium of rigid bodies; trusses, frames, internal forces in structural members; friction; second moments of areas. Prerequisites: Phys 2425 and concurrent enrollment in or completion of Math 192.

## CONE 212. Dynamics. 3 Hours.

Dynamics - Three semester hours Kinematics and kinetics of individual particles and systems of particles utilizing Newton's Laws of Motion, the Principle of Work and Energy, and the Principle of Impulse and Momentum; steady and variable mass flow. Pre-requisite: CONE 211.

CONE 221. Construction Materials and Methods. 3 Hours.
Construction Material \& Methods - Three semester hours. 2 Lec/2 lab Construction materials and methodologies related to commercial construction. Selection, acquisition, and utilization of concrete, steel, masonry and wood in a variety of construction applications.

CONE 231. Construction Estimating. 3 Hours.
Construction Estimating - Three semester hours Principles and application of construction estimating including quantity takeoff, pricing of materials, classification of work, labor, overhead, specifications, bid procedures, and project scheduling. Computerized estimating and scheduling software is introduced. Pre-requisite: CONE 221.
CONE 331. Mechanics of Materials. 3 Hours.
Mechanics of Materials - Three semester hours. 2 Lec/2 Lab Applications of conservation principles and stress/deformation relationships for continuous media to structural members; axially loaded members; thin-walled pressure vessels; torsional and flexural members; shear; moment; deflection of members; combined loadings; stability of columns; nonsymmetrical bending, shear center; indeterminate members; elastic foundations. Pre-requisite: CONE 211.

## CONE 341. Engineering Hydrology and Hydraulics. 3 Hours.

Engineering Hydrology \& Hydrauli - Three semester hours. 2 Lec/2 Lab Design of water distribution systems and open channels; selection of pumps and turbines; hydraulics of wells; basic engineering hydrology including precipitation, infiltration, runoff, flood routing, fluid flow in pipe, statistical measures and water resources planning. Pre-requisite: CONE 212 and CONE 221.

CONE 351. Field Engineering and Surveying. 3 Hours.
Field Engineering \& Surveying - Three semester hours. 2 Lec/2 Lab Techniques and procedures used in field engineering practices related to construction projects. Surveying instruments, topographic, building and site layout, and precision dimension control. Pre-requisite: CONE 221.
CONE 411. Steel \& Concrete Design. 3 Hours.
Steel \& Concrete Design - Three semester hours. 2 Lec/2 Lab Planning and field engineering for concrete and steel construction. Structural mechanics of concrete beams, slabs, columns, walls and footings. Steel structures including tension members, compression members, flexural members, connections, and building codes. Pre-requisite: CONE 221 and CONE 331.

## CONE 412. Structural Analysis and Design. 3 Hours.

Structural Analysis \& Design - Three semester hours Functions of structure, design loads, reactions and force systems; analysis of statically determinate structures including beams, trusses and arches; energy methods of determining deflections of structures; influence lines and criteria for moving loads; analysis of statically indeterminate structures including continuous beams and frames. Pre-requisite: CONE 221 and CONE 331.

## CONE 421. Construction Safety. 3 Hours.

Construction Safety - Three semester hours Safety and loss control concepts, practices, and skills to improve construction job site safety; OSHA regulations, accidents, documentation, safety policies and procedures, safe work environments, crisis management, risk management, and other safety related topics. Pre-requisite: IT 340.
CONE 422. Construction Engineering Management. 3 Hours.
Construction Engineering \& Technology - Three semester hours Study of construction operations, project management and project planning. Includes project selection, estimating bidding, scheduling, subcontracting practices, cost controls, project documentation, construction bonds, insurance, payments, elements of close out and reporting of an engineering project. Pre-requisite: BA 301 and CONE 231.
CONE 423. Contracts and Specifications. 3 Hours.
Contracts \& Specifications - Three semester hours Legal and contractual aspects of construction, types of construction contracts, contractual relationships among different parties, construction administration, insurance, and concepts in value engineering. Pre-requisite: CONE 422.
CONE 425. Construction Planning, Scheduling, and Control. 3 Hours.
Construction Planning, Scheduling, and Control - Three semester hours Planning, scheduling, and management of time, costs, and other resources within a construction project. Pre-requisite: CONE 422 and IE 207.

## CONE 431. Sustainable Construction Methods and Processes. 3 Hours.

Sustainable Construction Methods \& Processes - Three semester hours 2 Lec/2 Lab Sustainable construction materials and methodologies related to commercial construction, including LEED/Green certifications. Pre-requisite: CONE 221 and Senior Classification.

## CONE 432. Soil Engineering. 3 Hours.

Soil Engineering - Three semester hours. 2 Lec/ 2 Lab Determination of civil engineering properties of soil and their behavior, identification, grain size analysis, compaction, permeability, consolidation, and shear strength. Attention is given to foundation system selection, design, and construction methods Pre-requisite: CONE 221 and CONE 341.

## CONE 471. Construction Engineering Internship. 3 Hours.

Construction Engineering Internship - Three semester hours Occupational experience in the construction engineering field. Work experience is cooperatively planned by the faculty and employer to fulfill the student's objectives. Pre-requisite: Construction Science Major, Senior Classification and consent of the Department Head.

## Construction Science Courses

## CONS 235. Environmental Control Systems. 3 Hours.

Environmental Control Systems. Three semester hours. Environment control parameters; emphasis on the thermal environment; preparation of design and drawings for a building heating/air conditioning system.
CONS 253. Construction Materials and Methods. 3 Hours.
Construction Materials and Methods. Three semester hours. Materials, assembly techniques and methods, and sequences of the commercial construction process. Emphasis on design, specifications, materials acquisition and the utilization of concrete, steel, masonry and wood in construction.

## CONS 331. Field Engineering and Building Codes. 3 Hours.

Field Engineering and Building Codes. Three semester hours. (2 lecture, 2 lab) Study of techniques and procedures used in field engineering practices related to construction projects. Laboratory experiences include use of surveying instruments, topographics, building and site layout, and precision dimension control. Emphasis on building codes.

## CONS 332. Soil Mechanics and Foundation Design. 3 Hours.

Soil Mechanics and Foundation Design. Three semester hours. (2 lecture, 2 lab) Study of soil mechanics as related to construction projects. Laboratory experiences include sieve analysis, optimum moisture density, compaction, and plasticity index experiments. Attention is also given to foundation system selection, design, and construction methods.

CONS 389. Independent Study. 3 Hours.
Independent Study. One to three semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

CONS 397. Special Topics. 3 Hours.
Special Topics. Three semester hours. Organized class. May be repeated when topics vary.
CONS 411. Architectural Drafting/Design. 3 Hours.
Architectural Drafting/Design. Three semester hours (2 lecture, 2 lab). This course includes architectural symbols, building standards, and construction details. Elements of architectural history, building materials, construction techniques, and contemporary architectural design will be studied.
Prerequisites: IT 111 or consent of instructor.

## CONS 471. Construction Internship. 3 Hours.

Construction Internship. Three semester hours. Occupational experience in construction. Work experience is cooperatively planned by the department and employer to fulfill the student's objectives. Weekly conferences, assignments and reports required. Application for internship course must be made 30 days before registration (contact department office for applications). Prerequisite: ConS major, junior standing and consent of department head.
CONS 489. Independent Study. 3 Hours.
Independent Study. One to three semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of the department head.
CONS 497. Special Topics. 3 Hours.
Special Topics. Three semester hours. Organized class. May be repeated when topics vary.

## Counseling Courses

## COUN 301. Orientation to the Counseling Profession. 3 Hours.

Orientation to the Counseling Profession. Three semester hours. (1, 2) A study of general professional issues including ethics, history, credentialing, professional associations, and roles of counselors in various settings.

COUN 315. Philosophy of the Helping Relationship. 3 Hours.
Philosophy of the Helping Relationship. Three semester hours. $(1,2)$ This course is designed to create an understanding of helping relationships. Basic communication skills (such as active listening, responding, and interviewing skills) for building helping relationships are developed.

COUN 316. Parent and Family Dynamics. 3 Hours.
Parent and Family Dynamics. Three semester hours. (2) Approaches to parenting; assessment and development of parenting skills; communication systems; study of children and families with various cultural patterns and lifestyles.

COUN 317. Introduction to Assessment. 3 Hours.
Introduction to Assessment. Three semester hours. (1, 2) Emphasis will be given to the use of standardized and nonstandardized procedures to assess and appraise human behavior. Use of test and non-test data will also be covered. Emphasis will also be given to the use of appraisal and assessment methods in a variety of settings, including school, business, mental health, and human services.
COUN 409. Group Leadership. 3 Hours.
Group Leadership. Three semester hours. $(1,2)$ This course will focus on the literature on groups, group dynamics and leadership. The class will also offer personal experiences in individual growth through group participation.
COUN 410. Introduction to Counseling Theory and Methods. 3 Hours.
Introduction to Counseling Theory and Methods. Three semester hours. (1, 2) This course provides a general overview of counseling theories, an introduction to counseling techniques, the conditions which facilitate an effective counseling relationship, and stages in the counseling process.

## COUN 412. Career Development. 3 Hours.

Career Development. Three semester hours. $(1,2)$ A study of the impact of career services as an instrument of human development and mental health. Emphasis on history of career guidance, contemporary shifts on social values in and the meaning of work, changes in the occupational structure, and work and mental health in today's society.

## COUN 414. Home and Family Living. 3 Hours.

Home and Family Living. Three semester hours. (1) Functional study of modern family with special attention to roles, marriage preparation and partner selection. Emphasis on marital adjustment and other essentials of successful home and family life. Examination of current, relative issues of human relations including family planning, sex education, divorce, communications, and marriages under special circumstances.

COUN 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

COUN 497. Special Topics. 3 Hours.
Special Topics. One to four semester hours. $(1,2,3,4)$ Organized class. May be repeated when topics vary.

## Criminal Justice Courses

## CJ 101. Introduction to Criminal Justice. 3 Hours.

(CRIJ 1301) Introduction to Criminal Justice. Three semester hours. An overview of law enforcement, courts and corrections from historical, ethical, philosophical, and practical perspectives. A focus on defining crime, searching for its causes, and studying its impact on society through the investigation and arrest of suspects, prosecution and defense of the accused, and punishment and rehabilitation of criminals.

## CJ 201. Police and Law Enforcement. 3 Hours.

(CRIJ 2328) Police and Law Enforcement. Three semester hours. A general survey of the history and social issues involved in law enforcement in a democratic society with significant problems of crime. The course will also focus on aspects of police administration and police-community linkages.

## CJ 301. Criminal Investigation. 3 Hours.

Criminal Investigation. Three semester hours. An examination of theories and practices of the investigation process in the criminal justice system. An analysis of information and application of operational techniques relating to crime scenes, forensic sciences, interviews, and interrogations. A study of issues concerning rules of evidence, trial testimony, and other constitutional processes.

## CJ 326. Juvenile Delinquency. 3 Hours.

Juvenile Delinquency. Three semester hours. The study of the nature, extent, causation, treatment, and prevention of juvenile delinquency. Prerequisite: CJ 101.

## CJ 330. Crime and Criminology. 3 Hours.

Crime and Criminology. Three semester hours. The scientific study of the creation, causation, and societal reaction to crime. Focus is on criminological theories and developing a sociological understanding of trends and patterns of specific crimes and types of criminal offenders. Pre-requisite: CJ 101.

## CJ 338. Dealing with Terrorism. 3 Hours.

Dealing with Terrorism - Three semester hours This course covers critical thoughts on the meaning and focus of terrorism. It addresses the social and criminal justice impact of terrorism at the global, national, and local levels. The many explanations for terrorism are presented. The multiple ways of preventing it from intensifying as a serious type of so-called "dirty violence" are investigated.

## CJ 340. Criminal Justice Policy and Practice. 3 Hours.

Criminal Justice Policy and Practice This course will evaluate various policy dimensions of crime and criminal justice. Students will learn the process through which policy is made, will critically evaluate current criminal justice policies, and will study the impact of policy decisions on criminal justice practice. Pre-requisites: CJ 101.
CJ 360. Mass Media and Crime. 3 Hours.
This course examines the media's effects on perceptions of crime and justice in America. An examination is performed on media-generated crime and criminal justice policies. An example of media-generated crime would be when politicians/media "emphasize" a problem to essentially "create" a crime or crime wave. A discussion of the effect of social constructionism and the ability of the various types of media to create a new type of crime will occur. An investigation of the impact of various types of media (radio, television, motion pictures, records, and printed sources, etc.) on criminals, crime fighters, and the courts will be conducted. An example of criminal topics to be discussed is the drug problem, sex offenders, murders, etc.

## CJ 383. Criminal Justice Administration and Management. 3 Hours.

Criminal Justice Administration and Management - Three semester hours The study of criminal justice administration (i.e., police, courts, and corrections) with special emphasis on applying theoretical concepts to practical planning and application, including the policy-making process, implementation of new policy, and policy assessment. Pre-requisite: CJ 101.

## CJ 390. White-Collar Crime. 3 Hours.

White-Collar Crime. Three hours. This course examines the theories, ideas, nature and scope that are dominant in the field of white-collar crime. An examination of the structural foundation of occupational, political, and organization/corporate crimes, with some comparison with street (predatory) type crimes will occur in this class. Multi-level responses and forms of intervention will also be discussed.

## CJ 397. Special Topic. 3 Hours.

Special Topics. Three semester hours. Organized class. May be repeated when topics vary.

## CJ 420. Crime Profiling. 3 Hours.

Crime Profiling. Three semester hours This course examines various types of crimes, in terms of offender profile, victim profile and situational elements, using both national crime and victimization data. Within each crime typology, data are utilized to examine the characteristics of the most likely offender, and the circumstances under which the crime is most likely to be committed. Pertinent theories are examined, relating to both the crimes and offenders, by types of crimes. Responses to each type by law enforcement agencies are also discussed.

## CJ 430. Courts and Criminal Procedure. 3 Hours.

Courts and Criminal Procedure. Three semester hours. A survey of federal, state, and local judicial systems with an emphasis on pretrial, trial, and appellate criminal procedure. A description of court structures and roles of the judges, prosecutors, defense attorneys, juries, and other court personnel. Prerequisite: CJ 101 or equivalent.

## CJ 431. Criminal Law. 3 Hours.

Criminal Law. Three semester hours. Introduction to the basic concepts, principles and the nature of criminal law. The course also examines the mutual relationships between criminal law and society.

## CJ 468. Correctional Systems. 3 Hours.

Correctional Systems. Three semester hours. (1) A theoretical, historical, and pragmatic overview of institutional corrections, including the administration, design, and organization of adult prisons and jails and juvenile detention facilities and reformatories. An examination of punishment and treatment philosophies and objectives. Prerequisite: CJ 101 or equivalent.
CJ 470. Criminal Justice Internship I. 3 Hours.
Criminal Justice Internship I. Three semester hours. An academically based work experience within selected agencies of the criminal justice system. The purpose of the internship is to provide an arena for the application of classroom principles within the context of the day to day reality of the criminal justice system. The internship includes field supervision as well as classroom experiences. Prerequisites: Junior standing with 12 hours in criminology, law enforcement, and permission of the instructor. NOTE: Students with previous work experience within the criminal justice system are not eligible.

## CJ 478. Community-Based Corrections. 3 Hours.

Community-Based Corrections. Three semester hours. (2) A study of probation, parole, diversion, pre-trial release, and intermediate sanctions. A critical analysis of the statutes and policies relating to the administration of community-based correctional programs. Prerequisite: CJ 101.

## CJ 479. Offender Reentry. 3 Hours.

Offender Reentry - Three semester hours Offender reentry is the process of transitioning offenders from prison/jail to the community. This course will provide students with an in-depth analysis of the issues impacting successful offender reentry, including employment, drug treatment, family reunification, and housing issues. In addition, this course will educate students about barriers and impediments to offender reentry such as voter disenfranchisement. Pre-requisites: CJ 101.

CJ 480. Senior Seminar in Criminal Justice. 3 Hours.
Senior Seminar in Criminal Justice. Three semester hours. A review and discussion of significant current research and case studies in the criminal justice field. Examination and application of methods of transferring theoretical perspectives, knowledge, and skills from academics to the work environment. An overview of career opportunities, resume preparation, and job interviewing skills. Prerequisite: CJ 101, declaration as a Criminal Justice major, and completion of at least 90 semester hours.
CJ 488. Ethics in Criminal Justice. 3 Hours.
Ethics in Criminal Justice. Three semester hours. A review of ethical theories and their application to the fields of law enforcement, courts, and corrections. The development of ethical reasoning, familiarity of professional standards and codes of ethics, and resolution of complex ethical dilemmas.
CJ 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

CJ 490. Honors Thesis. 3 Hours.
CJ 491. Honors Reading. 3 Hours.
CJ 497. Special Topics. 3 Hours.
Special Topics. Three semester hours. Organized class. May be repeated when topics vary.

## Early Childhood Education Courses

## ECE 313. Child Development: Early Years. 3 Hours.

(TECA 1354 non-advance credit) Child Development: Early Years. Three semester hours. This course examines theoretical and empirical research along with practical experience relating to young children. Cognitive, physical, social and affective developmental domains are explored and implications for curriculum design and learning environments are drawn.
ECE 358. Language Acquisition and Development in Early Childhood Education. 3 Hours.
Language Acquisition \& Development in Early Childhood Education. Three semester hours. This course explores the first and second language acquisition and development of elementary children, including English Language Learners, with special emphasis given to the nature and function of both oral and written language, theories of first and second language acquisition, language and cognition, developmental stages in learning to talk, dialectical and linguistic differences, and partnering with parents to foster language and literacy development.

## ECE 364. Survey of Theories Influencing Childhood Development. 3 Hours.

(TECA 1311 non-advance credit) Survey of Theories Influencing Childhood Development. Three semester hours. This course provides a survey of learning theories and processes. Special emphasis will be placed on cognitive theory as related to learning and performance. Basic theories and beliefs will be linked to programs they have helped form. Special emphasis will be placed on current emerging theories of early childhood development.

ECE 366. Learning Environments. 3 Hours.
Learning Environments. Three semester hours. This course assists students in planning, designing and evaluating environments for young children. Early childhood organization, management, procedures and physical facilities are explored along with a survey of materials and equipment.
ECE 460. Early Childhood Curriculum. 3 Hours.
Early Childhood Curriculum. Three semester hours. This course emphasizes an integrated approach to early childhood curriculum development for young children. Relates early childhood pedagogy, research, and content area knowledge to thematic and inquiry curriculum design. Prerequisite: ECE 366.

ECE 489. Independent Study. 1-4 Hour.

## Earth Science Courses

ESCI 100. US-The Planet Earth. 4 Hours.
ESCI 201. Mineralogy/Crystallograph. 4 Hours.

## ESCI 203. History of the Earth. 4 Hours.

ESCI 203 - History of the Earth Hours: 4 Lecture Lab/ Clock Hours (3 lecture, 2 lab) Summary of the physical and biological history of the earth, with emphasis on North America; sequence of physical geological events and evolutionary changes in life. Laboratory includes the reconstruction of geologic history of various regions through interpretation of geologic maps, structure sections and simple pale ontological techniques. Field trip included. Note This is a University Studies course. When Offered (Spring).

## ESCI 303. Structural Geology. 4 Hours.

ESCI 305. Environmental Hydrology. 4 Hours.
ESCI 314. Weather and Climate. 3 Hours.
ESCI 401. General Oceanography. 3 Hours.
ESCI 402. Field Methods. 4 Hours.
ESCI 403. Sedimentology/Stratigraph. 4 Hours.
ESCI 418. Seminar in Geosciences. 1 Hour.

## ESCI 425. Weather, Climate, and Human Environment. 3 Hours.

Weather, Climate, and the Human Environment. Three semester hours. (Capstone) This course is designed to present, in a descriptive format, the basic fundamentals and principles of weather and climate from a global, regional, and local perspective. Major emphasis will be placed on how climate has been a major influence on human physical and cultural evolution, ranging from global population distribution to cultural/economic adaptation. Conversely, future climate modules will be discussed as they might be influenced by rapidly changing human-induced disruptions. Prerequisite: Junior standing.

## ESCI 460. Atmospheric \& Space Sci. 3 Hours.

ESCI 461. Earth Science for Teachers. 3 Hours.
Earth Science for Teachers. Three semester hours. (2) This course is designed for middle school (4-8) teachers with an emphasis placed on the four disciplines of Earth Science: geology, oceanography, meteorology and astronomy. Organization, materials selection, and set up of laboratory activities appropriate for achieving curriculum objectives will also be included. Prerequisites: Math 141 and 8 sh of science.

## ESCI 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## ESCI 497. Special Topics. 1-4 Hour.

Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## ESCI 1403. Physical Geology. 4 Hours.

(ESCI 1403) Geology and Man. Four semester hours (3 lecture, 2 lab). (Formerly ESci 131) A systematic study of minerals, rocks, and the processes which shape and modify the surface features of the earth. Energy, plate tectonics, volcanoes, earthquakes, and the practical aspects of geology are studied as they relate to man's adjustments to the geologic environment.

## Economics Courses

ECO 233. The Economics of Personal Finance. 3 Hours.
US-The Economics of Personal Finance - Three semester hours The course is designed to help students become prepared for a financially challenging world and to introduce the concepts and methods of personal financial planning. The financial planning process, the time value of money, taxation, credit, housing insurance, employee benefits, family economics and building a personal financial plan will be explored The course is designed to integrate subject matter into a comprehensive format enabling students to understand and demonstrate the ability to develop a personal financial plan and to increase financial literacy. Special Projects include the students reviewing their credit report, creating a debt repayment plan, monitoring their spending habits, identifying their retirement needs and understanding the need for insurance and estate planning.

## ECO 301. Environmental Economics. 3 Hours.

Environmental Economics. Three semester hours. This course applies the basic analytical tools of economics to explain the interaction between the marketplace and the environment, the implications of that relationship, and an examination of effective solutions. Particular emphasis given to agricultural and other renewable resources.

## ECO 309. Economic Forecasting. 3 Hours.

Economic Forecasting. Three semester hours. Introduces the student to the economic forecasting approach through which economic theories and policy analysis can be stated and applied. Prerequisites: Eco 2301, 2302; Math 176, BA 302.

## ECO 331. Intermediate Macroeconomics. 3 Hours.

Intermediate Macroeconomics. Three semester hours. (1) An analysis of national income and its components. Emphasis is placed on the relationship between saving, investment, and employment. Prerequisite: Eco 2301.

## ECO 332. Intermediate Microeconomics. 3 Hours.

Intermediate Micro Economics. Three semester hours. (2) Demand, cost, and supply functions of firms; sources of data for their estimation; functions of prices and markets. Application of principles to empirical problems, decisions, and situations. Prerequisite: Eco 2302.

ECO 428. International Economics/Finance. 3 Hours.
International Trade and Finance. Three semester hours. An analytical approach to assessing and understanding current impacts international economies have on the United States. Emphasis is on gains from trade, economic growth, exchange rates, price formation, trade policy, and political considerations. Prerequisites: Junior standing.

## ECO 489. Independent Study. 3-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.
ECO 490. Honors Thesis in Economics. 3-6 Hour.
Honors Thesis in Economics. Three semester hours. This course satisfies the requirements for honors thesis and oral examination on the student's chosen topic.

ECO 491. Honors Readings in Economics. 3 Hours.
Honors Readings in Economics. Three semester hours. This course satisfies the requirements for honors readings in economics on the student's chosen topics.

ECO 497. Special Topics. 4 Hours.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## ECO 2301. Principles of Macro Economics. 3 Hours.

Principles of Macro Economics. Three semester hours. Introduces the student to the workings and interrelationships of the U.S. and world economics. Principles of economic analysis including measurement of aggregate economic activity, national income determination, money and banking, monetary and fiscal policy, and business fluctuation. Emphasis is given to analyzing real world problems such as poverty, inflation, unemployment, and economic instability.
ECO 2302. Principles of Micro Economics. 3 Hours.
Principles of Micro Economics. Three semester hours. Introduces the student to the basic concepts and tools of analysis in microeconomics. Focuses on the operation of markets, with emphasis placed on the analysis of current problems such as health care, the environment, crime, education and regulatory reform. A major concern is how prices of individual goods and services are determined and how prices influence decision making.

## Education Curr \& Inst Courses

EDCI 414. Management and Curriculum Development for Diverse Learners. 3 Hours.
Management and Curriculum Development for Diverse Learners This course contains the professional body of knowledge necessary for effective teaching in a K-12 classroom. The focus is teaching and learning in diverse environments with an emphasis on instructional design and methods of organizing/ managing a classroom will be developed. The content of this course will include classroom management approaches, curriculum and lesson planning, teaching models, assessment, effective communication strategies, and certification issues. Students will exhibit an understanding of the domains and competences of the TExES Pedagogy and Professional Responsibilities certification examination. Prerequisite Permission of Advisor, minimum overall GPA of 2.5 , admission to teacher education program, and must have passed TSI. EIEd 412 for EC-6 majors. Corequisite EDCI 422.

EDCI 415. Effective Teaching in Diverse Environment. 3 Hours.
Effective Teaching in a Diverse Environment This course focuses on understanding learning theories and aligning effective teaching strategies that address the needs of all students. Included in this course will be a variety of diversity issues which focus on curricular, instructional, managerial and assessment techniques. Use of educational technologies in teaching and learning will be incorporated. Students will exhibit an understanding of the legal responsibilities and professional responsibilities of Texas teachers as assessed by TExES. Prerequisites: EDCI 414 co-requisite EDCI 422. Note: minimum overall GPA of 2.5, admission to teacher education program, and must have passed TSI. Enrollment is limited to students working as educational aides. Cross listed with EDCI 515.

EDCI 497. Special Topics. 4 Hours.

## Educational Technology Courses

ETEC 224. Computer Literacy. 3 Hours.
Computer Literacy. Three semester hours. Designed to provide students with knowledge and skills in using microcomputers; applying higher level means of communicating instructions to the computer; developing and evaluating software; and examining legal, ethical, and value issues regarding uses of microcomputers.

ETEC 424. Integrating Technology into the Middle/Secondary Curriculum. 3 Hours.
Integrating Technology into the Middle/Secondary Curriculum. Three semester hours. This course will examine specific methods for integrating technology (hardware and software) into subject area curricula. Individualization will allow each student to select and develop materials in his or her disciplines. Prerequisites: CSci 126 or ETec 224.
ETEC 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.
ETEC 497. Special Topics. 1-4 Hour.

# Elementary Education Courses 

## ELED 200. Education in Global Society. 3 Hours.

(EDUC 1301) Education in a Global Society - Three semester hours This course explores the culture of schooling and classrooms from global perspectives of current political, social, and familial issues impacting schooling and classrooms worldwide. Students will participate in early field experiences with varied and diverse student populations; designed to analyze the learning environment and the human experiences of teachers and learners and compare U.S. schools and the American educational system to those of other countries. Note: Ten clock hours of professional field experiences are required. Texas Common Course Number.

## ELED 300. Introduction to Teaching. 3 Hours.

Introduction to Teaching. Three semester hours. Knowledge and skills concerning the unique needs of special learners are emphasized in this course. In addition, structure, organization, and management of the American school system, as well as legal and ethical aspects of teaching, will receive attention. Thirty clock hours of professional field experiences are required. Prerequisites: Sophomore standing, must have passed TSI, and a minimum overall GPA of 2.5. Prerequisite or Co-requisite: EIEd 200.

## ELED 389. Indenpendent Study. 1-6 Hour.

Independent Study. One to six semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## ELED 412. Effective Teaching and Professional Growth. 3 Hours.

Effective Teaching and Professional Growth. Three semester hours. This course contains the body of knowledge necessary for understanding the relationship between effective teaching, professional growth, and lifelong learning. This course emphasizes theories and issues of education that are directly related to professional development including: site-based management, professional ethics, school environment issues, communication issues, education research, and political influences. Students will exhibit an understanding of the Texas teacher standards on professional development as assessed by TExES. Enrollment is limited to students working as educational aides. Prerequisites: Minimum overall GPA of 2.5 and must have passed TSI.

## ELED 422. Pract I: AppI Mgmt \& Curr Dev. 3-6 Hour.

Internship in Teaching. Three to six semester hours. (Same as SED 422) This course provides supervised experiences in the elementary school classroom and is designed for students on aide waivers. Regular seminar sessions focus on issues directly related to elementary classroom teaching. Prerequisite: Departmental approval. Limited to educational aide program.

ELED 436. Integrated Learning: Math in Field-Based Settings. 3 Hours.
Integrated Learning: Math in Field-Based Settings. Three semester hours. Explores the integrated nature of learning with math as the content focus. Seminars are conducted in CPDT centers; field-based applications take place in public schools under the guidance of public school teachers and university personnel that comprise the Instructional Leadership Team. Prerequisites: ElEd 300; Rdg 350, 370; admission to teacher education program; placement in a NETCPDT center; minimum overall GPA of 2.5 and must have passed TSI.
ELED 437. Integrated Learning: Math, Science and Technology in Field-Based Settings. 3 Hours.
Full Title : Integrated Learning: Math, Science \& Technology in Field-Based Settings Explores the integrated nature of learning with science, and math as content focus and with technology understanding, usage, and how it can enhance best practices. Seminars are conducted in CPDT centers; fieldbased applications take place in public schools under the guidance of public school teachers and university personnel that comprise the Instructional Leadership Team. Prerequisite EIEd 300; Rdg 350, 370; admission to teacher education program; placement in a NETCPDT center; minimum overall GPA of 2.5 and must have all requirements met from the department and Certification office.
ELED 438. Integrated Learning: Social Studies in Field-Based Settings. 3 Hours.
Integrated Learning: Social Studies in Field-Based Settings. Three semester hours. Explores the integrated nature of learning with social studies as content focus. Seminars are conducted in CPDT centers; field-based applications take place in public schools under the guidance of public school teachers and university personnel that comprise the Instructional Leadership Team. Prerequisites: EIEd 300; Rdg 350, 370; admission to teacher education program; placement in a NETCPDT center; minimum overall GPA of 2.5 and must have passed TSI.
ELED 441. Tchg Tech Field Bsd. 3 Hours.
Integrating Technology for K-8 Classrooms (Field-Based). Three semester hours (1 lecture, 4 lab). In this course, students learn how to use technology as a powerful teaching tool. Taken by K-8 teacher candidates in Centers for Professional Development and Technology. Emphases is on: (a) observing and studying classroom teachers who use technology effectively for instruction; (b) developing and utilizing computer assisted materials for instruction; and (c) evaluating computer-assisted programs, teaching, and learning. Prerequisites: Successful completion of internship in a NETCPDT center; minimum overall GPA of 2.5 and must have passed TSI.
ELED 443. Classroom Management for Teacher Candidates in Culturally Diverse Field-Based Settings. 3 Hours.
Classroom Management for Teacher Candidates in Culturally Diverse Field- Based Settings. Three semester hours (1 lecture, 4 lab). A field-based course, normally taught in Centers for Professional Development and Technology, in which prospective teachers develop and improve the skill of managing classroom environments, curriculum, space and time, and student behavior with culturally, economically, and educationally diverse student populations. Candidates acquire knowledge, skill, and ability by observing and working with experienced public school teachers in their elementary and/ or middle school classrooms. Seminars are conducted in schools by teams of university and Pre-K-8 teachers. Note: Minimum overall GPA of 2.5 and must have passed TSI.

## ELED 447. Teacher Inquiry Projects and Assessment in Field-Based Settings. 3 Hours.

Teacher Inquiry Projects and Assessment in Field-Based Settings Focuses on effective methods of assessment including the implementation of teacher inquiry projects as well as formal and informal assessments. The role of formative assessment as a guide for instruction and the importance of datadriven decisions will be emphasized. Problem based learning and the use of technology to collect, manage, and analyze multiple data sources to interpret learning results for individual students and for groups of students will be demonstrated.

ELED 452. Student Teaching in Field-Based Teacher Education Programs. 3-6 Hour.
Student Teaching in Field-Based Teacher Education Programs. Six semester hours. This is a course requiring observation, participation, and directed teaching for residents enrolled in the Center for Professional Development and Technology (CPDT). Prerequisites: Admission to teacher education; placement in a NETCPDT center; minimum overall GPA of 2.5 and must have passed TSI.
ELED 489. Independent Study. 1-6 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.
ELED 490. H Honors Thesis. 3 Hours.
ELED 490 - H Honors Thesis - Three semester hours Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.
ELED 491. H Ind Honors Rdgs. 3 Hours.
ELED 497. Special Topics. 3 Hours.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## Engineering Courses

## English Courses

ENG 100. Introduction to College Reading and Writing. 4 Hours.
Introduction to College Reading and Writing. Four semester hours (3 lecture, 2 lab). (Non-credit) (1, 2; 3 or 4) An introduction to those aspects of reading and writing necessary for college-level literacy. Students will write weekly and revise papers extensively in order to develop an understanding of (and appreciation for) the methods and purposes of revision and an ability to shape essays and frame arguments in effective and convincing ways. Students must prepare a Final Portfolio that proves they are ready to meet the demands of English 101. Required of those students who have not passed the writing portion of the TASP or THEA exam, but also available to anyone who may desire additional preparation before enrolling in English 101. May not be used to satisfy any degree requirement. Students placed in Eng 100 must make a grade of " C " or higher before they can enroll in Eng 101 . Eng 100 is based on a departmental requirement and is not directly related to THEA.

ENG 104. Basic Listening and Speaking for International Students. 3 Hours.
Basic Listening \& Speaking for International Students - Three semester hours This is a non-credit course for international students or students whose native language is not English and who need help with their academic English. Students work on a variety of tasks, skills, and techniques designed to improve their listening and speaking skills. The focus of instruction is on hands on knowledge directly relevant to the performance of the students in their other courses.

## ENG 105. Basic Reading and Writing for International Students. 3 Hours.

Basic Reading and Writing for International Students - Three semester hours This is a non-credit course for international students or students whose native language is not English and who need help with their academic English. Students work on a variety of tasks, skills, and techniques designed to improve their reading and writing skills. The focus of instruction is on hands on knowledge directly relevant to the performance of the students in their other courses.
ENG 110. Developmental Writing and Reading. 3 Hours.
Developmental Writing and Reading. Three semester hours (Noncredit) A course designed to help students work through the various reading and writing projects assigned in their writing-intensive courses. Students work in small groups with a peer tutor in order to sharpen abilities to read the imperatives of a given writing or reading project/situation and shape discourse to successfully address these imperatives. Much emphasis is placed on the important ways that the reading or writing process used must take into account the writing or reading task at hand. Required of those students who have not passed the reading portion of the TASP exam and those needing additional assistance following English 100, but also available to anyone who may desire supplemental assistance to English 101 or 1301, 102 or 1302 or other writing-intensive courses. May not be used to satisfy any degree requirement.
ENG 189. Independent Study. 1-4 Hour.
ENG 200. Popular Literature and Culture. 3 Hours.
US-Popular Lit. and Culture. Three Semester Hours. This course may cover a single popular medium, genre, author, or theme, such as science fiction, fantasy, mystery, romance, western, or horror, among others. This course may include popular literature in translation.

## ENG 202. Multi-Ethnic American Literature. 3 Hours.

Multi-Ethnic American Literature. Three semester hours. (1, 2) This course is designed to give students knowledge of the ethnic diversity of American literature at the same time that they improve their skills in reading and interpreting literature and in writing. The course covers material from at least three of the following ethnic groups: Native American, African American, Hispanic American, and American Eskimo. Other ethnic groups may also be included. Prerequisite: Eng 1302.
ENG 300. Reading, Analyzing, Teaching Literature. 3 Hours.
Reading, Analyzing, Teaching Literature. Three semester hours. (2) This course introduces students who are pre-service teachers to the reading process and critical reading strategies designed to better prepare them to understand the reading/writing connection, literary terminology, literary analysis, and research skills, in both pedagogical and analytical modes. In addition to examining the TEKS and TExES competencies for middle school and secondary English/Language majors, the course will provide support for pre-professional development through a variety of substantive projects. Prerequisites: Eng 333, 2 upper level Literature courses and preferred completion of one of the required Reading courses.

## ENG 301. Modern Grammar. 3 Hours.

Modern Grammar. Three semester hours. (1, 2) A thorough analysis of the sentence-level grammar of English employing contemporary as well as more traditional methodologies. Emphasizes the relationship between the structure of language and that of everyday experience. Develops an appreciation of change and variation. Prerequisite: Eng 1302.

ENG 305. Children's Literature. 3 Hours.
Children's Literature. Three semester hours. (1, 2; 3 or 4) A survey of children ${ }_{¿}$ s literature. The course includes various authors and illustrators in such genres as the oral tradition, fantasy, realistic and historical fiction, poetry, and the picture book. Prerequisite: Eng 1302.
ENG 311. Shakespeare. 3 Hours.
Shakespeare. Three semester hours. (1, even years; 3 or 4, odd years) A study of selected comedies, histories, and tragedies. Plays studied may include As You Like It; Henry IV, Part I; King Lear; and others. Prerequisite: Eng 1302.

## ENG 313. English Usage and Composition. 3 Hours.

English Usage and Composition. Three semester hours. A course to help students become proficient in Standard English Usage and to offer future teachers opportunities to learn how to teach usage in the context of student writing. This course will not count toward the major or minor or toward certification.

## ENG 315. Advanced Writing: Creative Writing. 3 Hours.

Advanced Writing: Creative Writing. Three semester hours. An introduction to creative writing through reading and analyzing models of selected genre or genres. In a workshop atmosphere, students share their writings and critique each other's work and learn the practical problems of preparing work for submission and marketing. Genres selected for a semester's focus may include: poetry, fiction, biography, community history, or screenplay. May be repeated once when the emphasis changes. Prerequisite: Eng 1302.

ENG 317. Word Building. 3 Hours.
Word Building. Three semester hours. A course planned to help students increase their vocabulary primarily through a study of the formation of English words from Latin and Greek roots. Prerequisite: Eng 1302.
ENG 323. Mythology. 3 Hours.
Mythology. Three semester hours. (2) This course focuses on the myths of the Greeks and Romans but may also include myths from other cultures such as the Norse and American Indian. Emphasis is placed on the influence of myths in literature and psychology and on enlargement of vocabulary through mastery of words derived from mythology. Prerequisite: Eng 1302.
ENG 331. Introduction to Linguistics. 3 Hours.
Introduction to Linguistics. Three semester hours. (1, even years) A survey of major areas of linguistic theory: phonology, morphology, syntax, historical/ comparative studies, sociolinguistics, psycholinguistics are included. Prerequisite: Eng 1302.

## ENG 332. Pre-Law Composition. 3 Hours.

Pre-Law Composition. Three semester hours. (1, even years) This course is designed for any student planning to go on to law school or a paralegal career. It concentrates on clear, correct, and well-reasoned writing. The primary emphasis is on writing effective answers on hypothetical legal case problems. Analytic, logical, and problem-solving skills are stressed. Some attention is given to the nature of the law school and its admissions requirements. Prerequisite: Eng 1302.

ENG 333. Advanced Writing: Non-Fiction. 3 Hours.
Advanced Writing: Non-Fiction. Three semester hours. (1, 2; 3 or 4) This course provides an intensive study of the principles of nonfictional composition through the analysis of examples from classic and modern writings and practice in the application of those principles. Emphasis is placed on rhetorical organization and the techniques of expository writing. Students devote much time to writing and editing their own work. Prerequisites: Eng 1302 and sophomore standing.

## ENG 336. British Poetry. 3 Hours.

British Poetry. Three semester hours. A study of the development of form, versification, and style in British poetry. Selected poems from the Old English period to the twentieth century will be read. Prerequisite: Eng 1302.

## ENG 341. Technical Writing. 3 Hours.

Technical Communication. Three semester hours. (1,2) Techniques of objective reporting on scientific and technical material; principles of technical exposition; study of language uses; writing samples and principles of various technical reports, including abstracts, proposals, and manuals. Prerequisite: Eng 1302.

## ENG 351. American Novel Before World War I. 3 Hours.

American Novel Before World War I. Three semester hours. (3 or 4, even years) A study of significant American novels written before World War I. Authors to be studied may include Adams, Cooper, Dreiser, Garland, Hawthorne, James, Jewett, Melville, Poe, Twain, Warren, Wharton, and others. Prerequisite: Eng 1302.

## ENG 352. American Novel After World War I. 3 Hours.

American Novel After World War I. Three semester hours. (3 or 4, odd years) A study of significant American novels written after World War I. Authors to be studied may include Bellow, Cather, Faulkner, Fitzgerald, Hemingway, Porter, Steinbeck, Walker, Warren, Welty, Wright, Updike, and others. Prerequisite: Eng 1302.

ENG 355. Women Writers. 3 Hours.
Women Writers. Three semester hours. (1, even years; 3 or 4, odd years) A study of literature by written by women. This course may cover specific historical periods (e.g., U.S. or Latin America texts after 1950), cultural groups (e.g., Black, Chicana, Asian-American, Native American), or specific genre or genres (e.g., science fiction, poetry). The course may be repeated once when the course emphasis changes. Prerequisite: Eng 1302.
ENG 358. Language and Society. 3 Hours.
Language and Society. Three semester hours. (2, odd years) A study of human social behavior and sociocultural interaction as they constrain language acquisition, use, and structure. Topics include sociolinguistic relativity, communicative competence, multilingualism, social and regional dialects, speechact types, language styles, gender-related issues, and sociolinguistic field methodology. Prerequisite: Eng 1302.

## ENG 388. Shaping the Future. 3 Hours.

Shaping the Future. Three semester hours. (Capstone) In this capstone course, students examine alternate possibilities for the future and the causes that might bring about those possibilities. In individual projects, they actually shape a part of their own futures. Prerequisite: Junior standing.

## ENG 399. Literary and Research Methods. 3 Hours.

Literary and Research Methods. Three semester hours This course provides an advanced study of the basic principles and methods of literary analysis. Emphasis is placed on the mastery of formal literary terminology a coverage of basic critical methodologies and a thorough understanding of research techniques specific to the field. Required of all English majors. Prerequisites: Eng 1302 and sophomore standing.

## ENG 403. The Discipline of English. 3 Hours.

The Discipline of English. Three semester hours. (1) This course is designed primarily for those pursuing teacher certification in secondary English. Reading materials will address methods of teaching composition, grammar, and literature in secondary schools and the competencies of the statemandated teacher certification test for secondary English. Prerequisite: Eng 1302.
ENG 406. Adolescent Literature. 3 Hours.
Adolescent Literature. Three semester hours. (1, 2) Introduces parents and prospective teachers of middle, junior high, and senior high schools to the major authors and genres of adolescent, or "young adult," literature. Classroom applications are discussed, but the emphasis is on the interpretation and evaluation of the literature itself. Prerequisite: Eng 1302.

## ENG 420. Approaches to Literature. 3 Hours.

Approaches to Literature - Three semester hours An introduction to historical and contemporary theoretical and critical approaches to textual analysis within the discipline of literary studies. Different methods and theories may be chosen for the course, but the goal is to improve learners' skills in reading, discussing and writing about texts from a variety of genres and media. Prerequisite Eng 1302.

ENG 424. Development of the English Language. 3 Hours.
Development of the English Language. Three semester hours. (2, even years) Insight into the vocabulary and sound systems of modern English through careful consideration of the sociocultural, geographic and linguistic roots of the language. Prerequisite: Eng 1302.

ENG 425. Development of the Novel. 3 Hours.
Development of the Novel. Three semester hours. (2) A study of British novels important in the history of the genre from the eighteenth century to the twentieth century, chosen from such authors as Fielding, Austen, Dickens, Hardy, Woolf, and others. Prerequisite: Eng 1302.
ENG 432. History and Aesthetics of Film. 3 Hours.
History and Aesthetics of Film. Three semester hours (2 lecture, 2 lab). A historical and aesthetic survey of film from the late nineteenth century to the present. The interdependence of technology and art is examined through the study of significant motion pictures that continue to influence contemporary filmmakers and reflect changing social and cultural values. Prerequisite: Eng 1302. Satisfies visual and performing arts option of University Studies.
ENG 434. Literature and Film. 3 Hours.
Literature and Film. Three semester hours (2 lecture, 2 lab). The interrelationships between film and literature and the unique qualities of each medium are analyzed. The course also examines film adaptations of literary works, films and literature that focus on similar themes, and the differences in reading and perceiving different types of texts. Prerequisite: Eng 1302. Satisfies visual and performing arts option of University Studies.

## ENG 441. A Survey of American Literature I. 3 Hours.

A Survey of American Literature I. Three semester hours. (1) The development of American literature from Colonial times to the Civil War. Prerequisite: Eng 1302.

## ENG 442. A Survey of American Literature II. 3 Hours.

A Survey of American Literature II. Three semester hours. (2) The development of American literature from the Civil War to the present. Prerequisite: Eng 1302.

## ENG 444. African American Literature. 3 Hours.

African American Literature. Three semester hours. A study of the literature surrounding the African American experience as expressed through poetry, drama, the short story, and the novel, and occasionally how it is represented in music and film. Readings will include diverse nineteenth- and twentieth century texts that will explore the ways in which writers have given narrative and poetic form to issues such as slavery, religion, urban migration, and social marginalization, and racial identity.

ENG 451. Twentieth-Century British Literature. 3 Hours.
Twentieth-Century British Literature. Three semester hours. A study of British poetry, fiction, and drama in the twentieth century, including works of such authors as Yeats, Joyce, Shaw, Eliot, and selected contemporary writers. Prerequisite: Eng 1302.

ENG 457. Teaching English as a Second Language. 3 Hours.
Teaching English as a Second Language. Three semester hours. This course focuses on the linguistic, psychological, and sociocultural foundations for teaching English to speakers of other languages. It surveys historical, as well as current trends in the methods and materials of ESL, of language testing, and of language-program evaluation. Also appropriate for students interested in teaching second or foreign languages other than English. Prerequisite: Eng 1302.

## ENG 460. Creative and Scholarly Publishing. 3 Hours.

Creative and Scholarly Publishing - Three semester hours This class is a practicum for students interested in publishing their creative or academic work. Students will work on preparing their work for publication, researching potential markets, and study how to submit work for publication. Extensive research on publishing and peer critiques. Pre-requisites: Eng 315 ( or equivalent introductory creative writing class).

ENG 462. Language Acquisition and Processing. 3 Hours.
Language Acquisition and Processing. Three semester hours. A survey of the cognitive, affective and developmental constraints on language acquisition and use. Topics include language, brain and mind; multilingualism; first and second language acquisition; evolution and change in the representational systems of humans and other animals; and research methods. Prerequisite: Eng 1302.

ENG 471. Survey of English Literature I. 3 Hours.
Survey of English Literature I. Three semester hours. (1) This course covers a thousand years of British literature, from (roughly) 800 to 1800 . It may begin with an introduction to Old English (e.g., Beowulf) and Middle English poetry (e.g., Chaucer), proceeding through the Renaissance (e.g., Jonson, Webster, and Shakespeare) and concluding with the Age of Reason (e.g., Dryden, Swift, Pope, and Johnson). Prerequisite: Eng 1302.

## ENG 472. Survey of English Literature II. 3 Hours.

Survey of English Literature II. Three semester hours. (2) The course covers British literature of the past two centuries, starting with the Romantics and the Victorians. The 20th century may include poets of the Great War, the Modernists, and late-century and contemporary authors. Prerequisite: Eng 1302.

## ENG 474. Topics in World Literature. 3 Hours.

Topics in World Literature. Three semester hours. Selected readings in world literature, in translation, with emphasis on cultural aspects and interdisciplinary approaches to the countries represented. Focus will be on, but not limited to, European countries. Prerequisite: Eng 1302.

ENG 485. Advanced Writing: Forms and Genres. 3 Hours.
Advanced Writing: Forms and Genres - Three semester hours This class is an advanced, intensive, reading and writing course that focuses on a specific genre of poetry or prose based on instructor specialization. Students will read and write in the assigned genre. Extensive writing and peer critiques. May be repeated for credit when the genre changes. Pre-requisites: Eng 315 (or equivalent introductory creative writing class.).
ENG 489. Independent Study. 3 Hours.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: consent of department head.

ENG 490. H Honors Thesis. 3 Hours.
Honors Thesis. Three semester hours.
ENG 491. H Ind Honors Readings. 3 Hours.
Individual Honors Readings. Three semester hours.
ENG 495. Internship. 3 Hours.
Internship. Three semester hours. Approved work experience in a professional organization. Supervision under the guidance of a practicing professional and departmental faculty member. May be repeated once when the internship organization changes. Prerequisites: Junior standing and approval of the department head.
ENG 497. Special Topics. 1-3 Hour.
Special Topics. One to Three semester hours. Organized class. May be repeated when topics vary.
ENG 497A. Special Topic. 1-3 Hour.
Special Topics. One to Three semester hours. Organized class. May be repeated when topics vary.
ENG 1301. College Reading and Writing. 3 Hours.
(ENGL 1301) College Reading and Writing. Three semester hours. (1, 2; 3 or 4) Introduces students to writing as an extended, complex, recursive process and prepares students for English 102, which more rigorously examines the forms and structures of argument and means to approaching multiple audiences. In 101 students will write weekly, and will work on essay organization and development. The course will emphasize close reading, summarizing, and analysis of expository texts, including student writing.

## ENG 1302. Written Argument and Research. 3 Hours.

(ENGL 1302) Written Argument and Research. Three semester hours. (1, 2) This course provides students with advanced training in communication skills emphasizing the writing and reading of argumentative prose and adapting writing to alternate audiences. Students will write weekly, including such texts as journals, reading response logs, summaries of argumentative texts, argumentative papers, and longer papers integrating secondary research. Activities include close reading of sample texts, both student and professional. Some sections will emphasize special topics in both reading and writing. Prerequisite: English 1301 or advanced placement or CLEP.

ENG 2326. Introduction to Literature. 3 Hours.
(ENGL 2326) Introduction to Literature. Three semester hours. (1, 2; 3 or 4) An introduction to the three major genres of literature: poetry, drama, and fiction. The course is designed to develop discriminating reading habits, and the student may be required to make analyses and value judgments based on critical thought. Prerequisite: Eng 1302.

## ENG 2331. Literature of the Western World. 3 Hours.

(ENGL 2331) Literature of the Western World. Three semester hours. A study of selected works of fiction, poetry, and drama in the literature of western civilization from classical times to the present. Authors covered may include Sophocles, Virgil, Dante, Voltaire, Goethe, Dostoevsky, Tolstoy, Mann, and Eliot. Prerequisite: Eng 1302.

## Environmental Sci Courses

## ENVS 104. Natural Disasters. 4 Hours.

US-Natural Disasters - Four semester hours (3 lec/ 2 lab ) Scientific principles and case studies of natural disasters, including those related to geological, meteorological, biological, cosmological, and man-made hazards and disasters. Assignments and activities in this class will contribute to the portfolio required of all Environmental Science Majors. Note This is a university studies course. When Offered (Fall).

ENVS 301. Risk Assessment and Environmental Impact Statements. 3 Hours.
Risk Assessment - Three semester hours This course is designed to provide an overview of ecological/environmental risk assessments. Students are involved in group projects to produce an ERA based on an existing abandoned hazardous waste site on EPA's National Priorities List. Students also complete a project to develop an Environmental Impact Statement based on a hypothetical government agency project proposal. Prerequisites: None.

## ENVS 302. Phase I Environmental Site Assessments. 3 Hours.

Phase I Environmental Site Assessments - Three semester hours Project-based course on protocol and methods for conducting Phase I Environmental Site Assessments as mandated by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Phase I Environmental Site Assessments are a common type of investigation conducted by environmental professional within environmental consulting firms. Assignments and activities in this class will contribute to the portfolio required of all Environmental Science Majors.

ENVS 304. Frontiers in Environmental Sciences. 1 Hour.
FRONTIERS IN ENVIRONMENTAL SCI - One semester hour This course is designed to familiarize environmental science majors with the literature pertaining to environmental science. Assignments and activities in this class will contribute to the portfolio required of all Environmental Science Majors. When Offered (Fall).

## ENVS 305. Environmental Hydrology. 4 Hours.

Environmental Hydrology. Four semester hours. (3 lecture, 2 lab) (2) An overview of all aspects of the field of hydrology, including the hydro logic cycle, surface water, and groundwater. The bulk of the course concerns groundwater and focuses on practical methods for ascertaining aquifer characteristics necessary to evaluating groundwater supplies and groundwater contamination problems and remediation. Assignments and activities in this class will contribute to the portfolio required of all Environmental Science Majors. Prerequisite Math 1314, ESCI 1403 Note All courses carrying four semester hours have labs. Students must register for both lecture and lab sections When Offered (Spring).
ENVS 312. Introduction to Environmental Toxicology. 3 Hours.
Introduction to Environmental Toxicology. Three semester hours. (2) This course is designed to provide an overview of environmental toxicology, including an examination of the major classes of pollutants, their fate in the environment, their disposition in organisms, and their mechanisms of toxicity. An emphasis will also be placed on assessing the toxicity of pollutants in biological and environmental systems. Assignments and activities in this class will contribute to the portfolio required of all Environmental Science Majors. Prerequisite BSc 1406, 1407 and EnvS 206. When Offered (Spring).

## ENVS 403. Environmental Ethics and Law. 3 Hours.

Environmental Ethics and Law. Three semester hours. (1) Course is designed to acquaint the student with the numerous ethical issues and perspectives confronting society and environmental scientists. The course also provides an overview of environmental laws on regulations and practice in navigating through these laws. Assignments and activities in this class will contribute to the portfolio required of all Environmental Science Majors. When Offered (Fall).

## ENVS 410. Environmental Monitoring and Waste Management. 4 Hours.

Environmental Monitoring and Waste Management. Four semester hours. (3 lecture, 2 lab) (2) The various sample collection and analytical techniques are emphasized as they related to detection and control of pollution. Technical and regulatory aspects of handling, control, and management of hazardous and nonhazardous wastes. Assignments and activities in this class will contribute to the portfolio required of all Environmental Science Majors. Note All courses carrying four semester hours have labs, Students must register for both lecture and lab section When Offered (Spring).

ENVS 489. Independent Studies. 1-4 Hour.
ENVS 490. H Honors Thesis. 3 Hours.

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ENVS 491. H Ind Honors Readings. 3 Hours.
ENVS 497. Special Topic. 4 Hours.
Special Topics-0-4 semester hours may vary.
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## ENVS 1301. Introduction to Environmental Science. 4 Hours.

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(ENVR 1301) Introduction to Environmental Science. Three semester hours. (1) Survey course designed to cover major areas relating to contemporary ecological/environmental problems and to introduce the student to the multiple roles of the environmental professional in addressing these problems.
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## Equine Science Courses

## EQSC 240. Intro to Equine Science. 3 Hours.

Introduction to Equine Science - Three semester hours An introduction to the selection, care, grooming, handling, and riding horses.

## EQSC 241. Advanced Horsemanship. 3 Hours.

Advanced Horsemanship. Three semester hours. (2 lecture, 2 lab) Refinement of equitation skills. Students will enroll in sections based on equitation skills as determined by a riding test. Class size limited to 15 per section.

EQSC 297. Special Topics. 1-4 Hour.
EQSC 340. Yearling Training. 3 Hours.
Yearling Training - Three semester hours This class is designed to help students learn the objectives for putting further training on yearling colts. The students will be doing ground work with the horses that is past the point of halter breaking the colts. The students will work on getting them ready for the many aspects involved in being saddle horses. The students will need to teach the colts how to walk, trot, and lope in both directions on a longe line, load into a trailer on their own, listen to verbal commands, come up to people in the pasture for catching, stand correctly and still for purposes of show, obedience, and future farrier needs, as well as many other aspects of getting a young horse trained.

EQSC 341. Two-Year-Old Horse Training. 3 Hours.
Two Year Old Horse Training - Three semester hours This class is designed to help teach students how to break horses to ride. These horses are 2 years old and have had all of their groundwork done in previous classes. Now, it is time for them to be broke. The objectives of the class are for the students to learn how to break the horses to ride which includes exercising the horse extensively, teaching the horse to ground drive, saddling the horse for the first time, and teaching the horse to accept a bit in its mouth. Once all this is accomplished, the students shall teach the horses how to accept the students on their backs and ask the horses to move out. The students will have to learn to teach the horses how to walk, jog, lope, back and turn all while the students are on them. The final goal of the class will be for all of the horses to be broke and for all of the students to now know how to break a horse and what all work and training goes into the process.

## EQSC 342. Equine Nutrition. 3 Hours.

Equine Nutrition. Three semester hours. (2 lecture, 2 lab) Nutrition of the horse with emphasis on ration formulation, forage and hay quality and digestive disorders. Prerequisite: AnS 308, PIS 326.

## EQSC 343. Equine Reproduction. 3 Hours.

Equine Reproduction. Three semester hours. (2 lecture, 2 lab) Management of reproduction in the mare and stallion to include puberty management, estrous cycles, mare and stallion reproductive management, artificial insemination, ultrasound and palpation, foaling care and rebreeding. Prerequisite: AnS 311.

EQSC 344. Veterinary Techniques in the Equine. 3 Hours.
Veterinary Techniques in the Equine. Three semester hours. (2 lecture, 2 lab) Diseases, parasites and common ailments specific to the horse. Treatment of colic, laminitis, proper hoof care will be among the topics covered. Occasional field trips required.

EQSC 345. Training and Behavior Modification in Equine. 3 Hours.
Horse Training. Three semester hours. (2 lecture, 2 lab) Techniques of horse training. Students will be responsible for developing a twoyear old for riding. Emphasis on behavior modification, imprinting, and techniques involved in finishing a young horse. Prerequisite: EqSc 241 . Class limited to 15 students.

## EQSC 441. Stable Management. 3 Hours.

Stable Management. Three semester hours. (2 lecture, 2 lab) Principles of stable management to include stable design, records and reports, equine law, labor management, customer relations, marketing and equine care in confinement. Field trips required. Prerequisites: AEc 219, AMc 315 or 425; EqSc 240.

EQSC 489. Independent Stuy. 1-4 Hour.
EQSC 497. Special Topics. 4 Hours.
Special Topic.

## Finance Courses

## FIN 304. Introduction to Business Finance. 3 Hours.

Introduction to Business Finance. Three semester hours. Basic concepts of business finance with emphasis on global and ethical issues, total quality management, production of goods and services, and various laws and regulations that affect the financial environment in which the firm operates. Basic elements of business finance, the financial environment, financial institutions, security markets, interest rates, taxes, risk analysis, time value of money and valuation. Maximizing value of the firm using financial analysis and planning, working capital management, cost of capital and capital budgeting. Prerequisites: Acct 222; Eco 2301, 2302; Math 1324.

FIN 312. Money, Banking, and Financial Markets. 3 Hours.
Money, Banking, and Financial Markets. Three semester hours. (Formerly Eco 310) The nature and evaluation of money and its role in determining the overall level of economic activity. The course also examines the role of banking, central banking, and monetary policy as they apply to financial instruments and institutions in the context of global financial markets. Prerequisites: Eco 2301, 2302.

## FIN 340. Real Estate Finance. 3 Hours.

Real Estate Finance. Three semester hours. The financial, social, legal and regulatory environment affecting real estate investing; the factors affecting availability and sources of mortgage funds; tools used for market research and forecasting; applying processes of analysis for the various types of real estate investments. Prerequisite: Junior standing.

## FIN 400. Principles of Investments. 3 Hours.

Principles of Investments. Three semester hours. (1) Introduction to the basic principles of investing in debt and equity securities which includes: the study of the behavior of securities markets; mechanics of security analysis and investing; economic affects on prices resulting from dynamic political, social and regulatory influences on the financial environment; and risks, such as those caused by influences of international changes in demographic diversity of the world's countries on domestic securities markets. Prerequisite: Fin 304.

## FIN 404. Advanced Financial Management. 3 Hours.

Managerial Finance. Three semester hours. Intermediate techniques of financial management. Emphasis on cash budgeting, capital budgeting, and financial impact of alternative financing methods in both short and long terms, financial engineering, and ethical and global issues with related demographic diversity effects. Prerequisite: Fin 304.

## FIN 410. Analysis of Financial Derivatives. 3 Hours.

Analysis of Financial Derivatives. Three semester hours. (2) This course provides a broad introduction to the options, futures, swaps and interset rate options markets. These derivative securities play an integral part in managing risk for many progressive companies, portfolio managers, and sophisticated investors. Prerequisite: FIN 304.

## FIN 420. Entrepreneur Fin \& Venture Cap. 3 Hours.

Entrepreneurial Finance and Venture Capital - Three semester hours The goal of this course is to help students understand the dynamics of the capital food chain within the context of the entrepreneurial ecosystem affecting the global economy. To this end, we explore various stages of venture capital investing such seed, start-up, early, mid and later. Next, we introduce the venture capital model and the valuation aspects of entrepreneurial finance. There is a strong emphasis on modeling cash flows as the most critical component of venture capital decision making. The mechanics of venture capital financing in the form of term sheets, business plans and due diligence process are discussed with respect to deal structuring (the entrepreneur perspective) and deal evaluation (the venture capitalist perspective). There will be case studies on such topics as the role of incubation centers, value creation by operational venture capital firms, exit strategies of limited partners, and risk management by venture capital firms. Pre-requisite: FIN 304.

FIN 429. Financial Markets and Institutions. 3 Hours.
Financial Markets and Institutions. Three semester hours. This course examines the economic role of financial institutions and their relationship to money and capital markets. Prerequisite: Fin 304 or Fin 312.
FIN 430. Financial and Estate Planning. 3 Hours.
Financial Planning. Three semester hours. Advanced techniques of personal sector cash flow, asset and liability management, life cycle financial planning, investment management, tax planning, and retirement and estate planning. Prerequisites: Four upper-level finance courses or consent of the instructor.

## FIN 435. Risk and Insurance Planning. 3 Hours.

Risk and Insurance Planning - Three semester hours The Insurance planning course looks at the basics of insurance and risk and their role as relates to financial planning. The topics covered include life, annuities, disability, long-term care including social security, Medicare and Medicaid. It also includes types of Employee benefit plans and their various facets such as cafeteria plans and flexible spending accounts. Pre-requisite: FIN 430.

## FIN 436. Retirmnt Plan \& Emp Comp. 3 Hours.

Retirement Planning and Employee Benefits - Three semester hours This course provides an introduction to retirement plans and employee benefits. The emphasis is on the decision making process of the individual in consultation with the financial planner. After a thorough review of retirement funding, this course discusses qualified pension plans, profit sharing plans and stock bonus plans as well as distributions from and administration of these plans. Other topics include IRAs, SEPs, 401 (k)-, 403(b)-, and 457 Plans, Social Security, Deferred Compensation and Non-qualified Plans. Employee benefits are explored in two as both fringe and group benefits. Pre-requisite: FIN 430.

## FIN 440. Financial Stat Analy \& Valuati. 3 Hours.

Financial Statement Analysis \& Valuation - Three Semester Hours The goal of this course is to provide the analytical framework students need to scrutinize financial statements, whether they are (i) evaluating a company's stock price, (ii) determining valuations for a merger or acquisition, or (iii) calculating the value of a start-up company from the perspective of a venture capitalist. By understanding the dynamic nature of financial ratios and evaluating the trends in historical series, students will be able to interpret financial statements in today's volatile markets and uncertain economy, and allow them to get past the sometimes biased portrait of a company's performance. Moreover, the course reflects changes in the financial reporting landscape, including issues related to the financial crisis of 2008-2009; provides guidelines on how to interpret balance sheets, income statements, and cash flow statements; and offers information for maximizing the accuracy of forecasts. There will be real-life examples on the use of ratio analysis for analyzing stock investments, the design of pro-forma financial statements for entrepreneurs, and its impact on risk capital. Pre-requisite: FIN 304.

## FIN 450. Financial Modeling in Excel. 3 Hours.

Financial Modeling in Excel - Three semester hours A review of principles of corporate finance and investment management using Excel and VBA. There will be an emphasis on (1) Financial Statement Analysis, (2) Valuation Methodologies including Real Options Analysis, (3) Modern Portfolio Theory including the Black-Litterman Approach, and (4) Risk Management Strategies such as Portfolio Insurance, Immunization and Hedging. BLOOMBERG PROFESSIONAL® will be incorporated when possible. Pre-requisites: FIN 304, 400, and 404.
FIN 471. International Business Finance. 3 Hours.
International Business Finance - Three semester hours The goal of this course is to help students understand issues and questions which concern financial management of international corporations. The course introduces students to the international aspects of corporate finance, including such topics as the international monetary system, balance of payments, foreign exchange markets, international parity conditions, foreign exchange exposure and management, foreign direct investment, international venture capital and entrepreneurship, global financing, and international cost of capital and capital budgeting. The course will emphasize the link between theory and applications. Pre-requisite: FIN 304.

## FIN 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## FIN 490. Honors Thesis. 3 Hours.

FIN 491. H Ind Honors Readings. 3 Hours.
FIN 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.
FIN 499. Internship. 3 Hours.
Internship in Finance - Three semester hours The goal of this course is to gain work experience in your field of interest by developing specific work related skills to improve marketability upon graduation. Students will also build "network" of professional contacts. Pre-requisites: FIN 304, 400, and 404.

## Fitness and Rec Ac Courses

## FRA 100. Lifetime Fitness. 1 Hour.

Lifetime Fitness. One semester hour. An overview of the requirements of a lifestyle conducive to fitness and health. Students will participate in a variety of fitness activities and be introduced to topics in nutrition, weight control, cardiovascular conditioning, flexibility, and strength training.
FRA 101. Aerobic Conditioning by Walking or Jogging. 1 Hour.
Aerobic Conditioning by Walking or Jogging. One semester hour. Fitness development with an emphasis on walking, jogging, and running, including discussion of proper technique and health benefits.
FRA 102. Aerobic Dance. 1 Hour.
Aerobic Dance. One semester hour. Basic aerobic dance conditioning to music for improving muscular endurance, strength, flexibility, and cardiovascular fitness.
FRA 103. Aquatic Fitness. 1 Hour.
Aquatic Fitness. One semester hour. Conditioning through water exercises for students with or without swimming ability. Increased fitness with emphasis on stretching, flexibility, and abdominal and back strength.
FRA 104. Beginning Triathlon. 1 Hour.
Beginning Triathlon. One semester hour. Conditioning and training for triathlon competition, including swimming, running, and bicycling. As a culmination to the course, students will participate in a triathlon sponsored by the class.

FRA 105. Weight Training. 1 Hour.
Weight Training. One semester hour. Strength development through basic exercise and lifting techniques. Theory and beginning techniques in fitness conditioning, body building, and power lifting.

FRA 110. Beginning Swimming. 1 Hour.
Beginning Swimming. One semester hour. For non-swimmers and those who cannot swim 25 yards (one pool length). Opportunity to learn and improve individual swimming and water survival skills. Introduction to Red Cross swimming strokes with increased endurance and comfort in the water.

## FRA 114. Water Polo. 1 Hour.

Water Polo. One semester hour. For swimmers only (must pass swimming proficiency test). Instruction in fundamental techniques, strategies, skills, conditioning and equipment for water polo. Students will participate in competitive play.
FRA 120. Varsity Sport. 1 Hour.
Varsity Sport. One semester hour. For students participating in intercollegiate sport only.
FRA 121. Badminton. 1 Hour.
Badminton. One semester hour. Instruction and practice in the fundamentals of the grip, strokes, footwork, court coverage and rules of play. Singles and doubles strategy, offensive and defensive positioning and tournament play will be progressively incorporated. Students will participate in competitive play.

## FRA 122. Golf. 1 Hour.

Golf. One semester hour. Instruction in the skills, techniques, rules and etiquette of golf on the course. Chipping, pitching, putting, golf strategies, and rules of the game are included. Students will participate in competitive play.

## FRA 123. Handball. 1 Hour.

Handball. One semester hour. Instruction in the basic skills of handball including singles and doubles strategy, court etiquette, rules and scoring. Students will participate in competitive play.

## FRA 124. Racquetball. 1 Hour.

Racquetball. One semester hour. Instruction in the basic skills of racquetball including singles and doubles strategy, court etiquette, rules and scoring. Students will participate in competitive play.

FRA 125. Tennis. 1 Hour.
Tennis. One semester hour. Instruction in the basic tennis skills including grip, foot work, and strokes, such as backhand, forehand, volley and serve. The drop shot, lob, and overhead shots will be introduced, as will singles and doubles strategies, rules, scoring and court etiquette. Students will participate in competitive play.

## FRA 130. Basketball. 1 Hour.

Basketball. One semester hour. Instruction in basic skills to include ball handling, shooting and passing. Students will learn offensive and defensive techniques, rules, strategy and participate in competitive play.

## FRA 131. Flag Football. 1 Hour.

Flag Football. One semester hour. Flag football explores the skills and techniques for team play including passing, catching, running, and offensive and defensive positioning. Football emphasizes individual and team skills, rules and strategy. Students will participate in competitive play.
FRA 132. Soccer. 1 Hour.
Soccer. One semester hour. Instruction in the individual offensive and defensive skills, game strategy, rules, and team tactics through the use of smallsided games and individual drills. Students will participate in competitive play.
FRA 133. Softball. 1 Hour.
Softball. One semester hour. This course provides instruction to develop the fundamental skills of throwing, catching, running, hitting, and rules of play of softball as well as individual and team skill development and strategies involved in competitive game situations. Students will participate in competitive play.

## FRA 134. Volleyball. 1 Hour.

Volleyball. One semester hour. Introduction to the fundamental skills and strategies of organized volleyball including the forearm pass, set, spike, block, dig, and serve. In addition, students will gain an understanding of elementary team strategies. Students will learn to practice effective communication with teammates through participation in competitive play.

FRA 140. Backpacking and Camping. 1 Hour.
Backpacking and Camping. One semester hour. This course is designed to instruct students in the basic techniques of backpacking and camping. Topics will include wilderness skills and outdoor survival techniques. The proper use and selection of personal backpacking and camping equipment will be covered. Students are required to participate in two off-campus weekend trips. Equipment is provided.
FRA 141. Canoeing and Kayaking. 1 Hour.
Canoeing and Kayaking. One semester hour. For swimmers only (must pass swimming proficiency test). This course is designed to instruct students in the basic techniques and safety for canoeing and kayaking. The proper use and selection of equipment will be covered. Students are required to participate in one off-campus weekend trip. Equipment is provided.

## FRA 142. Downhill Skiing. 1 Hour.

Downhill Skiing. One semester hour. Instruction in conditioning, basic skills and techniques for downhill skiing. The proper use and selection of equipment will be covered. Students are required to participate in a week long ski trip during spring break. Equipment is provided.

## FRA 143. Fly Fishing. 1 Hour.

Fly Fishing. One semester hour. Instruction in fundamental techniques and skills for fly fishing. The proper use and selection of equipment will be covered. Students are required to participate in two off-campus weekend trips. Equipment is provided.
FRA 144. US-HORSEMANSHIP. 1 Hour.

## FRA 145. Mountain Biking. 1 Hour.

Mountain Biking. One semester hour. This course is designed to instruct students in the basic techniques and safety for mountain biking. The proper use and selection of equipment will be covered. Students are required to participate in one off-campus weekend trip. Equipment is provided.
FRA 146. Rock Climbing. 1 Hour.
Rock Climbing. One semester hour. This course is designed to instruct students in the basic techniques of rock climbing. Covered techniques will include belaying, repelling, ascents and descents. The proper use of personal climbing equipment and safety concerns will also be covered. Students are required to participate in one off-campus weekend climbing trip. Equipment is provided.

## FRA 147. Sailing and Windsurfing. 1 Hour.

Sailing and Windsurfing. One semester hour. For swimmers only (must pass swimming proficiency test). This course is designed to instruct students in the basic techniques of sailing and/or windsurfing. The proper use and selection of equipment and safety concerns will also be covered. Students are required to participate in one off-campus weekend trip. Equipment is provided.

## FRA 148. Venture Dynamics. 1 Hour.

Venture Dynamics - One semester hour This course is designed to help students understand how participating in outdoor activities can promote lifelong health and wellness. Participants will experience an enjoyable, safe and informative introduction to outdoor activities including knot tying, belaying, movement technique, and safety procedures in the context of an outdoor ropes course. This course will emphasize a range of topics that include team building exercises, terminology, and conservation.

## FRA 149. Archery. 1 Hour.

Archery - One semester hour This course is a basic class in target archery, and requires no prior knowledge or experience. All equipment is provided. The emphasis is on target archery shooting technique, safety, and the history of archery. Recurve bows and a variety of targets will be used. Grading is based on shooting skill, proper form, and knowledge of the sport.

## FRA 160. Fencing. 1 Hour.

Fencing. One semester hour. Instruction in fundamental techniques and skills for fencing with foil, saber, and epee. Foil instruction will be emphasized. Students will learn proper fencing etiquette, competitive rules, basic skills, and classic fighting techniques. Students will participate in competitive fencing. Equipment is provided.
FRA 161. Karate. 1 Hour.
Karate. One semester hour. This course emphasizes mental and physical development in the martial art of karate. It includes techniques and philosophies of karate including the harmony of mind, body and spirit, and is designed to develop self-control, physical coordination and self confidence.

## FRA 162. Skeet and Trap Shooting. 1 Hour.

Skeet and Trap Shooting. One semester hour. Instruction in fundamental techniques and skills for skeet and trap shooting. Topics include patterning, shotgun fitting, conditioning, gun hold, targeting, and recoil. Students will participate in competitive skeet and/or trap shooting. Equipment is provided.
FRA 163. Social and Popular Dance. 1 Hour.
Social and Popular Dance. One semester hour. Instruction in the fundamentals, forms and patterns of social and popular dances. Basic dances develop confidence through practice with a variety of partners as well as an appreciation for cultural and geographical backgrounds.
FRA 164. Yoga. 1 Hour.
Yoga. One semester hour. Instruction in the techniques and benefits of yoga. Learning skills will include postures (asanas), breathing, and relaxation techniques. Improved flexibility, strength, muscle tone, and concentration will be emphasized.

## FRA 165. High Elements. 1 Hour.

High Challenge Course Activities - One semester hour This course is designed to help students understand how participating in outdoor activities can promote lifelong health and wellness. Participants will experience an opportunity to engage in high elements on the challenge course and to learn the key risk management issues of participating in these activities. This course will emphasize developing an understanding of equipment and gear, different high elements and a variety of belaying systems.

## FRA 166. Leading Adventure Activities to Enhance Community. 1 Hour.

Leading Adventure Activities to Enhance Community - One semester hour This course is designed to provide experiences in adventure activities that develop group processes among participants while they learn to lead adventure-based initiative and prop activities.

## FRA 167. Climbing Wall Instructor. 1 Hour.

Climbing Wall Instructor - One semester hour This course is designed to prepare students for certification as a climbing wall instructor. Participants will experience enjoyable, safe and informative instruction focused on risk management in day to day operation of a climbing facility and practice in instruction of climbing skills and techniques. Participants will learn skills to present information to a variety of potential clients or climbers.
FRA 189. Independent Study. 2 Hours.
FRA 197. Special Topics. 1-4 Hour.
FRA 197M. Special Topic. 1-4 Hour.
Special Topics. One to Four semester hours. Organized class. May be repeated when topics vary.
FRA 197P. Special Topic. 1-4 Hour.
Special Topics. One to Four semester hours. Organized class. May be repeated when topics vary.

## FRA 197W. Special Topics. 1-4 Hour.

Special Topics. One to Four semester hours. Organized class. May be repeated when topics vary.

## FRA 489. Independent Study. 1-4 Hour.

Independent Study - Hours: One to four Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisites Consent of department head. Note May be repeated when the topic varies.
FRA 1151. Beginning Scuba. 1 Hour.
Beginning Scuba. One semester hour. For swimmers only(must pass swimming proficiency test). Instruction in fundamental techniques and skills for scuba.
FRA 1153. Lifeguarding. 1 Hour.
Lifeguarding. One semester hour. For swimmers only (must pass swimming proficiency test). Instruction in fundamental techniques, skills and equipment for Red Cross Lifesaving. Students will have the opportunity to test for Red Cross Lifeguarding certification.
FRA 2155. Water Safety Instructor. 1 Hour.
Water Safety Instructor. One semester hour. For swimmers only (must pass swimming proficiency test). Training needed to teach courses in the American Red Cross Swimming and Water Safety Program. Students will develop their understanding of how to use the course materials, how to conduct training sessions and how to evaluate participants' progress.

## Food Science Courses

FDSC 210. Principles of Food Science. 3 Hours.
(AGRI 1329) Principles of Food Science. Three semester hours. Basic principles of food preservation in relation to processing techniques and quality control procedures. Processing effects on aesthetic and nutritional food quality of plant and animal products will be explored. Occasional field trips to food processing companies will be required.
FDSC 318. Meat Technology. 3 Hours.
Meat Technology. Three semester hours (2 lecture, 3 lab). Theory and practice of slaughtering, processing, curing, and storing meat from domestic animals. Wholesale and retail cuts. Prerequisite: AnS 118 and FdSc 210.

FDSC 489. Independent Study. 4 Hours.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.
FDSC 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## French Courses

FRE 131. Elementary French I. 3 Hours.
(FREN 1311) Elementary French I. Three semester hours. Introduction to the four language skills: speaking, writing, listening and reading. Emphasis on the spoken language. Introduction to French and Francophone cultures.
FRE 132. Elementary French II. 3 Hours.
(FREN 1312) Elementary French II. Three semester hours. A continuation of Fre 131 with further emphasis on the spoken language. Prerequisite: French 131 or approved placement or CLEP or consent of department head.
FRE 231. Intermediate French I. 3 Hours.
(FREN 2311) Intermediate French I. Three semester hours. Review and expansion of the four language skills with emphasis on speaking and writing, and further exposure to French and Francophone cultures. Prerequisites: French 131 and 132 or approved placement or CLEP or consent of department head.

## FRE 232. Intermediate French II. 3 Hours.

(FREN 2312) Intermediate French II. Three semester hours. A continuation of Fre 231 with emphasis on reading comprehension and writing skills. Introduction to French prose, poetry or drama. Prerequisite: French 231.

FRE 289. Independent Study. 1-4 Hour.
FRE 331. Advanced French I:Written Emphasis. 3 Hours.
Advanced French I: Written Emphasis. Three semester hours. Improves composition skills by the implementation of three major components: grammar review and refinement; reading and analysis of various kinds of texts, both literary and journalistic; composition assignments involving such techniques as description, analysis, and persuasion. Prerequisite: French 232.

FRE 332. Advanced French II: Oral Emphasis. 3 Hours.
Advanced French II: Oral Emphasis. Three semester hours. Improves oral comprehension and production. Listening skills will be enhanced through French and Francophone radio, television and film. Speaking skills will be honed by class discussions based on current events in the newspapers and magazines of the Francophone world. Prerequisite: French 232.

## FRE 450. Major Literary Figures. 3 Hours.

Major Literary Figures. Three semester hours. A survey of the major literary figures of French or Francophone literatures. French authors treated may include Marie de France, Rabelais, Ronsard, Montaigne, Corneille, Racine, Moliére, Marivaux, Montesquieu, Voltaire, Diderot, Rousseau, Balzac, Hugo, Camus, Sartre, Robbe-Grillet and Duras. Francophone authors treated may include Camara Laye, Nafissatou Diallo, Cheikh Sow, Calixthe Beyala, Tahar Ben Jelloun, Assia Djebar, Patrick Chamoiseau, Maryse Condé, Joseph Zobel, Gabrielle Roy and Roch Carrier.

FRE 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

FRE 490. Honors Thesis. 3-6 Hour.
FRE 491. H Ind Honors Readings. 3 Hours.
FRE 497. Special Topics. 1-4 Hour.
Special Topics. Three semester hours. Organized class. May be repeated when topics vary.

## Geography Courses

## Global E-Lrng Trng \& Dev Courses

## EDUC 400. Global eLearning. 12 Hours.

Global eLearning - Twelve semester hours EDUC 400 Global eLearning (12 semester hours) This course guides access to the following programmatic competencies in the BS in Global eLearning: metacognition, communication, digital fluency, cultural fluency, global fluency, servant leadership, commitment to life-long learning, and field of study.

EDUC 401. Metacognition. 6 Hours.
Metacognition - Six semester hours This course covers the first competency in the BS in Global eLearning. Emphasis is on cognition about cognition and provides a framework about when and how to use particular strategies for learning and problem solving.

## EDUC 402. Communication in a Global Context. 6 Hours.

Communication in a Global Context - Six semester hours EDUC 402 is the second competency in the BS in Global eLearning. Communication is examined in a global context to include group and intercultural communication.

## EDUC 403. Digital Fluency. 6 Hours.

Digital Fluency - Six semester hours EDUC 403 Digital Fluency is the third competency in the BS in Global eLearning. Emphasis in the course is on multimedia implementation and design and emerging technologies. The course focuses on the adoption, utilization, and integration of appropriate technologies into the instructional environment.

## EDUC 404. Cultural Fluency. 6 Hours.

Cultural Fluency EDUC 404 examines the educational impact of the intersections of race, class, gender, and sexuality from an intercultural perspective.

## EDUC 405. Global Fluency. 6 Hours.

Global Fluency - Six semester hours EDUC 405 Global Fluency examines the impact of the interconnected world on educational delivery systems in light of the dynamics of global sociology.

## EDUC 406. Servant Leadership. 6 Hours.

Servant Leadership - Six semester hours EDUC 406 examines the history, dynamics, and expectations of servant leadership. Emphasis will be placed on ethics and leadership in a dynamic and changing world.

EDUC 407. Life-Long Learning. 6 Hours.
Life-Long Learning - Six semester hours EDUC 407 is the seventh programmatic learning outcome in the BS in Global eLearning. The course examines the development of career decisions and the adoption of scholarship into the career pathway.

EDUC 408. Field of Study. 18 Hours.
Field of Study - Eighteen semester hours EDUC 408 Field of Study evidences the unique field of study appropriate to the individual's educational practice.

## Health \& Human Perfor Courses

## HHPA 140. Introduction to Athletic Training. 1 Hour

Introduction to Athletic Training. One semester hour This course is part of the pre-professional requirements for athletic training majors. The students will learn basic history, policies and procedures, management, and prevention techniques related to the allied-health field of athletic training. Observation hours in the on-campus athletic training facilities are required for full admittance to the Athletic Training Education Program. (removed sentence)Course fees and lab fees are listed in the current course schedule.

## HHPA 213. Prevention and Care of Athletic Injuries. 3 Hours.

Prevention and Care of Athletic Injuries. Three semester hours. (Same as HHPK 213) A lecture course designed to provide entry-level knowledge in the field of sports related injuries. Content areas include: basic anatomy of common injuries, emergency procedures, evaluation techniques, medical conditions affecting athletes and preventive measures to reduce the incidence of injuries. Standard treatment protocols and legal and ethical issues are also discussed. Course fees and lab fees are listed in the current course schedule. Prerequisite: HHPH 172 or BSC 2401 or consent of instructor.

HHPA 214. Preventive Techniques in Athletic Training. 1 Hour.
Preventive Techniques in Athletic Training. One semester hour. Students will learn taping, wrapping and padding techniques used to support and prevent athletic injuries. Techniques for making and applying special preventative pads, splints and fitting of protective equipment will be taught. Demonstration of proficiency of clinical skills will be required to complete this course. Participation in directed clinical experience in on-campus athletic training facilities is required. Course fees and lab fees are listed in the current course schedule.

## HHPA 239. Therapeutic Modalities. 3 Hours.

Therapeutic Modalities. Three semester hours. A study of knowledge, skills and values an athletic trainer or health care provider must possess to plan, apply, document and evaluate the efficacy of therapeutic modalities. Scientific theories and application principles will be discussed. Content areas include: cold, heat, ultrasound, electrical stimulation, traction, and manual therapy techniques. Course fees and lab fees are listed in the current course schedule. Prerequisite: HHPA 213 or HHPK 213.

## HHPA 240. Therapeutic Modalities Lab. 1 Hour.

Therapeutic Modalities Lab. One semester hour. Students will learn the application of therapeutic physical modalities and other therapeutic agents applied to treat injuries. Indications, contraindications, and legal implication will be taught. Mastery of clinical skills will be required to complete this lab. Participation in directed clinical experience in on-campus and off-campus facilities is required. Transportation will be needed. Course fees and lab fees are listed in the current course schedule. Co-requisite HHPA 239.

## HHPA 249. Clinical Experience in Athletic Training I. 1 Hour.

Clinical Experience in Athletic Training I. One semester hour. Under the direct supervision of a licensed/certified athletic trainer or other licensed medical professional students will be provided the opportunity to observe, learn, practice, and demonstrate a variety of skills directly related to the profession of athletic training. In addition, students are expected to successfully demonstrate required clinical proficiencies, Clinical experiences will take place both on and off campus in a variety of settings.

HHPA 259. Athletic Injury Assessment I. 3 Hours.
Athletic Injury Assessment I. Three semester hours. A study of the knowledge, skills and values an athletic trainer must posses to assess and evaluate injured athletes and other physically active individuals. Content areas to include: pathology, on and off-field assessment procedures for the foot, ankle, knee and thigh/hip, and lumbar spine. Prerequisite: HHPA 213, 214.
HHPA 260. Athletic Injury Assessment I Lab. 1 Hour.
Athletic Injury Assessment I Lab. One semester hour. This lab course will teach general and specific assessment and evaluation techniques for the foot, ankle, knee, thigh/hip, and lumbar spine. Pathology and on-field assessment procedures will also be taught. Mastery of clinical skills will be required to complete the lab. Corequisite HHPA 259.

## HHPA 279. Clinical Experience in Athletic Training II. 1 Hour.

Clinical Experience in Athletic Training II. One semester hour. Under the direct supervision of a licensed/certified athletic trainer or other licensed medical professional, students will be provided the opportunity to observe, learn, practice, and demonstrate a variety of skills directly related to the profession of athletic training. In addition, students are expected to successfully demonstrate required clinical proficiencies. Clinical experiences will take place both on and off campus in a variety of settings.

## HHPA 339. Therapeutic Rehabilitation. 3 Hours.

Therapeutic Rehabilitation. Three semester hours. A study of knowledge, skills and values an athletic trainer or health care provider must possess to plan, apply, document and evaluate the efficacy of therapeutic exercises and rehabilitation programs. Scientific theories and application principles will be discussed. Content areas include: basic rehab concepts, therapeutic exercise parameters, general and specific therapeutic rehabilitation applications. Course fees and lab fees are listed in the current course schedule. Prerequisite: HHPA 239.

## HHPA 340. Therapeutic Rehabilitation Lab. 1 Hour.

Therapeutic Rehabilitation Lab. One semester hour. Students will learn the application of therapeutic exercises and rehab equipment. Indications, contraindications and legal implications of applying therapeutic rehabilitation programs will be taught. Mastery of clinical skills will be required to complete the lab. Participation in directed clinical experience in on-campus and off-campus facilities is required. Transportation will be needed. Course fees and lab fees are listed in the current course schedule: Co-requisite HHPA 339.
HHPA 349. Clinical Experience in Athletic Training III. 1 Hour.
Clinical Exp in Athletic. One semester hours. Under the direct supervision of a licensed/certified athletic trainer or other licensed medical professional, students will be provided the opportunity to observe, learn, practice, and demonstrate a variety of skills directly related to the profession of athletic training. In addition, students are expected to successfully demonstrate required clinical proficiencies. Clinical experiences will take place both on and off campus i a variety of settings. Prerequisite HHPA 279.

HHPA 369. Athletic Injury Assessment II. 3 Hours.
Athletic Injury Assessment II. Three semester hours. A study of the knowledge, skills and values an athletic trainer must possess to assess and evaluate injured athletes and other physically active individuals. Content areas to include: pathology, on and off-field assessment procedures for the head, neck, spine, shoulder, elbow, forearm, hand, and wrist. Prerequisite HHPA 239.

## HHPA 370. Athletic Injury Assessment II Lab. 1 Hour.

Athletic Injury Assessment II Lab. One semester hour. This lab course will teach the general and specific assessment and evaluation techniques for the head, neck, spine, shoulder, elbow, forearm, hand, and wrist. Pathology and on-field assessment procedures will also be taught. Mastery of clinical skills will be required to complete the lab. Corequisite HHPA 369.

## HHPA 379. Clinical Experience in Athletic Training IV. 1 Hour.

Clinical Experience in Athletic. One semester hours. Under the direct supervision of a licensed/certified athletic trainer or other licensed medical professional, students will be provided the opportunity to observe, learn, practice, and demonstrate a variety of skills directly related to the profession of athletic training. In addition, students are expected to successfully demonstrate required clinical proficiencies. Clinical experiences will take place both on and off campus in a variety of settings. Prerequisite: HHPA 349.
HHPA 441. Athletic Training Administration. 3 Hours.
Athletic Training Administration. Three semester hours. A study of knowledge, skills and values an athletic trainer or health care professional must posses to develop, administer, and manage an athletic training program or other health care facility. Students will learn the administrative responsibilities of the athletic training profession, as they relate to national and state regulatory agencies, sports associations and educational entities. Content areas include: management, budgets, facilities, insurance, legal concerns and professional ethics. Course fees and lab fees are listed in the current course schedule.

## HHPA 442. Health Care Administration Lab. 1 Hour.

Health Care Administration Lab. One semester hour. This course will give the student the opportunity to observe administrative procedures used in the different health care settings. A rotation of health care facilities will be visited. Application of administration techniques will be applied to the athletic training profession. Mastery of clinical skills will be required to complete the lab. Participation in directed clinical experience in on-campus and offcampus facilities is required. Transportation will be needed. Course fees and lab fees are listed in the current course schedule. Co-requisite HHPA 441.

## HHPA 449. Clinical Experience in Athletic Training V. 1 Hour.

Clinical Experience in Athletic Trng V. One semester hours. Under the direct supervision of a licensed/certified athletic trainer or other licensed medical professional, students will be provided the opportunity to observe, learn, practice, and demonstrate a variety of skills directly related to the profession of athletic training. In addition, students are expected to successfully demonstrate required clinical proficiencies. Clinical experiences will take place both on and off campus in a variety of settings. Prerequisite: HHPA 379.

HHPA 459. Assessment of General Medical Conditions. 3 Hours.
A study of the knowledge, skills and values an athletic trainer must possess to assess general medical conditions for the physically active. Course content to include: assessment of the trunk, chest, abdomen, lower axial spine, illnessess, skin conditions and pharmocology. Course fee will be applied and are listed in current class schedule. Prerequisite HHPA 239.
HHPA 460. General Medical Techniques Lab. 1 Hour.
This lab will teach the application of general medical assessment techniques used by health care providers. Content areas to include: assessment of the chest, abdomen, illnesses, dermatological conditions, and pharmacology. Corequisite HHPA 459.
HHPA 479. Clinical Experience in Athletic Training VI. 1 Hour.
Clinical Experience in Athletic Training VI. One semester hour. Under the direct supervision of a licensed/certified athletic trainer or other licensed medical professional, students will be provided the opportunity to observe, learn, practice and demonstrate a variety of ski8lls directly related to the profession of athletic training. In addition, students are expected to successfully demonstrate required clinical proficiencies. Clinical experiences will take place both on and off campus in a variety of settings. Athletic training students taking part in this clinical experience will be assigned to four-four week rotations to include experience within a local high school, general medical physician's office, physical therapy clinic and orthopedic surgeon's office. Prerequisite: HHPA 449.
HHPA 480. Clinical Integration in Athletic Training. 3 Hours.
Clinical Integration in Athletic Training. Three semester hours. This course is designed for professional level III athletic training majors to integrate clinical competencies and proficiencies before enter professional practice. The students will participate in scenario-based problem solving, critical thinking challenges and the review for mastery of previously assessed clinical skills. Professional test preparation, career opportunities, and professional development requirements will be discussed. Participation in directed clinical experience in on-campus and off-campus facilities is required. Transportation will be needed. Course fees and lab fees are listed in the current course schedule. Prerequisite HHPA 479.
HHPA 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topics vary. Prerequisite: consent of athletic training program director.
HHPA 497. SPECIAL TOPICS. 1-4 Hour.

## Health \& Human Perfor Courses

HHPK 141. WEIGHT TR COND MAJORS. 1 Hour.
HHPK 142. EDUCATIONAL GYMNASTICS. 1 Hour.

## HHPK 144. Foundations of Kinesiology. 3 Hours.

Foundations of Kinesiology. Three semester hours. A survey course in human movement that includes the historical development of movement and sport from ancient through contemporary cultures. Physiological, sociological, and psychological principles affecting human movement and sport are also studied.

## HHPK 154. Concepts of Physical Activity. 3 Hours.

Concepts of Physical Activity. Three semester hours. This course is designed to provide information related to the need for continuing physical activity and its contribution to human well-being. Units of instruction will include procedures for assessing fitness levels in the various components of physical fitness and techniques used in developing physical fitness among students.

HHPK 172. Systems of the Human Body. 3 Hours.
Systems of the Human Body. Three semester hours. (Same as HHPH 172) A study of the structure and function of selected body systems and their integration into personal health. Designed to be a foundation for other health and kinesiology courses.

HHPK 200. US-Concept of Lifetime Wellnes. 3 Hours.
Concepts of Lifetime Wellness - Three semester hours This course is designed to provide information related to the need for healthy lifestyles and their contribution to human well-being. Units of instruction will include procedures for assessing wellness levels in the various components of health and strategies used in developing lifetime wellness among students. Restricted to BAAS majors only.
HHPK 210. SPORTS APPRECIATION. 3 Hours.
Sports Appreciation for the Spectator. Three semester hours. A course specially designed as an elective course for all students who desire a broader knowledge of major and minor sports. Rules, terminology, and the finer points of many sports are studied. Open to all students.
HHPK 211. First Aid and Safety. 3 Hours.
First Aid and Safety. Three semester hours. (Same as HHPH 211) This course is designed to develop the knowledge and skills necessary to be effective in providing safe environments and as a first responder to accidents and/or sudden illness. Life saving skills, accident prevention principles, and the proper use of Automated External Defibrillators (AED) will also be included.

## HHPK 213. Prevention and Care of Athletic Injuries. 3 Hours.

(PHED 2356) Prevention and Care of Athletic Injuries. Three semester hours. (Same as HHPH 213) A course designed to provide entry level knowledge in the field of sport related injuries. This course includes units dealing with the history of athletic training, basic anatomy of common injuries, evaluation techniques, preventive measures to reduce the incidences of injuries and a knowledge of basic treatment procedures to be used after injuries occur. Legal and ethical issues will also be discussed. Prerequisite: HHPH/ HHPK 172 or consent of instructor.
HHPK 235. SOCIAL AND POPULAR DANCE. 1 Hour.

## HHPK 245. CONTEMPORARY GAMES. 1 Hour.

HHPK 250. Physical Activity Skills I: Conditioning, Individual and Dual Sports. 3 Hours.
Physical Activity Skills I: Conditioning, Individual and Dual Sports. Three semester hours. The purpose of this course is to develop the techniques for sports conditioning and fundamental skills used in teaching individual/dual sports. This course will also focus on the various stages of games skill development for a variety of activities.

## HHPK 251. Physical Activity Skills II: Team Sports. 3 Hours.

Physical Activity Skills II: Team Sports. Three semester hours. The purpose of this course is to develop the techniques utilized in fundamental skills for team sports. This course will also focus on the various stages of games skill development. An emphasis will be placed on designing a variety of learning experiences for grade appropriate team sports. Prerequisite: HHPK 250.

HHPK 252. EXERCISE \& DANCE MAJORS. 1 Hour.

## HHPK 274. Adapted Physical Education. 3 Hours.

Adapted Physical Education. Three semester hours. A course designed to provide knowledge related to handicapping conditions and the effects of these handicaps upon motor development and the performance of motor activities. The types of conditions considered range from orthopedic handicaps, learning disabilities, and cardio-respiratory disorders to behavior disorders, sensory impairments, and other permanent and temporary handicapping conditions.

## HHPK 301. PARTICIPATION IN HEALTH \& PE. 1 Hour.

Participation in Health and Physical Education (Elementary). One semester hour. Exploration experiences in educational programs in health and physical education through the elementary school level. May be repeated for up to three semester hours credit.

## HHPK 304. Motor Development. 3 Hours.

Motor Development. Three semester hours. This course will offer instructional techniques for early childhood motor activities and development. Experiences will be presented in a variety of activities with an emphasis on motor development, skill themes, rhythmic movement, and tumbling and developmental gymnastics. Prerequisite: HHPK 154.

## HHPK 314. Teaching Methods in Physical Education I. 3 Hours.

Teaching Methods in Physical Education I. Three semester hours. A course designed to enable the student to learn the process of movement and skill acquisition for elementary children. Principles and practices related to the learning of children's movement skills fitness and active lifestyles will be investigated. Includes the scientific basis for motor performance, curricular organization, and pedagogical methodology related to the elementary school physical education program. Prerequisite: HHPK 154 and junior/senior standing.

## HHPK 315. Teaching Methods in Physical Education II. 3 Hours.

Teaching Methods in Physical Education II. Three semester hours. A course designed to enable the student to learn the processes of movements and skill acquisition of students in middle/secondary schools. Using state standards, it provides information related to curriculum selection and implementation of middle/secondary public school physical education programs. Students will demonstrate competencies in presentations utilizing various instructional strategies. Prerequisite: HHPK 154 and junior/senior standing.

## HHPK 324. Health and Kinesiology for Children. 3 Hours.

(TECA 1318 non-advance credit) Health and Kinesiology for Children. Three semester hours. A course designed to acquaint elementary education majors with current health information and activities appropriate for the pre-kindergarten through fourth grade child. Principles of kinesiology, analysis of motor skills, and age appropriate interdisciplinary activities will be explored one-half of the semester.

HHPK 335. Kinesiology and Biomechanics. 4 Hours.
Kinesiology. Four semester hours. A study of human musculoskeletal anatomy and function. Prerequisite: BSC 251 or consent of instructor.
HHPK 339. DRIVERS EDUCATION. 3 Hours.
Driver Education. Three semester hours. A course designed to address the classroom phase of drive education to be taught to beginner drivers. Options allowed by the State Board of Education will be studied.

HHPK 350. Motor Learning and Motor Control. 3 Hours.
Motor Learning and Motor Control. Three semester hours. The study of the acquisition of psychomotor skill and neuromuscular function in the control of movement. Prerequisite: BSC 251 or consent of instructor.

## HHPK 390. TCH DESIGNS, STRAT \& COMP. 3 Hours.

## HHPK 397. Special Topics. 1-4 Hour.

Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## HHPK 414. Theory of Coaching Football and Soccer. 3 Hours.

Theory of Coaching Football and Soccer. Three semester hours. A comprehensive study in coaching football and soccer. Students will study rules, strategies and tactics, scouting, evaluation of skills, and motivation of athletes.

## HHPK 416. Theory of Coaching Baseball and Softball. 3 Hours.

Theory of Coaching Baseball and Softball. Three semester hours. A comprehensive study in coaching baseball and softball. Students will study rules, strategies and tactics, scouting, evaluation of skills, and motivation of athletes.

## HHPK 417. Measurement and Evaluation. 3 Hours.

Measurement and Evaluation. Three semester hours. This course is intended to address the current practices in conducting data-based measurement and evaluation processes. Specifically, this course will examine statistical techniques necessary for manipulation and interpretation of various performance data. Prerequisites: Math 141 or 175 or 179 and junior or senior standing.

HHPK 439. DRIVERS ED II. 3 Hours.
Driver Education II. Three semester hours. The T.E.A. Driver Education Standards of Operation will be followed to assure standards compliance.

## HHPK 444. Administration of Kinesiology and Sports Programs. 3 Hours.

Administration of Kinesiology and Sports Programs. Three semester hours. An integrated study of the administration of traditional and contemporary kinesiology and sports programs. Philosophies and principles of the administration of kinesiology and sports programs will be applied to various areas of concern such as personnel policies, leadership, facilities, equipment, record keeping, finance, legal implications, and program promotion. Prerequisites: junior or senior standing.

## HHPK 450. Exercise Physiology. 4 Hours.

Exercise Physiology. Four semester hours. Topics include aerobic and anaerobic energy sources for muscular activity, physiology of muscle contraction; strength, and flexibility. The role of nervous system control of muscular activity. Pulmonary and circulatory physiology; gas exchange and transport, body composition and weight control. Pediatric exercise physiology. Prerequisites: BSc 251 and 252 or consent of instructor.

## HHPK 451. Topics in Exercise Science. 4 Hours.

Topics in Exercise Science. Four semester hours. Advanced topics in exercise science to include biomechanics, exercise physiology, and/or motor learning. Prerequisites: BSc 251 and 252 or consent of instructor.

## HHPK 454. Theory of Coaching Track and Field and Cross Country. 3 Hours.

Theory of Coaching Track and Field and Cross Country. Three semester hours. A comprehensive course covering basic knowledge in the theory of coaching track and field and cross country. Fundamental skills in the individual events of track and field will be analyzed. Students will also study rules and tactical strategies.

## HHPK 455. Theory of Coaching Basketball and Volleyball. 3 Hours.

Theory of Coaching Basketball and Volleyball. Three semester hours. A comprehensive study in coaching basketball and volleyball. Students will study rules, strategies and tactics, scouting, evaluation of skills, and motivation of athletes.

## HHPK 459. DRIVER EDUCATION III. 3 Hours.

Driver Education III. Three semester hours. A course to address learning styles, student discipline, lesson planning, and administration of the driver education program. Curriculum adopted and distributed by the Texas Education Agency will be followed for content and contact hours recommended.

## HHPK 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.
HHPK 490. H HONORS THESIS. 1-6 Hour.
H Honors Thesis Hours: 6 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite: Consent of head. Note: May be repeated when the topic varies.

## HHPK 491. H IND HONORS READING. 3 Hours.

HHPK 491 - H IND HONORS RDGS. - Three semester hours Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.
HHPK 497. Special Topics. 4 Hours.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## Health \& Human Perfor Courses

## HHPS 100. Foundations of Sport and Recreation. 3 Hours.

Foundations of Sport and Recreation. Three semester hours. The history, philosophy, principles, and opportunities in sport and recreation management, both in the private and public sectors.
HHPS 110. Principles of Leadership in Sport and Recreation. 3 Hours.
Principles of Leadership. Three semester hours. Examination of the role of administration and leadership in the objectives, organization, and procedures of sport and recreational organizations.
HHPS 200. Programming in Sport and Recreation. 3 Hours.
Programming in Sport and Recreation - Three semester hours. Exploration and examination of the foundations and basic sport programming skills, methods, and techniques necessary to deliver sport and recreational activities within a variety of settings, agencies and/or organizations.

HHPS 210. Sport Psychology. 3 Hours.
Sport Psychology. Three semester hours. An overview of the principles of psychology as applied to sport or recreational activity for enhanced interactions and performance.
HHPS 300. Field Experience in Sport and Recreation. 3 Hours.
Field Experience in Sport and Recreation Management - Three semester hours Provides an opportunity for supervised observation and participation in a variety of settings related to sport and recreation management. This course will also help students to prepare for their internship. Prerequisite: HHPS 100, 110 and 200.
HHPS 310. Event and Facility Management. 3 Hours.
Event and Facility Management. - Three semester hours An examination into the history of sport and recreation facilities, along with appropriate procedures for the planning and operating of current and future sport and recreation facilities. Planning, organizing, coordinating, and managing of sport and recreation events will be famor foci.
HHPS 317. Individual and Group Exercise Instruction Techniques and Methodologies. 3 Hours.
Individual and Group Exercise Instruction.- Three semester hours. Examination of the theoretical knowledge and practical skills in preparation for national certification in individual and group exercise training. Participants will practically apply classroom knowledge during interactive training sessions including performing fitness assessments and creating exercise prescriptions.
HHPS 320. Legal and Social Issues in Sports. 3 Hours.
Legal and Social Issues in Sport. Three semester hours. Examinion of legal and ethical concepts related to sport and recreation management. Topics will include athletic participation and eligibility, public facility use issues, constitutional due process, contracts and tort law as applied to participants and spectators. Concepts, models, and techniques to use in managing ethical dilemmas will be explored. Prerequisite: HHPS 100 and 110.
HHPS 350. Social Issues in a Global Sport Economy. 3 Hours.
Social Issues in a Global Sport Economy - Three semester hours An examination of social and ethical issues which affect sport, the sport industry, and sport managers in today's global marketplace. Topics include a survey of the cultural, economic, and technological structures which compose, and contribute to, an ever-changing and expanding international sport business. This Sport organizations, and the production and consumption of sport products will be analyzed concering their roles in global sport commerce. Pre-requisites : Junior or Senior standing.

## HHPS 400. Management of Sport and Recreation Organizations. 3 Hours.

Management of Sport and Recreation Organizations. - Three semester hours. An examination of the management and operational techniques and strategies for sport and recreation programs. Topics include the determination of strategic direction for sport and recreation organizations and effective implementation of strategies. Prerequisite: Junior or Senior standing.

HHPS 410. Economics and Finance of Sport. 3 Hours.
Economics and Finance of Sport -Three semester hours. An examination of the principles of finance as applied to budgeting, operations, and business decisions in recreation and sport organizations. Topics include financial indicators for strategic planning, strategies for generating income, and the allocation of resources. Prerequisite: Junior or Senior standing.

## HHPS 415. SCH AND COM RECREATION. 3 Hours.

School and Community Recreation. Three semester hours. A study of the recent trends in recreation and leisure-time pursuits, the organization and content of programs for school, and community recreation programs.
HHPS 420. Marketing for Sport and Recreation. 3 Hours.
Marketing for Sport and Recreation. - Three semester hours. An examination of marketing concepts, advertising, consumer behavior, strategic planning and the marketing of sport or recreation as a consumer product.
HHPS 450. Internship in Sport and Recreation Management. 6 Hours.
Internship in Sport \& Recreation Management Designed to give students practical work experience with a sport and/or recreation organization. Current job-related topics and job procurement techniques will be discussed. Note: senior standing.

## HHPS 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## HHPS 490. H - Honors Thesis. 3 Hours.

H Honors Thesis. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note: May be repeated when the topic varies.

## Health \& Human Perfor Courses

HHPH 130. Introduction to Personal and Community Health. 3 Hours.
Introduction to Personal and Community Health. Three semester hours. An introduction to personal and community health, this course will acquaint students with basic principles of health. Studies include community health problems, programs, agencies, and health careers. Attention will also be given to cultural diversity in matters pertaining to health.
HHPH 172. Exer Body Systems. 3 Hours.
Exercise and the Body Systems - Three semester hours A study of the structure and function of selected body systems and their integration into personal health. Designed to be a foundation for other health and human performance courses.
HHPH 210. Environmental Health. 3 Hours.
Environmental Health. Three semester hours. This course covers environmental health topics of importance to the health promotion practitioner. Environment is approached as one of the determinants of health for individuals and human populations.
HHPH 220. Emotional Health. 3 Hours.
Emotional Health. Three semester hours. This course is designed to provide the student with principles and methods necessary for understanding emotional health and developing an emotional health plan. The concept of emotional wellness and the role stress in emotional health development are examined.

## HHPH 250. Consumer Health. 3 Hours.

Consumer Health. Three semester hours. Attention will be given to current health problems and issues dealing with consumerism. The course will involve students establishing concepts of self-protection in sales promotion of health products and services.
HHPH 265. Substance Use and Abuse. 3 Hours.
Substance Use and Abuse. Three semester hours. An examination of the physiological, psychological, and social effects of drugs and other harmful substances. Legal and ethical implications are considered.

## HHPH 331. Nutrition. 3 Hours.

Nutrition. Three semester hours. Basic facts and principles of human nutrition are presented. Study includes the physiological and psychological factors of food intake and utilization with emphasis on nutrition education for dietary improvements of groups and individuals.

## HHPH 362. Human Diseases. 3 Hours.

Human Diseases. Three semester hours. A study of communicable and non-communicable diseases. Emphasis is placed on causative factors of various diseases, means of transmission, and prevention. Prerequisite: HHPH 172 or HHPK 172 or BSC 251, or consent of instructor.

HHPH 382. Elementary and Secondary School Materials in Health Education. 3 Hours.
Elementary and Secondary School Material in Health Education. Three semester hours. A study of the organization and curriculum of the elementary and secondary school health program including individual guidance, healthful school environment, protective measures, screening procedures, evaluation of methods of instruction, teaching materials lesson planning, units of study, and methods and materials in the teaching of health education.
HHPH 385. Current Issues in Health. 3 Hours.
Current Issues in Health. Three semester hours. This course will examine emerging issues and trends relevant to health and the application of health decisions. Prerequisite: junior or senior standing.
HHPH 410. Planning and Organization of Health Promotion. 3 Hours.
Planning and Organization of Health Promotion. Three semester hours. This course will involve program planning in the health promotion field, including needs assessment, missions, goals and field objectives of health promotion programs. Prerequisite: junior or senior standing.

## HHPH 420. Program Implementation and Evaluation of Health Promotion. 3 Hours.

Program Implementation and Evaluation of Health Promotion. Three semester hours. The course will include program implementation and evaluation in several health promotion settings. Prerequisite: HHPH 410.

## HHPH 430. Health Promotion with Special Populations. 3 Hours.

Health Promotion with Special Populations. Three semester hours. This course will include learning about and developing health promotion programs for special populations such as older adults, children, and the physically challenged. Prerequisite: junior or senior standing.
HHPH 472. Stress Management. 3 Hours.
Stress Management. Three semester hours. This course includes a study of the nature and psychology of stress with particular emphasis placed on coping strategies and relaxation techniques. Conflict resolution and interpersonal relationships will also be discussed.

## HHPH 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## HHPH 490. H Honor Thesis. 3 Hours.

H Honors Thesis Hours: 6 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

## HHPH 491. H IND HONORS READINGS. 3 Hours.

H Ind Honors Readings Hours: 3 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

HHPH 495. Internship and Seminar in Health Promotion. 3 Hours.
Internship and Seminar in Health Promotion This course is taken during the senior year and is designed to give students practical work experience with a health promotion or sport \& recreational organization. Current job-related topics and job-hunting techniques will be discussed. Note senior standing.

HHPH 497. Special Topics. 4 Hours.
Special Topics.

## History Courses

## HIST 189. INDEPENDENT STUDY. 4 Hours.

## HIST 253. Reading and Writing History. 3 Hours.

Reading and Writing History. Three semester hours. This course introduces students to the discipline of history as it is taught at the college level. Students will discover how and why historians debate issues of evidence and interpretation. By studying the "history of history," students will learn to distinguish between various schools or styles of academic history; to improve reading, note-taking, and library skills; and to formulate meaningful thesis statements. Students will apply the lessons of the course in a hands-on research experience which will result in the preparation and presentation of a finished historical essay in approved scholarly form.
HIST 264. A Nation Divided: American History. 3 Hours.
A Nation Divided. Three semester hours. America is a country characterized by diversity. Its history is the story of interactions between groups divided by race, ethnicity, language, income, religion, ideology, culture, and gender. This course explores the nature of encounters between social groups and the consequences such encounters had for American culture and politics. Topics such as Native American history, the Civil Rights Movement, and the labor movement may receive special attention. Note: This course satisfies a Humanities requirement for University Studies.

HIST 265. A World Divided: Global History. 3 Hours.
A World Divided. Three semester hours. Encounters between human populations who perceive the differences that separate them to be greater than the similarities that unite them have punctuated world history. Such encounters have frequently led to war, imperialism and colonization, and less frequently to cultural imitation and syncretism. The modern world is the product of these encounters as much as, if not more than, it is the product of the development of district regional cultures, such as Western Civilization. This course explores th nature of such encounters and the consequences they had for cultural and political developments. Topics such as the slave trade, European colonization, and globalization may receive special attention. Note: This course satisfies a Humanities requirement for University Studies.

HIST 303. Historical Geography. 3 Hours.
Historical Geography. Three semester hours. A study of the various ways in which history has affected and has been affected by geography, including but not limited to physical, political, cultural, and environmental elements. Topics may include the emergence of ancient civilizations, the spread of Islam, and global commercial relations. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 305. World History: Origins through the Seventeenth Century. 3 Hours.

World History to 17 th Century - Three semester hours World History differs from traditional Western Civilization not only in its greater geographic scale but also its longer chronological scope. This course begins with the earliest human tribal organizations. Consideration of the ancient period will also include the development of cradles of civilization, the growth and decline of classical cultures, interactions among classical and nomadic peoples, and the establishment of great world religions. The study of the medieval period will include varieties of rebuilding after the collapse of classical empires, the roles played by great world religions in medieval cultures, the development of technologies of communication and transportation, and the interactions among settled and nomadic peoples. Topics considered in the early modern period include the voyages of exploration and early colonization efforts by China and Europe, and the impact of emerging globalization. Prerequisite and/or Corequisite Majors: Hist 253. Non-Majors: may enroll with consent of instructor.

## HIST 306. The Emergence of the Modern World. 3 Hours.

The Emergence of the Modern World. Three semester hours. This course covers the period from 1500 to the present and will focus on the ecological conditions of globalization, the rise of "formal" imperialism, and the construction and maintenance of colonial/imperial states. Themes covered will included paths to modernity, non-western philosophies of resistance, technological revolutions, and the intersections of world thought, religion, trade, and economy. Special emphasis will be given to the non-Wester world. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 312. Ancient and Medieval Europe. 3 Hours.

Ancient and Medieval Europe. Three semester hours. This course begins with a consideration of classical Greece and Rome, continues into the Late Antique period when classical culture gave way to medieval and then through the European Middle Ages, ending about 1500. Continuity and change between the classical and post-classical periods will be examined from a variety of perspectives, including the fortunes of political, social, economic, and religious institutions; the forms and varieties of social organizations; the models and content of philosophy, literature, and the arts; and technology. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 313. A Feudal Society. 3 Hours.

A Feudal Society. Three semester hours. This course examines European society during the period roughly from 500 to 1500 . The focus will be on how different groups of people experienced life during the Middle Ages. Topics will include the three estates and those on their margins; economic and occupational organizations; and gender and family roles. The course will also study how medieval people understood their own society, that is, how medieval beliefs, particularly religious beliefs, informed how medieval people interpreted their world. Majors: Pre or co-requisite: Hist 253 . Non-majors may enroll with consent of instructor.

## HIST 314. The European Reformations. 3 Hours.

The European Reformations. Three semester hours. This course examines how Christian beliefs, institutions, and practices altered in Europe from the late fourteenth through the mid-seventeenth centuries. The course will begin with a consideration of theologians and the theology, both from the late middle ages, such as John Wycliffe, and the sixteenth century, such as Martin Luther. It will analyze the institutional cultural, and political ramifications of religious beliefs, including the formation of new Christian churches; the alliances formed between churches and national governments; and the changes in attitudes towards women and the poor, manifested in episodes such as the witch craze. The course will conclude with a consideration of the Thirty Years War (1618-1648) and its consequences. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 327. Europe in the Age of Enlightenment and Revolution, 1648-1848. 3 Hours.

Europe in the age of Enlightenment and Revolution. Three semester hours. This courses will explore European history from the Age of Louis XIV to the mid-nineteenth-century revolutions, tracing the changes in ideas about politics, governance, and society as they evolved from theories of divine rule to the realities of mass politics. Particular attention will be paid to the phenomena of absolutism and enlightened despotism, the general transformation of intellectual thought known as the Enlightenment, and the events leading up to the French Revolution. Finally, the course will trace the impact of the French Revolution on European society, culture, and politics, highlighting the developments that made mass political participation possible. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 329. Women and Gender in European History. 3 Hours.

Women and Gender in European History. Three semester hours. This course explores European women's and men's changing social roles and competing views of femininity and masculinity in Modern Europe. It examines the status and role of women as well as the cultural construction of myths of gender and sexuality. Special attention will be paid to questions of equality and difference, the relationship between gender and politics/power, and issues of the female body, sexuality, and the family. Students will investigate the expectations that European societies proposed for women, the diversity of roles that women assumed in all fields of activity -- economic, social, political, religious, and cultural -- and how different women experienced transformation in their daily life as well as cataclysmic social and political change. Prerequisite or co-requisite: Hist 253.
HIST 333. Modern Europe, 1848-1991. 3 Hours.
Modern Europe 1848-1991. Three semester hours. This course investigates the momentous events of the late nineteenth and twentieth centuries in Europe and the impact of these developments on the rest of the world. Over the course of the semester, students will explore the formation of European nations, states, and empires; the emergence of ideologies such as nationalism, socialism, communism, and fascism; the impact of technological developments; and the devastation of the wars and genocides that have shoped the modern period. The course, framed by the Europe-wide upheavals of 1848 and 1991, gives special attention to the role of revolution, protest, and mass movements in Modern Europe, and the important contributions that Eastern Europe (including Russia) has made in shaping these events. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 334. Urban Underworlds: The City and Its People in Modern Europe. 3 Hours.

Urban Underworlds: The City and Its People in Modern Europe. Three semester hours. Industrialization and the urbanization that accompanied it changed the nature of Europe's cities permanently. These new metropolises brought the contradictions of modern life into sharp relief. This course takes a comparative approach to analyze the urban environment in cities such as London, Paris, Vienna, Berlin, St. Petersburg, and Moscow. Focusing on the "hidden" worlds of the ordinary person we will examine issues of class, crime and social control, prostitution and vice, entertainment and culture, and health and hygiene, as we explore the impact of change and modernity on Europe's urban landscape. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 360. Themes in World History. 3 Hours.

Themes in World History. Three semester hours. A study of the themes which influenced all human cultures from the earliest times to the present, considered within the context of a comparative framework. Such themes as the impact of technological change on society, the development of means of economic exchange and the structure of religious and ideological systems will be examined. May be repeated for credit up to nine semester hours as topics change. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 365. History of Modern East Asia. 3 Hours.

History of Modern East Asia - Three semester hours. This course is a survey of developments in China, Japan, Korea and Vietnam during the nineteenth and twentieth centuries with emphasis on the impact of the West in the nineteenth century and modernization in the twentieth. It considers the impact of domestic and global conditions on East Asian history as a means of understanding regional and national events in an international context. This course will examine in detail the growth and effects of nationalism in East Asia and specific emphasis will be placed on comparing the efforts by China and Japan to modernize in response to ongoing Western encroachment. From this foundation, students will then consider the challenges faced by these countries in the post-war world. This course presupposes no prior knowledge of East Asian history. Prerequisite and/or Co-requisite Majors: HIST 253. Non-majors: may enroll with consent of instructor.
HIST 366. Modern India. 3 Hours.
Making of Modern India - Three semester hours. This course surveys the history of the Indian subcontinent from c. 1700 to the present. It considers the larger trends, changes and themes in Indian history, with particular emphasis on those occurring during British colonial rule and on those fostering India's transition to an independent state. The larger political and social and impacts of Mughal decline and the advent of British rule will be explored, as will the nature of the two-century British Raj. A significant focus over the semester will be the formation and evolution of an Indian nation-state and the characteristics of India's anti-colonial movement. Through this sweeping assessment of historic trends, students will be prepared to understand the long-term significance and implications of the events of the past in framing recent and contemporary concerns in India and Pakistan. This course presupposes no prior knowledge of South Asian history. Prerequisite and/or Co-requisite Majors: HIST 253. Non-Majors: may enroll with consent of instructor.

## HIST 375. Colonial Latin America. 3 Hours.

Colonial Latin America. Three semester hours. This course offers an introduction to the history of Latin America from the late pre-Columbian period through the initial Movements for independence. it will highlight the Amerindian, African and European experiences in the colonization process; as well as the colonial structures. Topics include Christianization, race and gender relations, political and economic systems, and the rise of Creole nationalism. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 385. Latin America in the Modern Period. 3 Hours.

Latin America in the Modern Period. Three semester hours. This course will examine Latin America since the independence process. It will study the obstacles confronted by the new nations, as well as themes such as; the role of women in society, political violence and resistance, as well as the deepening links between Latin America and the world economy and its relationship with the United States. Majors: Pre or co-requisite: Hist 253. Nonmajors may enroll with consent of instructor.

## HIST 389. Independent Study. 1-4 Hour.

## HIST 400. Controversies in History and Social Studies. 3 Hours.

Controversies in History and Social Studies. Three semester hours. Controversies in History and Social Studies: This course will explore the relationships between and the intersections among the social studies content areas (history, government, economics, and geography). Student work will include analyses of content-area textbooks, state assessments, and established curriculums. Prerequisite or co-requisite: Hist 253.

## HIST 402. Colonial North America to 1775. 3 Hours.

Colonial North America to 1775. Three semester hours. This course explores the lives and cultures of American Indians, Europeans, and Africans/ African Americans in North America, and the experience of colonialism, from the Precontact Period through the imperial crisis leading to the American Revolution. Topics covered include the conflict and cooperation between natives and newcomers, the role of religion in the conquest and settlement of the continent, the economic and political development of British America, the pivotal role of slavery, the evolving social structures of colonial communities, and the souring of relations between the British mainland colonies and Great Britain in the 1770s. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 403. Revolutionary America and the Early National United States, 1775-1850. 3 Hours.

Revolutionary America and the Early National US, 1775-1850. Three semester hours. This course examines the rise, progress and ramifications of the American Revolution that created the United States of America, from its beginnings in the 1770s through the development of a radical democratic nation by 1850 . Topics covered include the social, economic, and political maturation of British colonial America preceding the Revolution; the War for independence and the creation of nationhood; the later consequences of independence; the role of region in early national American society; the conflicts leading to American Indian removal; and the debates over constitutionalism, federalism, slavery and states rights that divided North from South. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 404. Religion in Early American History. 3 Hours.

Religion in Early American History. Three semester hours. This course surveys the development of religion in North America from the Precontact Period to the end of the American Civil War, with an emphasis on the transplantation and evolution of European Christianity. Topics covered include American Indian and African religions as they developed in contact with missionizing Christianity in the colonial and early national contexts, the influence of Protestantism on American identity, the religious justifications for slavery, issues pertaining to religious tolerance and the separation of church and state under the Constitution, the First and Second Great Awakenings, nineteenth-century reform movements and the role of religion in warfare from the Pequot War through the Civil War. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.
HIST 405. The Civil War and Reconstruction, 1850-1877. 3 Hours.
The Civil War and Reconstruction, 1850-1877. Three semester hours. This course charts national debate over slavery from the early Republic through secession, addresses topics concerning the conduct and outcome of the war, and discusses the legacy of the conflict in American history with special attention to the period of Reconstruction. The course strikes a balance between military, political, economic, racial, and gender issues in understanding the period. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 407. Emergence of Modern America, 1850-1920. 3 Hours.

Emergence of Modern America, 1850-1920. Three semester hours. This course examines the final crisis between the sections over the issue of slavery which produced Civil War, slavery's destruction, and opened a long tortured effort to fully define citizenship for those freed from slavery's grasp. Industrialization and its complications brought political radicalism and demands for reform. Economic growth helped fuel expansion overseas greater involvement in the international affairs, and involvement in the First World War. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 409. The Twentieth-Century United States. 3 Hours.

The Twentieth-Century United States. Three semester hours. The cataclysm of World War I produced international economic catastrophe, masked initially in America by an emerging consumer economy and the Jazz Age. Economic depression produced a climate in which the government became the insurer of general prosperity. World War II ended the Great Depression, produced the modern middle-class but also began a period of prolonged international competition with the Soviet Union. Despite prevailing over communism, the United States closed the century facing international uncertainty and economic limits. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 410. Civil Rights Movement, 1940-1968. 3 Hours.

Civil Rights Movement, 1940-1968. Three semester hours. An exploration of the African American Civil Rights Movement, concentrating on developments in the American South. Topics covered include the origins of segregation and disfranchisement, extralegal methods of social control, national developments fueling black resistance, the varied groups within the movement, Black Power, and the decline of the movement after 1968. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 411. Race and Education in the 20th Century US. 3 Hours.

Race and Education in the 20th Century U.S. Three semester hours. This course will explore the evolution of the national culture of public education in the U.S. after the Civil War era. Students will examine political efforts used to assimilate minority populations in the U.S. in order to promote citizenship, as well as the impact of legislation and court decisions on public schools. The course will also include an investigation of the effects of education policies on children and their families, and how schools perpetuate racism and discrimination. Topics considered may include the impact of segregation on the educational experiences of African Americans and the consequences of attempts at forced assimilation on Native American educational experiences. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 415. History of Texas. 3 Hours.

History of Texas. Three semester hours. A topical examination of Texas history, this course covers material from the time of Spanish colonization to the present day. The state's diversity and development take center stage, and the state's history is placed in the context of national and global trends. This course examines political, economic racial, ethnic gender, and social issues in Texas history. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 425. Themes in Southern History. 3 Hours.

Themes in the History of the American South - Three Semester Hours Hist. 425 is a study of the themes which influenced the history of the southern United States considered within the context of a comparative framework. It is primarily concerned with the development of southern regional identity prior to and/or after the Civil War. To promote an understanding Southern regional identity, the course will examine class, racial, political, economic, gender, and religious issues. Matters relating to the Civil War are largely reserved for Hist 405 . Note the course may be repeated for credit up to nine semester hours as topics change. Prerequisite and/or Corequisite Majors: Hist 253. Non-Majors: may enroll with consent of instructor.

## HIST 437. American Diplomatic History. 3 Hours.

American Diplomatic History. Three semester hours. This course is a study of U.S. foreign policy which examines the international role of the U.S. as its prominence in world affairs grew from the period of the Spanish-American War through the World Wars, and the Cold War. Peace time as well as war time developments will be investigated. Majors: Pre or co-requisite: Hist 253. Non-majors may enroll with consent of instructor.

## HIST 439. Women and Gender in U.S. History. 3 Hours.

Women and Gender in U.S. History - Three semester hours. This course explores the study of women, gender and sexuality in the United States with primary focus from the mid-nineteenth through the twentieth centuries. It is the goal of this course to encourage the analysis and discussion of the social, political, and economic meanings of gender in the United States by examining the experiences of women and men from a variety of cultural vantage points using both primary and secondary sources. Prerequisite and/or Corequisite Majors: Hist 253. Non-Majors: may enroll with consent of instructor.

## HIST 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Pre or co-requisite: Hist 253.

## HIST 490. H Honors Thesis. 3-6 Hour.

H Honors Thesis Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

## HIST 491. H Ind Honors Readings. 3 Hours.

H Ind Honors Readings Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

## HIST 497. Special Topics in History. 3 Hours.

Special Topics in History. One to four semester hours. Special Topics in History.Organized class. May be repeated when topics vary. Prerequisite or corequisite: Hist 253.

## HIST 1301. US History to 1877. 3 Hours.

U.S. History to 1877. Three semester hours. A broad interdisciplinary course in the historical development of the United States and North America to 1877. Assignments will focus on reading, writing, and analysis. Prerequisite and/or Corequisite: Eng 1301 or 1302.

## HIST 1302. US History from 1865. 3 Hours.

(HIST 1302) U.S. History from 1865. Three semester hours. A broad interdisciplinary course in the historical development of the United States and North America from 1865. Note: Assignments will focus on reading, writing, and analysis. Pre/co-requisite Eng. 1301 or 1302.

## Industrial Engineering Courses

## IE 101. Introduction to Industrial Engineering. 3 Hours.

Introduction to Industrial Engineering. Three semester hours. Basic industrial engineering concepts to include systems optimization, variability in systems, and production systems. Student teams engage in design projects that required the integration of several concepts. Ethics and professional conduct are stressed. The computer competency evaluation will be administered in this course. Co-requisite: Placement and enrollment in Math 142, 2413,192 , or 315 , and Eng 1301 or 1302, if not all complete.

## IE 201. Elementary Engineering Analysis. 3 Hours.

Elementary Engineering Analysis. Three semester hours. This course will utilize Microsoft Excel to solve problems that commonly arise in engineering analysis. Numerical methods of problem solving will be emphasized. Problem solving techniques will be accentuated rather than the underlying mathematical solution procedures. Application of these methods for use in other science, mathematics, engineering, and technology courses will be illustrated. A one-hour per week outside class laboratory will be required. Prerequisite: Math 2413.

## IE 207. Engineering Economic Analysis. 3 Hours.

Engineering Economic Analysis. Three semester hours. Emphasizes the systematic evaluation of the costs and benefits associated with proposed technical projects. The student will be exposed to the concepts of the "time value of money" and the methods of discounted cash flow. Students are prepared to make decisions regarding money as capital within a technological or engineering environment. Prerequisite: IE 201.

## IE 211. Engineering Probability and Statistics. 3 Hours.

Engr Prob and Stat. Three semester hours. This course covers the role of statistics in engineering, probability, discrete random variables and probability distributions, continuous random variables and probability distributions, joint probability distributions, random sampling and data description, point estimation of parameters, statistical intervals for a single sample, tests of hypotheses for a single sample. Co-requisite: Math 192.

## IE 305. Facilities Planning and Management. 3 Hours.

Facilities Planning and Management. Three semester hours. Study of production facilities, including location, planning, design and maintenance. Emphasis on production systems, machine selection, automation, material handling, storage and warehousing, quality, retrofitting and preventative maintenance.

## IE 311. Advanced Engineering Statistics. 3 Hours.

Advanced Engineering Statistics. Three semester hours This course examines model building, design of experiments, multiple regression, nonparametric techniques, contingency tables and introduction to response surfaces, decision theory and time series data. Prerequisite: IE 211.

## IE 312. Industrial Operations Research I. 3 Hours.

Industrial Operations Research I. Three semester hours. This course focuses on the application of linear programming techniques. Most of the mathematic models presented in the course are normal prescriptive or optimization applications. The models include the Diet, Work-Scheduling, Capital Budgeting, Short-Term Financial Planning, Blending, Multi-period Decision (Inventory model), Multi-period Financial Model, and Multi-period Work Scheduling. The course includes discussions of the simplex algorithm and other methods to derive solutions for the above models. The Excel Solver software is also used in the course to solve linear programming problems. Discussions (Sensitivity Analysis) are included as to how changes or variations in a linear programming's parameters affect the optimal solution. These techniques in the course are included to present the student, methods for deriving solutions of resource allocations, distributions, and business and industrial performance parameter index settings. Prerequisite: Math 335.
IE 313. Industrial Operations Research II. 3 Hours.
Industrial Operations Research II. Three semester hours. Development and application of probabilistic analytical methods including Markov chains, queuing systems and digital simulation modeling. Prerequisite: IE 312.

## IE 314. Statistical Quality Control. 3 Hours.

Statistical Quality Control. Three semester hours. This course focuses on the application of linear programming techniques. The models included in this course are Transportation, Assignment and Transshipment. The network models (Shortest Path; Maximum-Flow; Minimum-Cost; and CPM and PERT) are included. The course includes formulating integer programming problems. A formal study focused on deterministic economic order quantity (EOQ) inventory models is presented. The inventory models in which demand over a given time period is considered uncertain or stochastic in nature are studied. Prerequisite: IE 312.

## IE 316. Manufacturing Systems Design and Control. 3 Hours.

Manufacturing Systems Design and Control. Three semester hours. Advanced course emphasizing the analysis and design of job requirements, workplace arrangements, material handling devices/systems and machine controls which improve the human workplace. Students will research and create a system design project. Prerequisites: IE 311 and Math 2413.

## IE 389. Independent Study. 1-4 Hour.

Independent Study - One to four semester hours Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## IE 397. Special Topics. 3 Hours.

Special Topics. Three semester hours. Organized class. May be repeated when topic varies.

## IE 403. Human Factors Engineering. 3 Hours.

Human Factors Engineering. Three semester hours. The emphasis of this course is the design of the human-system interface. 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.

## IE 407. Production Systems Operations. 3 Hours.

Prod Systems Operations. Three semester hours. Analytical principles of manufacturing systems design, analysis and control; emphasis placed on stochastic analysis; role of variability and impact on cycle time; push versus pull production strategies including Kanban and constant WIP control; probability, queueing theory, Little ¿s Law, heavy traffic approximation and queueing networks. Prerequisite: IE 316.

## IE 410. Systems Simulation. 3 Hours.

Systems Simulation. Three semester hours. The application of simulation to facilities layout for manufacturing industries, service business models, entertainment and crisis management is emphasized. Areas covered include system structure, system analysis, model construction, data collection, and computer simulation languages. Prerequisite: IE 311.
IE 411. Engineering Management. 3 Hours.
Engineering Management. Three semester hours. Techniques relating to managing engineering activities; engineer's transition into management; engineering managerial functions; motivation of individual and group behavior; productivity assessment/improvement; managing the quality function and communications. Prerequisite: Senior classification in Industrial Engineering.

## IE 431. Principles of Programmable Automation. 3 Hours.

Principles of Programmable Automation. Three semester hours. (2 lecture, 2 lab) 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).

## IE 444. Systems Engineering. 3 Hours.

Systems Engineering. Three semester hours A study of the systems acquisition life cycle, contract negotiations, life cycle cost (LCC) analyses, project cost estimation, project schedule and tracking techniques, reliability and maintainability ( $R \& M$ ) analyses, trade off analyses, test and evaluation (T\&E), design for maintainability, design for manufacturability, design for manageaility.

## IE 471. Planning for Industrial Systems Design. 3 Hours.

Planning for Industrial Systems Design. Three semester hours. This course is a precursor for IE 495 Industrial Systems Design. Each student will be pre-enrolled the following spring in IE 495 and a member of a student team. The objective of the course is for each team to prepare a proposal (technical and management sections) to outline the approach and methodology that the team plans to follow in working with industry sponsors on real-world industrial engineering process improvement activities. The proposed improvement activity will be the systems design project planned for the following spring semester in IE 495 Industrial Systems Design. The proposal prepared during this class is intended to present: the background for the problem, statement and description of the problem, the approach, the methodology and analytical support of the team $\dot{¿}$ s plans for the execution of the project. Prerequisites: Senior Classification, IE Majors only, Course must be scheduled in the fall semester prior to the student¿s IE 495 enrollment in the final spring semester and Instructor $¿$ s consent.

## IE 486. Service Systems Analysis. 3 Hours.

Service systems Analysis. Three semester hours This course focuses on analyses and visualization of engineering issues faced by service industries contrasted against production and manufacturing industries, service business models, development of support facility requirements, technological tools used in serving various business, and metrics to measure quality of services. Prerequisite: Senior Classification. IE Major. Course scheduled in the final semester of the student's IE Program. Co-Requisite: IE 495.

## IE 489. Independent Study. 1-3 Hour.

Independent Study. One to Three semester hours Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies.

## IE 490. H HONORS THESIS. 1-6 Hour.

## IE 491. Honors Reading. 3 Hours.

## IE 495. Industrial Systems Design. 4 Hours.

Industrial Systems Design. Three semester hours. This course is the Industrial Engineering Capstone Design course, covering: flexible manufacturing systems and manufacturing integration; integrated knowledge to be gained from using all required industrial engineering courses in a system design project. Laboratory component will be used to reinforce team activities by working with industry sponsors on real-world industrial engineering process improvement activities. Prerequisites: IE 471; senior standing; IE Major; course scheduled in the final semester of the student ¿s IE program, and consent of instructor.

## IE 497. Special Topics. 3 Hours.

Special Topics. Three semester hours. Organized class. May be repeated when topic varies.

## Industrial Technology Courses

## IT 111. Computer Aided Design (CAD). 3 Hours.

(ENGR 1304) Computer Aided Design (CAD). Three semester hours (2 lecture, 2 lab) This is an introductory course in freehand sketching and computer-aided drafting/ design. Students will taught basic CAD commands, tools, multi-view drawing and dimensioning techniques. For successful completion of this course a comprehensive examination over the use and execution of CAD will be required. Persons not passing the comprehensive examination will be required to repeat the course.
IT 112. Product Design and Development. 3 Hours.
(ENGR 1305) Product Design and Development. Three semester hours. (2 lecture, 2 lab) Product development and design processes and methods, including product specifications, concept development, engineering drawings, design for prototyping, and manufacturing. Prerequisite IT 111 or the equivalent.
IT 225. Industrial Materials \& Process. 3 Hours.
Industrial Materials and Processes. Three semester hours. Study of contemporary production processes, machines and manufacturing materials including metals, plastics, and woods.
IT 231. Electronic Principles. 3 Hours.
(ENGR 2305) Electronic Principles. Three semester hours. (2 lecture, 2 lab) Theory and application of AC and DC. Laboratory includes circuit analysis, schematic reading, basic analog and digital concepts, use of laboratory instruments and troubleshooting. Prerequisite: Math 1314 or consent of instructor.
IT 303. Industrial Communications. 3 Hours.
Industrial Communications. Three semester hours. Study and application of technical writing documents, letters, manuals and reports. Emphasis also on presentations, team building, employee training, interviewing, business etiquette and professionalism. Prerequisite: Junior standing.

## IT 340. Quality Management and Improvement. 3 Hours.

Quality Management and Improvement. Three semester hours. This course examines (1) the primary tools and methods used to monitor and control quality in organizations and (2) the ways in which quality can be improved. Included in the course are such topics as the historical development of quality management, the seven basic tools for quality improvement, and management strategies for implementing world class quality improvement strategies. Emphasis is also given to control chart analysis and process capability study. Perquisite: Junior standing.
IT 371. Construction Safety Management. 3 Hours.
Students will be able to discern the need, technical application, and management/labor implementation issues in preparing safety management plans. Construction safety plans include technical, cultural, legal and administrative issues, which are addressed in the course.
IT 389. Independent Study. 1-4 Hour.
Independent Study. One to three semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of the department head.
IT 397. Special Topics. 1-4 Hour.
Special Topics. Three semester hours. Organized class. May be repeated when topics vary.

## IT 471. Industrial Internship. 3 Hours.

Industrial Internship. Three semester hours. Occupational experience in an industrial facility. Work experience is cooperatively planned by the department and employer to fulfill the student's objectives. Weekly conferences, assignments and reports required. Application for internship course must be made 30 days before registration (contact department office for applications). Prerequisite: IT or TMGT major, junior standing and consent of department head.
IT 489. Independent Study. 1-4 Hour.
Independent Study. One to Three semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

IT 497. Special Topics. 1-4 Hour.
Special Topics. Three semester hours. Organized class. May be repeated when topics vary.

## Integrated Science Courses

## IS 351. Inquiry: Knowledge and Skills of Science. 3 Hours.

Inquiry: Knowledge and Skills of Science. Three semester hours. Science topics and themes are chosen to emphasize broad concepts highlighted in the Texas and national science standards. Topics will include conservation laws, systems in nature, the nature of scientific inquiry and presentation of scientific information. The course will be taught by an inquiry based method, modeling instructional techniques proved effective by current educational research. This course is designed for interdisciplinary majors. It will not count toward a major or minor in the sciences. Prerequisite: Junior level standing.

## IS 352. Science Inquiry II. 3 Hours.

Science Inquiry II. Three semester hours. Science topics and themes are chosen to emphasize broad concepts highlighted in the Texas and National Science Standards. Topics include fundamental physical and chemical processes such as the chemistry of the environment, macromolecules of life, systems in nature, and the nature of scientific inquiry. The course will be taught using an inquiry based method, modeling instructional techniques proven effective by current educational research. This course is designed for interdisciplinary majors. It will not count towards a major in the sciences. Prerequisite: Junior level standing.

## IS 397. Special Topics. 3 Hours.

Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## IS 451. Historical Development of Great Ideas in Science. 3 Hours.

Historical Development of Great Ideas in Science. Three semester hours. Major people, discoveries, and the evolution of fundamental concepts and theories through time are examined through literature, research, and hands-on inquiry based investigations. Science topics and themes are chosen to emphasize broad concepts in the Texas and national science standards.

## IS 497. Special Topics. 3 Hours.

## IS 1415. Integrated Science I. 4 Hours.

1415 - Integrated Science I. Four semester hours. (3 lecture, 2 lab) This is a University Studies science course. The interdisciplinary application of scientific principles to society is emphasized. The scientific principles developed in this course are motion, energy, chemical changes, and other topics typically covered in physical science courses. Connections and applications of these principles to the other sciences and public issues are examined.

## IS 1417. Integrated Science II. 4 Hours.

IS 102 Integrated Science II. Four semester hours (3 lecture, 2 lab). This is a University Studies science course. The interdisciplinary application of scientific principles to society is emphasized. The scientific principles developed in this course are cellular structure, genetics, DNA, astronomical and geological issues, and other topics covered in life earth sciences courses. Connections and applications of these principles to the other sciences and public issues are examined.

## Journalism Courses

## JOUR 115. Publication Design and Production. 3 Hours.

Publication Design and Production. Three semester hours. An introduction to programs for application to print publications such as newspapers, magazines, and newsletters. Instruction in the fundamentals of layout and design in electronic publishing. Required of all sequence majors.

## JOUR 197. Special Topics. 4 Hours.

## JOUR 214. Basic Reporting. 3 Hours.

(COMM 2311) Basic Reporting. Three semester hours (2 lecture, 2 lab). A beginning course in the gathering and writing of news with an emphasis on interviewing and the basic types of stories. Assignments will include work to be submitted to the student newspaper. Laboratory hours each week. Students must be able to type.

## JOUR 260. Advertising Principles. 3 Hours.

(COMM 2327) Advertising Principles. Three semester hours. A survey course in advertising as one aspect of promotion. Examines the historical background, social and economic environments, media channels, and other basics of the field as the beginning for further study in advertising. Prerequisite: Jour 1307 or consent of the instructor.

## JOUR 297. Special Topics. 4 Hours.

## JOUR 314. Intermediate Reporting. 3 Hours.

Intermediate Reporting. Three semester hours (2 lecture, 2 lab). A continuation of Jour 214 with emphasis on developing the students' news sense, judgment, interpretive news presentation, and reporting skills to produce in-depth stories using multiple sources of information. Assignments will include work to be submitted to the student newspaper. Laboratory hours each week. Prerequisite: Jour 214 or consent of instructor.

## JOUR 315. Editing and Production. 3 Hours.

Editing and Production. Three semester hours (1 lecture, 4 lab). Focus is on the concerns of the news editor, including copyediting, headline writing, and newspaper design. Laboratory work consists of copyediting, layout, and headline writing for fully-paginated student publications. Prerequisite: Jour 115.

## JOUR 316. Topics in Community Newspaper Journalism. 3 Hours.

Topics in Community Newspaper Journalism. Three semester hours. This course explores various topics in community newspaper journalism, including photojournalism, business-related operations such as advertising and circulation, newspaper management, technology, and community relations. Prerequisites: Jour 1307 or consent of instructor.

## JOUR 326. Advanced Reporting/Feature Writing. 1-3 Hour.

Advanced Reporting/Feature Writing. Three semester hours. (2 lecture, 2 lab) An advanced course integrating writing, reporting and news feature writing skills. Assignments will include work to be submitted to the student newspaper. Laboratory hours each week. Prerequisite: Jour 315 or consent of instructor.

## JOUR 328. Public Relations Principles. 1-3 Hour.

Public Relations Principles. Three semester hours. An introduction to the fundamentals of public relations and the functions of reputation management. A beginning examination of publics, research techniques, media outlets, and public relations techniques. Prerequisite: Jour 1307 or consent of instructor.

## JOUR 329. Writing for Public Relations. 3 Hours.

Writing for Public Relations. Three semester hours. The preparation of and writing of various documents in the field of public relations with both lecture and laboratory sessions. Emphasis is upon writing and research for public relations formats. Prerequisite: Jour 328 or consent of the instructor.

## JOUR 335. Media History. 3 Hours.

Media History. Three semester hours. A survey of the origins and development of journalism and the mass media from their beginnings in Germany and England to the present time. Emphasis on the ideas, economic forces, and cultural realities touching the development of American journalism. Prerequisite: Jour 1307 or consent of instructor.

## JOUR 336. Media Law. 3 Hours.

Media Law. Three semester hours. A study of the First Amendment and the significant legal decisions affecting print, broadcast, and interactive media. Particular attention is focused on Supreme Court decisions. Prerequisite: Junior standing or permission of instructor.

## JOUR 350. Visual Communication for News Publications. 3 Hours.

Visual Communication for News Publications. Three semester hours. An introduction to preparing visual documents for use in print publications. Digital cameras are used to introduce the essentials of composition, selection, and editing of images. Prerequisite: Permission of Instructor.

## JOUR 351. Introduction to Photojournalism. 4 Hours.

Introduction to Photojournalism-3 Lec/ 2 Lab An introduction to photojournalism. This class covers techniques and equipment needed when shooting for publication and places an emphasis on producing digital images. Cross list with PHO 351.

## JOUR 352. Advanced Photojournalism. 4 Hours.

Advanced Photojournalism - Four semester hours Photojournalism students will refine their photo reporting skills while expanding techniques to include visual storytelling and documenting with emerging technology. Students must be published. An emphasis will be placed on students publishing assignments to further portfolios. Critiques will be an integral part of the course. Cross listed with PHO 352. Pre-requisites : Jour 351/Art 351.

JOUR 380. Magazine Production and Editing. 3 Hours.
Magazine Production and Editing - Three semester hours An advanced course to build on Jour 115 and to introduce our majors to the field of magazine journalism. The students will learn the fundamentals of magazine writing, production and editing, which differ significantly from similar newspaper skills. Pre-requisites: Jour 115 and Jour 214.
JOUR 389. Independent Study. 1-4 Hour.
Independent Study - Hours: One to four Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisites Consent of department head. Note May be repeated when the topic varies.
JOUR 397. Special Topics. 3 Hours.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.
JOUR 425. Public Relations Case Studies. 3 Hours.
Public Relations Case Studies. Three semester hours. An analysis and evaluation of contemporary public relations problems in public and private organizations. Case studies are examined. Prerequisite: Jour 328 and 329 or consent of instructor.
JOUR 426. Public Relations Campaigns. 3 Hours.
Public Relations Campaigns. Three semester hours. The planning, implementation, and analysis of public relations campaigns. Examination of the role of research in such campaigns. Prerequisites: Jour 328, 329, 425 or consent of the instructor.
JOUR 445. Ethics in the Media. 3 Hours.
Ethics in the Media. Three semester hours. (Capstone) This is a course about ethical issues raised by contemporary mass media practices, especially those related to news, advertising, and public relations. Students will learn to recognize and analyze problem situations in terms of a framework of ethical principles in a societal context shaped by the libertarian traditions of Enlightenment thought. Communitarian challenges to those traditions will be studied and their impact on media ethics and practices explored. Prerequisite: Junior or senior standing.
JOUR 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite: Consent of Journalism division coordinator.

JOUR 490. H Honors Thesis. 3 Hours.
Individual Honors Thesis.

JOUR 491. H Ind Honors Readings. 3 Hours.
Honors Readings.
JOUR 495. Media Internship. 3 Hours.
Media Internship. Three semester hours. Approved work experience in a media organization such as a community newspaper or public relations firm. Supervision by professionals and faculty. Prerequisite: Junior standing and approval of the department head.
JOUR 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.
JOUR 1307. Mass Communication in Society. 3 Hours.
(COMM 1307) Mass Communication in Society. Three semester hours. A discursive study of mass media organizations, how they operate and exert their influence on individuals and society, enabling students to become knowledgeable and self critical consumers of mass media content. The emphasis will be on those media engaged in news and public affairs reporting and commentary, especially the press and television.

## Liberal Studies Courses

LIBS 300. Introduction to Liberal Studies. 3 Hours.
Intro to Liberal Studies. Three semester hours. An introduction to interdisciplinary study and the Liberal.

## LIBS 310. Research Methods. 3 Hours.

Research Methods - Three semester hours Students will explore a variety of investigative methodologies. Emphasis on the application of advanced reading, thinking, and writing skills. Deleting "to a team-based study of complex problems.".

## LIBS 320. Forms of Interdisciplinary Study. 3 Hours.

Theories Interdisc Study. Three semester hours. Investigation of an interdisciplinary subject area utilizing careful reading and analysis of interdisciplinary writings. Emphasis on making connections across disciplines and designing and completing a personal research project.
LIBS 397. Special Topic. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.
LIBS 400. Liberal Studies Senior Seminar. 3 Hours.
LS Senior Seminar. Three semester hours. This course provides each student in th Liberal Studies Program with opportunities for making connections among his or her concentration, support fields, other educational experiences., and possible careers. A project reflecting a sound application of research methods, analytical frameworks, or performance criteria and a learning outcomes learning assessment will also be required. Must be taken in final semester.

LIBS 489. Independent Study. 4 Hours.
LIBS 497. Special Topic. 4 Hours.
Hours: One to four - Organized class Note May be graded on a satisfactory (S) or unsatisfactory (U) basis. May be repeated when topics vary.

## Linguistics Courses

FLL 489. Independent Study. 4 Hours.
FLL 497. Special Topics. 1-4 Hour.
Hours: One to four - Organized class Note May be graded on a satisfactory ( S ) or unsatisfactory ( U ) basis. May be repeated when topics vary.

## Management Courses

## MGT 305. Management and Organizational Behavior. 3 Hours.

Management and Organizational Behavior. Three semester hours. This course provides a comprehensive analysis of individual and group behavior in organizations. Its purpose is to provide an understanding of how organizations can be managed more effectively and at the same time enhance the quality of employees work life. Topics include motivation, goal setting and rewards, job design, group dynamics, work stress, power and politics, international aspects of organizations, organizational structure, decision making, communication and organizational change and development. Prerequisite: Junior standing.

MGT 307. Operations Management. 3 Hours.
Operations Management. Three semester hours. This course is an introduction to the concepts, principles, problems, and practices of operations management. Emphasis is on managerial processes for effective operations in both goods-producing and service-rendering organizations. Topics include operations strategy, process design, capacity planning, facilities location and design, forecasting, production scheduling, inventory control, quality assurance, and project management. The topics are integrated using a systems model of the operations of an organization. Prerequisites: Junior standing, Math 1314 or 1324, BA 302, MIS 128 or IT 111.

## MGT 308. Entrepreneurial Strategy. 3 Hours.

Entrepreneurial Strategy. Three semester hours. This course introduces students to the challenges of owning, operating, and marketing a successful small business and the need for entrepreneurial focus in large firms. Prerequisite: Junior standing, Mgt 305, Mkt 306 or permission of instructor.

## MGT 333. Legal Environment of HR. 3 Hours.

Legal Environment of Human Resources. Three semester hours. Major employment legislation affecting personal and business decisions will be examined. Emphasis will be placed on the Civil Rights Act of 1964, as amended, the Americans with Disabilities Act and Age Discrimination in Employment Act. Other topics will include sexual harassment, affirmative action, comparable worth and means of dispute resolution. Prerequisite: Junior standing.

## MGT 340. Quality Management and Improvement. 3 Hours.

Quality Management and Improvement. Three semester hours. This course examines (1) the primary tools and methods used to monitor and control quality in organizations and (2) the ways in which quality can be improved. Included in the course are such topics as the historical development of quality management, the seven basic tools for quality improvement, and management strategies for implementing world class quality improvement strategies. Emphasis is also given to control chart analysis and process capability study. Prerequisite: Junior standing.

## MGT 348. Management Dynamics. 3 Hours.

Management Dynamics. Three semester hours. An application of management principles to current business challenges. Methods will be those of contemporary management training programs and may include role playing, team exercises, skits, case studies and other high student involvement activities. Prerequisite: Junior standing.

## MGT 389. Independent Study. 4 Hours.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## MGT 394. Human Resource Management. 3 Hours.

Human Resource Management. Three semester hours. This course provides a study of principles, policies and practices related to staffing, employee development, compensation, employee and labor relations in profit, not for-profit, domestic and international organizations. Prerequisite: Junior standing.

## MGT 422. Electronic Commerce. 3 Hours.

Electronic Commerce. Three semester hours. (Same as Mkt 422) This course exposes students to key strategic management applications relevant to the use of Internet technologies. The goal of the course is to provide students the necessary background of strategic management concepts, technologies, and applications required of businesses wanting to become actively involved in the rapidly growing electronic commerce industry. Some exposure to technical issues will also be provided. Prerequisite: Senior standing.

## MGT 431. Internship in Management. 3 Hours.

Internship in Management - Three semester hours This course provides an opportunity for selected students to earn elective credits in Management or HR Management through supervised work experience with area business firms under the supervision of a faculty member. Prerequisites: 12 hours of Management or HR Management and permission of the department head.

## MGT 438. Compensation Management. 3 Hours.

Compensation Management. Three semester hours. A study of total compensation management systems is the focus of this course. Financial considerations emphasized include the environment of the employer organization, organizational policies, job analysis, job evaluation and employee performance appraisal. Non-financial compensation components are studied from the viewpoint of the work environment and job design. Prerequisites: Junior standing, Mgt 394.

## MGT 439. Business Strategy. 3 Hours.

Business Strategy. Three semester hours. This course provides a business capstone for the study of the overall functioning of various types of organizations. This course includes a brief study of strategic planning including mission statement development, analysis of external environments and internal organizational factors, development of strategic alternatives, selection of appropriate alternatives, implementation of strategies, and competitive strategies and dynamics. Special emphases are given to the integration and coordination of the functional areas within the enterprise. The case method and/or a business simulation will be used to provide practical experience in analysis and decision making in the solution of business problems. Prerequisites: Senior standing; Fin 304; BA 302; Mgt 305, 307; Mkt 306.

## MGT 441. Purchasing and Supply Management. 3 Hours.

Purchasing and Supply Management. Three semester hours. This course examines the responsibilities related to managing the flow of materials and services into organizations. Traditional purchasing activities of global sourcing, bidding, contract administration and materials management are included in the course. particular focus is given to the strategic issues of managing the supply function and the creative purchasing activities of developing buying strategy, supply research, economic analysis, value analysis, supplier certification and evaluation, and information systems analysis. Prerequisite: Junior standing and Mgt 307.

## MGT 445. Retail Management. 3 Hours.

Retail Management. Three semester hours. (Same as Mkt 445) This is a survey course dealing with managerial principles and practices of retail operation, including store location and layout, buying pricing, promotion, services, and inventory control. Prerequisite: Mkt 306, Mgt 305.
MGT 453. Employee and Labor Relations. 3 Hours.
Employee and Labor Relations. Three semester hours. A study of the employment relationship in unionized and non-unionized settings. Emphasis is given to the growth of the labor movement, major provisions of present day federal labor law, institutions that have a major influence on the labor movement, contract negotiation and administration. The future of the labor movement, as well as employee relations in non- and partially-unionized settings, will also be discussed. Prerequisites: Junior standing, Mgt 394.
MGT 471. e-Business Strategy. 3 Hours.

## MGT 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.
MGT 490. Honors Thesis. 3 Hours.
Honors Thesis. Six semester hours.
MGT 491. Honors Reading. 3 Hours.
Honors Reading. Three semester hours.
MGT 493. Staffing and Research. 3 Hours.
Staffing and Research. Three semester hours. This course provides an in-depth study of the staffing process which involves moving people into, through, and eventually, out of the organization. The primary emphasis is on human resource planning, recruitment, selection, appraisal, and employment laws, especially equal employment opportunity. Further attention is given to the role of research in the management function. Prerequisite: Junior standing, Mgt 394.

## MGT 494. Human Resource Developmnt. 3 Hours.

Human Resource Development. Three semester hours. This course is an intensive study of the procedures utilized by organizations to facilitate the learning process to assure that these efforts result in the achievement of organizational goals and objectives. Emphasis is given to such topics as learning theory, training and development methods, presentations, evaluation, and administration. Experiential learning exercises are utilized to facilitate the application of theory to organizational practices. Prerequisite: Junior standing, Mgt 394.
MGT 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## Management Informa Sys Courses

## MIS 128. Business Computer Systems. 3 Hours.

Business Computer Systems. Three semester hours. $(1,2,3)$ This course is designed to provide students with the skills necessary to use a microcomputer with current important end-user software for communication and decision making and to solve problems within an organizational environment. Includes coverage of software and hardware components, operating system concepts, information structures, internet applications, and formal problem solving techniques. Includes supervised, structured laboratory exercises.

## MIS 315. IS Security and Risk Management. 3 Hours.

IS Security and Risk Management - Three Semester Hours This course provides an introduction to the fundamental principles and topics of Information Systems Security and Risk Management at the organizational level. Students will learn critical security principles that enable them to plan, develop, and perform security tasks. The course will address hardware, software, processes, communications, applications, and policies and procedures with respect to organizational IS Security and Risk Management.
MIS 326. Data and Information Management. 3 Hours.
Data and Information Management - Three semester hours This course provides the students with an introduction to the core concepts in data and information management. It is centered around the core skills of identifying organizational information requirements, modeling them using conceptual data modeling techniques, converting the conceptual data models into relational data models and verifying its structural characteristics with normalization techniques, and implementing and utilizing a relational database. The course will also include coverage of basic database administration tasks and key concepts of data quality and data security. Building on the transactional database understanding, the course provides an introduction to data and information management technologies that provide decision support capabilities under the broad business intelligence umbrella.
MIS 328. IS Project Management. 3 Hours.
IS Project Management - Three semester hours This course discusses the processes, methods, techniques and tools that organizations use to manage their information systems projects. The course covers a systematic methodology for initiating, planning, executing, controlling, and closing projects. This course assumes that project management in the modern organization is a complex team-based activity, where various types of technologies (including project management software as well as software to support group collaboration) are an inherent part of the project management process. This course also acknowledges that project management involves both the use of resources from within the firm, as well as contracted from outside the organization.

## MIS 379. Business Process Management and ERP Systems. 3 Hours.

Business Process Management and ERP Systems - Three semester hours In this course students will be introduced to key concepts and approaches to business process management and improvement. The main focus of this course is both understanding and designing business processes. Students will how to identify, document, model, assess, and improve core business processes. Students will be introduced to process design principles. The way in which information technology can be used to manage, transform, and improve business processes is discussed. Students will be exposed to challenges and approaches to organizational change, domestic and offshore outsourcing, and inter-organizational processes.
MIS 415. Principles of Business Process Analysis and Design. 3 Hours.
Principles of Business Process Analysis and Design - Three semester hours This course discusses the process, methods, techniques and tools that organizations use to determine how they should conduct their business, with a particular focus on how computer-based technologies can most effectively contribute to the way business is organized. The course covers a systematic methodology for analyzing a business problem or opportunity, determining what role, if any, computer-based technologies can play in addressing the business need, and articulating business requirements for the technology solution.

## MIS 422. IS Innovation and New Technologies. 3 Hours.

IS Innovation and New Technologies - Three semester hours New IS technologies are being used to change how organizations operate, produce products and services, and communicate both internally and as well as with external partners. This course is designed to introduce students to new and innovative technologies and examine how these powerful systems have fundamentally reshaped modern organizations along with our society. Using online collaborative technologies that were developed in the context of social networking and online communities, corporations are reengineering both internal business processes and those related to customers, suppliers, and business partners. Developing innovative ways to communicate and collaborate can lead to new business opportunities, and new efficiencies. This course investigates the technologies, methods and practices of developing new innovations such as online communities, and how this knowledge and these skills are applied to reengineer business processes. For example, how products, services and information systems are developed, and how geographically disperse virtual teams collaborate.
MIS 424. Information Technology Infrastructure and Enterprise Architecture. 3 Hours.
Information Technology Infrastructure and Enterprise Architecture-Three semester hours This course explores the design, selection, implementation and management of enterprise IT solutions. The focus is on applications and infrastructure and their fit with the business. It covers topics related to both computer and systems architecture and communication networks, with an emphasis on services and capabilities that IT infrastructure solutions enable in an organizational context. Students learn frameworks and strategies for infrastructure management, system administration, data/information architecture, content management, distributed computing, middleware, legacy systems integration, system consolidation, software selection, total cost of ownership calculation, IT investment analysis, and emerging technologies. Attention is given to Internet-based solutions, computer and network security, business continuity, the role of infrastructure in regulatory compliance, and managing risk and security within audit and compliance standards. Students will hone their ability to communicate technology and enterprise architecture clearly and concisely to a general business audience.

## MIS 426. Management Information Systems. 3 Hours.

Management Information Systems. Three semester hours. (1, 2, 3) This course provides students with the understanding of managerial and organization needs to analyze, design, and implement an information system. The role of information services in management, including current professional practices and methodologies, will be covered along with the presentation of systems theory, decision theory, organizational models, types of information systems, information planning, and information systems development. Prerequisites: Senior standing.
MIS 431. Internship in MIS. 3 Hours.
Internship in MIS - Three semester hours This course provides an opportunity for selected students to earn elective credits in Management Information Systems through supervised work experience with area business firms under the supervision of a faculty member. Pre-requisites : 12 hours of MIS.

MIS 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advance level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## MIS 490. HONORS THESIS. 3 Hours.

MIS 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## Marketing Courses

## MKT 306. Marketing. 3 Hours.

Marketing. Three semester hours. This course is an introduction to the concepts, principles, problems and applications of marketing. This course emphasizes all functional areas and institutions of marketing including target marketing and positioning, consumer and organizational markets, product management, pricing, channels of distribution, marketing ethics, promotions, services, and international marketing. Junior standing.

## MKT 366. Marketing Promotion. 3 Hours.

Marketing Promotion. Three semester hours. This course provides an analysis of the promotion networks of business firms to external publics. Emphasis is on enabling students to appraise the effectiveness of marketing tools and their social and economic significance. Prerequisites: Mkt 306.

## MKT 367. Professional Selling and Sales Management. 3 Hours.

Professional Selling and Sales Management. Three semester hours. This course focuses on developing and maintaining relationships with customers and managing the sales process of finding, coverting, and keeping customers while achieving the organization ¿s goals. Communication techniques, career planning, selling strategies and tactics, as well as sales duties, responsibilities, and problems are included. Prerequisite: Junior standing.

## MKT 386. Channels of Distribution. 3 Hours.

Channels of Distribution. Three semester hours. This course provides a study of the industrial aspects of marketing which includes physical distribution, industrial selling, purchasing, warehousing and wholesaling, and how efficiently each is integrated into the system. Value added industrial buying processes and government marketing are included. Prerequisite: Marketing 306.

## MKT 389. INDEPENDENT STUDY. 1-4 Hour.

## MKT 422. Electronic Commerce. 3 Hours.

Electronic Commerce. Three semester hours. (Same as Mgt 422) This course exposes students to key strategic management applications relevant to the use of Internet technologies. The goal of the course is to provide students the necessary background of strategic management concepts, technologies, and applications required of businesses wanting to become actively involved in the rapidly growing electronic commerce industry. Some exposure to technical issues will also be provided. Prerequisite: Senior standing.

## MKT 431. Internship in Marketing. 3 Hours.

Internship in Marketing - Three semester hours This course provides an opportunity for selected students to earn elective credits in Marketing through supervised work experience with area business firms under the supervision of a faculty member. Prerequisites: 12 hours of Marketing and permission of the department head.

## MKT 436. Marketing Research. 3 Hours.

Marketing Research. Three semester hours. Techniques of marketing research, research design, analysis and interpretation of marketing data, questionnaire building, and sampling methods are studied in this course. Prerequisites: Mkt 306, BA 302.

## MKT 445. Retail Management. 3 Hours.

Retail Management. Three semester hours. (Same as Mgt 445) This is a survey course dealing with managerial principles and practices of retail operation, including store location and layout, buying, pricing, promotion, services, and inventory control. Prerequisite: Mkt 306, Mgt 305.

## MKT 467. Global Consumer Behavior. 3 Hours.

Global Consumer Behavior. Three semester hours. Students examine global market segments and how to reach them their understanding of the consumer buying process as well as psychological and sociological variables which influence and motivate consumers. Prerequisite: Mkt 306.

## MKT 471. e-Business Strategy. 3 Hours.

E-Business Strategy. Three semester hours. This course exposes students to key strategic management and marketing applications relevant to the use of Internet technologies and digital commerce. The goal of the course is to provide students the necessary background of strategic management concepts, technologies, and applications required of businesses wanting to become actively involved in the rapidly growing electronic commerce industry.

## MKT 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## MKT 490. H Honors Thesis. 1-6 Hour.

MKT 491. H Ind Honors Readings. 3 Hours.
MKT 492. Mkt Policy \& Strategy. 3 Hours.
Marketing Policy and Strategy. Three semester hours. This course is devoted to strategy determination and problems of marketing decision making. It includes intensive study of the influence of the consumer, product planning, channels of distribution, promotion and pricing policies as applied to student theses on developing a new business. Prerequisites: Senior standing, Mkt 306 and consent of instructor.

MKT 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## Mathematics Courses

## MATH 131. Intermediate Algebra. 3 Hours.

Intermediate Algebra. Three semester hours. May not be used to satisfy any mathematics or degree requirements. Basic algebraic operations, equations and inequalities, polynomials, functions, rational expressions, exponents and radicals, quadratic equations, graphing and geometry in the plane, sequences and series. This course is to prepare students for further study at the level of college mathematics.
MATH 142. Pre-Calculus. 3 Hours.
(MATH 2312) Pre-Calculus. Three semester hours. Trigonometric functions and their graphs; radian measurement; solution of triangles; identities; logarithmic and exponential functions; trigonometric equations; applications of trigonometry; conic sections and their graphs. Prerequisite: High school geometry and two years of high school algebra or Math 1314.
MATH 176. Mathematics for Business Applications II. 3 Hours.
(MATH 1325) Mathematics for Business Applications II. Three semester hours. The derivative, graphing and optimization, exponential and logarithmic functions, integration. Applications to management, economics, and business. Prerequisite: Math 1314 or 1324.
MATH 179. Mathematics: Applications and Philosophy. 3 Hours.
Mathematics: Applications and Philosophy. Three semester hours. Applications of mathematics which may include graph theory, linear programming, statistics, probability, coding theory and conic sections; logic; topics from the history of mathematics; the mathematical method and philosophy; mathematical writings.
MATH 189. Independent Study. 4 Hours.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: consent of department head.

## MATH 192. Calculus II. 4 Hours.

(MATH 2414) Calculus II. Four semester hours. This course examines integral calculus of functions of one variable, and some integral calculus of functions of two variables, as follows. Topics include techniques of integration; applications of the integral; improper integrals; limits involving indeterminate forms; sequences and series; some exposure to multiple integrals; and use of computer technology. Prerequisite: Math 2413.
MATH 289. Independent Study. 4 Hours.

## MATH 297. Special Topics. 4 Hours.

MATH 301. Introductory Geometry. 3 Hours.
Introductory Geometry. Three semester hours. Topics from plane and solid Euclidean geometry, including the properties of parallels, perpendiculars, triangles, and circles along with perimeter and formulas for area of plane regions and for the surface area and volume of solids. Prerequisite: Math 351.

## MATH 314. Calculus III. 4 Hours.

Calculus III. Four semester hours. Infinite series; vector-valued functions; partial derivatives; multiple integrals; three-dimensional geometry; Green's Theorem; Stoke's Theorem. Prerequisite: Math 192.

## MATH 315. Differential Equations. 3 Hours.

Differential Equations. Three semester hours. First order equations, second order linear equations, power series solutions, Laplace Transforms, and applications. Prerequisite: Math 192.

## MATH 317. Numerical Analysis. 3 Hours.

Numerical Analysis. Three semester hours. (Same as CSci 317) Computer algebra systems will be introduced. Topics include methods for approximate solutions of equations in one variable, polynomial approximation methods, numerical calculus, numerical solutions to ordinary differential equations, linear systems of equations, and difference equations. Prerequisites: CSci 151 and 152. Co-requisite: Math 192.
MATH 321. College Geometry. 3 Hours.
College Geometry. Three semester hours. A study of advanced topics in Euclidean plane geometry and an introduction to non-Euclidean geometry. Emphasis will be placed on the axiomatic method. Prerequisite: Math 331.

## MATH 331. Discrete Mathematics. 3 Hours.

Discrete Mathematics. Three semester hours. Mathematical models, mathematical reasoning, sets, binary relations, counting and algorithm analysis, infinite sets. Prerequisites: CSci 151 and Math 192.

## MATH 334. Introduction to Abstract Algebra. 3 Hours.

Introduction to Abstract Algebra. Three semester hours. Properties of the integers, permutations, groups, rings, integral domains and fields. Prerequisite: Math 331.

## MATH 335. Linear Algebra. 3 Hours.

Linear Algebra. Three semester hours. Vector spaces; linear transformations; matrices; determinants; systems of linear equations; equivalence relations on matrices; characteristic vectors; operators. Prerequisite: Math 331.

## MATH 350. Topics in Mathematics for Elementary Teachers I. 3 Hours.

(MATH 1350 non-advance credit) Topics in Mathematics for Elementary Teachers I. Three semester hours. This course will include content and pedagogy for teaching sets, functions, numeration systems, number theory, and the properties of the natural numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking. Prerequisite: a " $C$ " or better in Math 1314 College Algebra.

## MATH 351. Topics in Mathematics for Elementary Teachers II. 3 Hours.

Mathematics for Elementary Teachers II - Three semester hours This course will include content and pedagogy for teaching geometry, probability, statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking. Prerequisite: a "C" or better in Math 350 Mathematics for Elementary Teachers Part 1.
MATH 352. Topics in Mathematics for Elementary Teachers III. 1 Hour.
Topics in Mathematics for Elementary Teachers III. One semester hour. Topics include using spatial sense to investigate concepts such as direction, orientation, perspective, shape and structure; exploration of basic geometry concepts from synthetic, coordinate, and transformational approaches; classification of, and structure in, two and three dimensional geometric figures; problem solving, particularly problems relating geometric ideas to number and measurement. Course focuses on problem solving and hands-on exploration using manipulatives and technology. Prerequisite: Math 350.

MATH 361. Mathematical Modeling of Science for Middle School I. 3 Hours.
Mathematical Modeling of Science for Middle School I. Three semester hours. Mathematics will serve as the basis of the course and the following topics will be covered: Mathematical modeling, transformation of functions, data analysis skills, linear models, exponential growth and decay, logarithmic functions, logistic models, power and polynomial models, inverse and direct variation, periodic models and trigonometric functions. Prerequisite: Math 351.

MATH 362. Mathematical Modeling of Science for Middle School II. 3 Hours.
Mathematical Modeling of Science for Middle School II. Three semester hours. Mathematics will serve as the basis of the course and the following topics will be covered: Trigonometric functions and relationships, rate of change, derivative concepts, extrema and points of inflection, accumulating change, concepts of the definite integral, finite difference equations. Technology will be a vital part of the course. Prerequisite: Math 361.
MATH 372. Mathematics Structures and Applications. 3 Hours.
Mathematics Structures and Applications. Three semester hours. A study of the algebraic processes, polynomials, equations, inequalities, functions, graphs, and mathematics of finance. Prerequisite: Math 351.
MATH 380. Mathematics History. 3 Hours.
Mathematics History. Three semester hours. A survey of the history of mathematics; attention will be given to the origin, development and importance of mathematical ideas. Prerequisite: Math 301.

## MATH 389. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: consent of department head.
MATH 397. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.
MATH 401. Introduction to Mathematical Statistics. 3 Hours.
Introduction to Mathematical Statistics. Three semester hours. Classical probability theory; discrete and continuous random variables; distribution functions; expectation; law of large numbers; central limit theorem; applications; random sampling; estimation of parameters; hypothesis testing; and other topics as time allows. Prerequisite: Math 192.

## MATH 426. History of Mathematics. 3 Hours.

History of Mathematics. Three semester hours. Selected topics in the history of mathematics; the growth of algebra, trigonometry, geometry, and the calculus; the contribution of different cultures; selected biographies of mathematicians. Prerequisite: Math 192 or consent of Instructor.

## MATH 436. Introduction to Analysis. 3 Hours.

Introduction to Analysis. Three semester hours. Sequences; limits; functions; continuity; differentiation; integration. Prerequisite: Math 192 and 331.

## MATH 437. Elementary Number Theory. 3 Hours.

Elementary Number Theory. Three semester hours. Mathematical induction, divisibility, prime numbers, congruences, factorization, arithmetic functions, quadratic reciprocity, primitive roots, diophantine equations. Prerequisite: Math 331.

## MATH 438. Complex Analysis. 3 Hours.

Complex Analysis. Three semester hours. The complex numbers; elementary functions and their mappings; complex limits and power series; analytic functions; conformal mapping and boundary value problems; Contour integrals; Cauchy's Theorem; Taylor and Laurent expansions; residues; Liouville's Theorem. Prerequisite: Math 314.

## MATH 440. Introduction to Topology. 3 Hours.

Introduction to Topology. Three semester hours. Topological spaces, topology of the real line, metric spaces, connectedness, compactness, separation axioms, mappings, continuity, homeomorphisms, product spaces. Prerequisite: Math 331.

MATH 453. Essentials of Statistics. 3 Hours.
Essentials of Statistics. Three semester hours. Techniques of statistical applications concerning descriptive statistics, tests of hypothesis, regression and analysis of variance. Prerequisite: One course in college mathematics.

MATH 460. Technology and Topics in Mathematics for Secondary Teachers. 3 Hours.
Mathematics for Secondary Teachers. Three semester hours. Exploration of problems in algebra, trigonometry, analytic geometry, calculus, Euclidean geometry, probability, statistics and discrete mathematics using technology. The course is intended as a capstone study for prospective secondary teachers of mathematics. Graphing calculators and computers will be employed to illustrate and encourage conjecturing and problem solving with an emphasis on applications. In addition, a brief survey will be made of major documents and resources pertinent to secondary mathematics teachers, such as the NCTM Standards. Prerequisite: Math 331 or consent of instructor.

## MATH 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: consent of department head.

## MATH 490. H Honors Thesis. 3 Hours.

H Honors Thesis Hours: 6 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.
MATH 491. H Ind Honors Readings. 3 Hours.
Hours: One to four - Organized class Note May be graded on a satisfactory ( S ) or unsatisfactory ( U ) basis. May be repeated when topics vary.

## MATH 497. Special Topics. 4 Hours.

Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## MATH 1314. College Algebra. 3 Hours.

(MATH 1314) College Algebra. Three semester hours. Quadratic equations; solutions of equations in several unknowns; ratio and proportion; variation; arithmetic and geometric progressions; the binomial theorem; permutations and combinations; elementary theory of equations.

## MATH 1324. Mathematics for Business Applications. 3 Hours.

(MATH 1324) Mathematics for Business Applications. Three semester hours. Linear equations, quadratic equations, functions, inequalities, mathematics of finance, linear programming, matrices and determinants, systems of linear equations, probability. Applications to management, economics, and business.

## MATH 2413. Calculus I. 4 Hours.

(MATH 2413) Calculus I. Four semester hours. This course examines differential and integral calculus of functions of one variable, as follows. Topics include limits; continuity; derivatives; curve sketching; applications of the derivative; the definite integral; derivatives and integrals of the logarithmic, exponential, and trigonometric functions; and use of computer technology. Prerequisites: Two years of high school algebra and trigonometry or Math 142.

## Middle Level Education Courses

## MLED 314. Young Adolescent Development. 3 Hours.

Young Adolescent Development. Three semester hours. MLEd 314 is designed to provide preservice teachers with a knowledge base of the changes and issues that typically affect development in the years from age 8 through adolescence. Students will examine and study the various domains of physical, cognitive, social and emotional development; and will consider how various learning theories, particularly multiple intelligence theory, can inform practices in middle level classroom. The effect of environmental factors on development will also be explored.

## MLED 401. Differentiating Instruction for Diverse Learners. 3 Hours.

Differentiating Instruction for Diverse Learners. Three semester hours. This course teaches preservice teachers how to design instruction to meet the emerging needs of all middle level learners. The beliefs, behaviors, and characteristics of the unique qualities of diverse learners and how these impact literacy and learning will be explored. Research-based teaching practices will be demonstrated and critiqued. Field experiences required with the course.

## MLED 402. Best Practices in Pedagogy and Assessment. 3 Hours.

Best Practices in Pedagogy and Assessment. Three semester hours. This field-based course provides for examination and implementation of developmentally appropriate instructional and assessment strategies and techniques with an emphasis on problem-based, inquiry-based and technology-based learning; development of extended inter and intra disciplinary learning experiences for middle level learners utilizing appropriate TEKS, resources and materials. Prerequisites: Admission to the Teacher Education Program and placement in a NET CPDT Center.

## MLED 403. Organization, Motivation and Management in Middle Level Classrooms. 3 Hours.

Organization, Motivation and Management in Middle Level Classrooms. Three semester hours. A field-based course concentrating on communication, methodology, and management perspectives consistent with democratic classrooms and organizational structures that focus on student centered inclusive learning of young adolescents from culturally, economically, and educationally diverse student populations. Prerequisite: Admission to the Teacher Education Program and placement in a NET CPDT Center.

## MLED 404. Developing Communication Skills. 3 Hours.

Developing Communication Skills. Three semester hours. A field-based course that focuses on instructional strategies and practices to develop the written, verbal, non-verbal, and technical communication skills of the middle-level learner. Also examines the culture and dynamics of communication within the classroom and the school. Foci will include: process writing; writing in all areas of the curriculum, communication assessment, communicating with technology; and how to guide the middle-level learner in asking critical questions. Prerequisite: Admission to the Teacher Education Program and placement in a NET CPDT Center.
MLED 410. Fostering School, Family, and Community Relationships. 3 Hours.
Fostering School, Family, and Community Relationships. Three semester hours. A field-based course emphasizing shared responsibility among educators, students, the family unit, and the community; examining the home-school connections and the roles and responsibilities of educators on a campus. Developing strategies for reciprocal relationships with peers, parents, and the community to promote collaboration while learning to become a reflective and self-assessing practitioner. Includes an investigation of the effects of a collaborative practice such as peer mediation, service learning, or teachers as advisors. Prerequisite: Admission to the Teacher Education Program and placement in a NET CPDT Center.

## MLED 435. Integrating Instruction: Science, Mathematics and Technology. 3 Hours.

Integrating Instruction: Science, Mathematics and Technology. Three semester hours. The course will focus on how middle level children learn and develop knowledge and skills in mathematics and science; varied instructional and assessment strategies that require high expectations and worthwhile opportunities for all students; Texas Essential Knowledge and Skills (TEKS) in mathematics and science; resources for teaching mathematics and science in grades 4-8; and the integration of technology in mathematics and science instruction grades 4-8. Field experience required. Prerequisites: MLEd 401 or EIEd 300; Admission to the Teacher Education Program and placement in a NET CPDT Center; and must have passed TSI.
MLED 489. Independent Study. 4 Hours.

## Music Courses

MUS 100. Ensembles. 2 Hours.
Ensembles. Zero to two semester hour. (3-6 lab) (1, 2).
MUS 100B. Symphonic Band. 1 Hour.
Ensembles. Zero to two semester hour. (3-6 lab) (1, 2).
MUS 100C. Chorale. 1 Hour.
Ensembles. Zero to two semester hour. (3-6 lab) (1, 2).
MUS 100D. Drum Line. 1 Hour.
Ensembles. Zero to two semester hour. (3-6 lab) (1, 2).
MUS 100G. Color Guard. 1 Hour.
Color Guard.
MUS 100H. Chamber Music. 1 Hour.
MUS 100I. Jazz Improvisation. 1 Hour.
Ensembles. Zero to two semester hour. (3-6 lab) (1, 2).

MUS 100J. Jazz Ensemble. 1 Hour.
Ensembles. Zero to two semester hour. (3-6 lab) (1, 2).
MUS 100M. Marching Band. 1 Hour.
Marching Band. Zero to Two semester hour. (3-6 lab)(1,2).
MUS 100P. Percussion Ensemble. 1 Hour.
Percussion Ensemble. Zero to Two semester hour. (3-6 lab)(1,2).
MUS 100R. Recital. 2 Hours.
Recital. Zero to Two semester hour. (3-6 lab)(1,2).
MUS 100S. Chamber Singers. 1 Hour.
MUS 100U. University Singers. 1 Hour.
University Singers. Zero to Two semester hour. (3-6 lab)(1,2).
MUS 100V. University Band. 1 Hour.
University Band - one semester hour This ensemble will provide the opportunity for members of the community and students from other academic disciplines to practice once a week and perform one concert each semester in a band.
MUS 100W. Wind Ensemble. 1 Hour.
MUS 111. Music Literature, II. 3 Hours.
(MUSI 1309) Music Literature, II. Three semester hours. (2) Designed for lower division music major students and deals with the characteristics of musical sound, the elements of music as they relate to literature, performance media, musical texture, and form as found in the music of recognized composers in the major periods of music history from the Renaissance to the present. Major emphasis will be given to active listening (recordings, tapes, live performances, etc.), reading about music, score reading, and organized verbal discussion of the music heard. Prerequisite: Music 1308 and 115 with a grade of "C" or better.

## MUS 114. Fundamental Theory. 4 Hours.

Fundamental Theory. Four semester hours. (1) Theory for students whose placement scores indicate insufficient background for Theory I.
MUS 115. Theory I. 4 Hours.
(MUSI 1311) Theory I. Three semester hours. (1, 2) A study of fundamentals, chords, keys, voice leading, harmonic progression, inversions, cadences, phrases and periods. Concurrent enrollment with Music 117. Prerequisite: Pass placement test for 115 or Theory 114 with a grade of "C" or better.

## MUS 117. Ear Training I. 1 Hour.

(MUSI 1116) Ear Training I. One semester hour. (2 lab) (1, 2) Fundamentals of music through sight singing, ear training and the incorporation of movable solmization. Studies involve elementary sight singing, dictation of melodic and harmonic intervals and dictation of rhythm and melody.
MUS 125. Theory II. 1-4 Hour.
(MUSI 1312) Theory II. Three semester hours. (1,2) A study of non-chord tones and seventh chords. Concurrent enrollment with Mus 127. Prerequisite: Music 117 with a grade of "C" or better.

MUS 127. Ear Training II. 1 Hour.
(MUSI 1117) Ear Training II. One semester hour (2 lab). (1, 2) A course designed to enable students to sight-sing and take dictation in complex rhythms and melodies. Prerequisite: Music 117 with a grade of " C " or better.

MUS 133. Class Instruments. 1 Hour.
Class Instruments. One semester hour. (2 lab) (1, 2) Designed to provide the fundamentals of performance and functional performance abilities in brass, woodwinds, and percussion.

MUS 134. Elementary String Class. 1 Hour.
Elementary String Class. One semester hour. (2lab) (2) Fundamentals of string instrument techniques taught in a semi-heterogenous grouping in which the instrumentation of a balanced string ensemble is maintained.

MUS 136. Piano Class. 1 Hour.
Class Piano. One semester hour. (2 lab) (1, 2) (a) (MUSI 1181) Elementary. Introduction to piano literature, chord structure and progressions, improvisation, and sight-reading techniques. Not applicable toward a degree in music. (b) (MUSI 1182) Intermediate. Continuation of (a). Prerequisite: 136a (or equivalent) with a grade of "C" or better. (c) (MUSI 2181) Advanced. Chord progressions, transposition, modulation, accompanying styles, and hymn tunes. Recommended prerequisite: 136b with a grade of " C " or better. Music majors must make a " C " or better. Applicable by music majors only toward a degree in instrumental music.

MUS 139. Voice Class. 1-2 Hour.
Voice Class. One or two semester hour. (2-4 lab) (1, 2) Fundamentals of voice production. For non-vocal majors.

## MUS 141. Diction for Singers. 2 Hours.

Diction for Singers. Two semester hours. (1) Teaches voice students the proper pronunciation and articulation of the English and Italian languages. The students learn the International Phonetic Alphabet (IPA) and application of this tool in the preparation and performance of solo vocal repertoire.

## MUS 142. Diction for Singers. 2 Hours.

Diction for Singers. Two semester hours. (2) Teaches students of voice the proper pronunciation and articulation of the French and German languages. The students learn the International Phonetic Alphabet (IPA) and the application of this tool in the preparation and performance of solo vocal repertoire.

## MUS 149. Restricted Applied Music. 1-4 Hour.

Restricted Applied Music. One semester hour. Music 149 is applied music at the beginner level. Most often used for Music Education majors who will be required to teach a variety of instruments other than their primary instrument.

## MUS 151. Minor Applied Music. 1-2 Hour.

Minor Applied Music. One to four semester hours. (1,2) Private instruction for music majors in keyboard, voice, instruments, or composition. The course includes recitals and performance forums with teacher-directed student evaluations and instructions. May be repeated for credit.

## MUS 152. Principal Applied. 4 Hours.

Principal Applied. One to four semester hours. Private instruction for music majors in keyboard, voice, instruments, or composition. This course includes recitals and performance forums with teacher-directed student evaluations and instructions. May be repeated for credit.

## MUS 215. Theory III. 1-4 Hour.

(MUSI 2311) Theory III. Three semester hours. $(1,2)$ A study of secondary functions, modulation, mode mixture, Neapolitan chord and augmented sixth chords. Concurrent enrollment with Music 217. Prerequisite: Music 125 with a grade of " C " or better.

## MUS 217. Ear Training III. 1 Hour.

(MUSI 2116) Ear Training III. One semester hour. (2 lab) (1, 2) A course designed to enable students to hear, sing, and notate complex rhythms, modulating melodies, and harmonies. Prerequisite: Music 125 and 127 with a grade of " C " or better.

MUS 225. Theory IV. 1-4 Hour.
(MUSI 2312) Theory IV. Three semester hours. (1, 2) A study of augmented sixth chords, enharmonic spellings and modulations, chromatic harmony in the late nineteenth century and an introduction to twentieth-century practices. Concurrent enrollment with Music 227. Prerequisite: Music 215 with a grade of "C" or better.

MUS 227. Ear Training IV. 1 Hour.
(MUSI 2118) Ear Training IV. One semester hour. (2 lab) (1, 2) A course designed to enable students to hear, sing, and notate complex rhythms in opposing meters, chromatic and/or modulating melodies, and twentieth-century harmonies. Prerequisite: Music 217 with a grade of " C " or better.

## MUS 300. Jazz Ensemble I, the Mane Attraction. 1 Hour.

Jazz Ensemble I, the Mane Attraction Jazz Ensemble I, the Mane Attraction is the premiere jazz ensemble of the University. Membership in the ensemble is awarded after a rigorous and competitive audition. Students performing in Jazz Ensemble I must read music quickly, be well-prepared through individual practice for each rehearsal, improvise well, demonstrate an awareness of varied jazz styles, and perform with solid technique and expressive nuance. As with all music ensembles, the course may be repeated for credit.

## MUS 300P. Percussion Ensemble I. 1 Hour.

Mus 300P. 012 Percussion Ensemble I Percussion Ensemble I is the premiere percussion ensemble of the University. Membership in the ensemble is awarded after a rigorous and competitive audition. Students performing in Percussion Ensemble I must read music quickly, be well-prepared through individual practice for each rehearsal, and perform with solid technique and expressive nuance. As with all music ensembles, the course may be repeated for credit.

## MUS 300S. Chamber Singers. 1 Hour.

Mus 300S.009 Chamber Singers Mus 300S.009 Chamber Singers ensemble is the most select vocal ensemble of the University. Membership in the ensemble is awarded after a rigorous and competitive audition. Students performing in Chamber Singers must read music quickly, know IPA and Solfege, be well-prepared through individual practice for each rehearsal, and perform with solid technique and expressive nuance. As with all music ensembles, the course may be repeated for credit.

MUS 300W. Wind Ensemble. 1 Hour.
Mus 300W - Wind Ensemble The Wind Ensemble is the premiere ensemble of the University. Membership in the ensemble is awarded after a rigorous and competitive audition. Students performing in wind ensemble must read music quickly, be well-prepared through individual practice for each rehearsal, and perform with solid technique and expressive nuance. As with all music ensembles, the course may be repeated for credit.
MUS 305. Integrated Arts for Elementary Teachers. 3 Hours.
Integrated Arts for Elementary Teachers. Three semester hours. Combined with Art 305 and Theatre 305, this course is designed to introduce students to various creative theatre, visual, and musical arts contents and experience in the elementary school classroom.

## MUS 310. Music Technology. 3 Hours.

Music Technology. Three semester hours. The course is intended primarily for music majors at the junior or senior level. Major topics discussed in the book Experiencing Music Technology (1996) by David Williams and Peter Webster will serve as the basis for course content.
MUS 313. Fundamentals of Conducting. 2 Hours.
Fundamentals of Conducting. Two semester hours. (2 lab) (1) Development of fundamental conducting skills and an introduction to basic issues of ensemble instructions and/or management. Prerequisite: Music 125 or equivalent.
MUS 316. Analysis of Music Form. 2 Hours.
Analysis of Music Form. Two semester hours. (1) Analysis of musical structure from simple binary and ternary forms, the rondo and sonata-allegro forms, and contrapuntal applications. Prerequisite: Music 215 with a grade of " C " or better.

## MUS 318. Counterpoint. 2 Hours.

Counterpoint. Two semester hours. (2) Principles of contrapuntal writing in the style of J.S. Bach and his successors in the Eighteenth and Nineteenth Centuries. Prerequisite: Music 215 with a grade of "C" or better. Concurrent enrollment with Music 225 is permitted when necessary.
MUS 320. Music Literature for Elementary Music Education. 3 Hours.
Music Literature for Elementary Music Education. Three semester hours. (1) Study of music literature from various cultures, eras, and styles appropriate for the beginning musician. The course is for music majors and incorporates vocal and instrumental performance, improvisation, and composition.

## MUS 321. Elementary Music Instruments. 2 Hours.

Instruments in Elementary Music. Three semester hours. This course provides prospective elementary general music teachers with the skills necessary to teach lessons using recorder, pitched and unpitched percussion, and to accompany song with string instruments.

## MUS 323. Music History I. 3 Hours.

Music History I. Three semester hours. (1) A study of the historical development of the art of Western music from the Middle Ages through the Baroque Era. Particular attention will be given to music as an aspect of general cultural and intellectual history as well as to the evolution of musical forms and styles.

## MUS 324. Music History II. 3 Hours.

Music History II. Three semester hours. (2) A study of the historical development and cultural significance of Western art music from the 18th Century to the present. Particular attention will be given to the general stylistic characteristics of each musical period and the historical, technological, and societal reasons for their evolution.
MUS 326. Piano Literature. 3 Hours.
Piano Literature. Three semester hours. (2) Level I: A study of piano literature of the Baroque and classic eras. Level II: A study of piano literature of the Romantic era and the twentieth century. May be repeated for credit.
MUS 331. Piano Pedagogy. 3 Hours.
Piano Pedagogy. Three semester hours. (2) A study of various methods and approaches to teaching piano, in class and/or studio environments. May be repeated for credit.

## MUS 351. Minor Applied Music. 1-2 Hour.

Minor Applied Music. One to four semester hours. Private instruction for advanced music majors in keyboard, voice, instruments, or composition. This course includes recitals and performance forums with teacher-directed student evaluations and instructions. All students must pass the upper division barrier examination prior to enrollment. May be repeated for credit.

## MUS 352. Principal Applied. 1-4 Hour.

Principal Applied. One to four semester hours. Private instruction for advanced music majors in keyboard, voice, instruments, or composition. This course includes recitals and performance forums with teacher directed student evaluations and instructions. All students must pass the upper division barrier examination prior to enrollment. May be repeated for credit.

MUS 397. Special Topics. 1-3 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## MUS 403. Voice Production. 2 Hours.

Voice Production. Two semester hours. (2 lab) (2) An examination of techniques relating to vocal registration, resonance adjustments, and breath management for the singer. Includes age specific physiological developments and instructional needs of people from childhood through senior adults.

MUS 404. Marching Band Technique. 2 Hours.
Marching Band Techniques. Two semester hours. (2 lab) (2) A study of various styles of marching band presentation. Includes history on marching bands, music selection, computer based drill design and performance application.

MUS 410. History and Organization of Choral Music. 2 Hours.
History and Organization of Choral Music. Two semester hours. (2) A study of the history and development of choral music in the public schools. This course includes an examination of aesthetics and technological developments and requires observation of choral ensembles at various levels.

## MUS 413. Choral Conducting. 2 Hours.

Choral Conducting. Two semester hours. (2) Continuation, development, and expansion of Music 313 with emphasis on choral conducting and issues related to the instruction and/or management of the choral ensemble.

MUS 414. Instrumental Conducting. 2 Hours.
Instrumental Conducting. Two semester hours. (2) Continuation, development, and expansion of Music 313 with emphasis on instrumental conducting. Prerequisite: Music 313.
MUS 416. Orchestration/Arranging. 2 Hours.
Orchestration/Arranging. Two semester hours. (2) Arranging for various vocal/instrumental ensemble combinations. Prerequisite: Music 215 with a grade of "C" or better.
MUS 420. Instrumental Organization. 2 Hours.
Instrumental Organization. Two semester hours. (2) A study of the organization and administration of the instrumental music program in current application.

## MUS 430. Instrumental Literature. 3 Hours.

Instrumental Literature. Three semester hours. (1) A comprehensive overview of all levels of repertoire ranging from beginning band to collegeappropriate works. Each piece will be individually examined to provide students with general information as well as practical suggestions on the inherent challenges unique to it. Students will also examine and analyze the cornerstone works of the band repertoire and their historical significance. Additional topics will include criteria that determine artistic merit and how to effectively program for ensembles at various ability levels.

## MUS 450. Music and Movement I. 3 Hours.

Music and Movement for Children I. Three semester hours. The primary purpose of this course is to prepare students to teach elementary music for students in Kindergarten through second grade. Accordingly, the course will introduce pedagogical strategies that combine movement and music and examine music-specific topic such as the development child's singing voice approrpriate song literature, etc.
MUS 465. Music and Movement II. 3 Hours.
Music and Movement for Children II. Three semester hours. The primary purpose of this course is to prepare students to teach elementary music for students in grades three through six. Accordingly the course will introduce pedagogical strategies that combine movement and music activities and examine music-specific topics such as the development child's singing voice, appropriate song literature, etc. The course will introduce well-known pedagogical strategies such as Orff, Kodaly, Dalcrose, etc.

## MUS 470. Choral Literature. 3 Hours.

Choral Literature. Three semester hours. (1) A comprehensive study of choral literature styles and genres from the Renaissance through the 21 st Century including non-western cultures.

## MUS 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: consent of department head.

## MUS 490. H Honors Thesis. 3 Hours.

H Honors Thesis Hours: 6 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

MUS 491. H Honors Readings. 3 Hours.
H Ind Honors Readings Hours: 3 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

MUS 1308. Introduction to World Music Literature. 3 Hours.
Introduction to World Music Literature Designed for lower division students and deals with the characterisitics of musical sound and the elements of music as found in the music of all of the world's cultures. Major emphasis will be given to active listening through recordings, live performances, reading about music, and organized discussions of the music heard.
MUS 1310. Jazz; New Orleans to Jazz/Rock. 3 Hours.
(MUSI 1310) 102 - Jazz; New Orleans to Jazz/Rock. Three semester hours. (1, 2, 3, 4) This course is designed as an introduction to the history and music of jazz and its cross over into jazz rock. Particular emphasis will be placed on the evolution of various jazz styles as they developed in New Orleans, Chicago, and Kansas City, the big band era of the 30 s and 40 s and Be-Bop and cool jazz of the late 50 s and 60 s Aspects of fusion jazz, new age and synthesized electronic music will be examined in the context of rock influences. Specific artists' musical styles will be compared and contrasted in terms of rhythm, melody, harmony, and structural consideration. Emphasis will be placed on the performers contribution to the genre through extensive listening to recorded examples.

## Nursing Department Courses

NURS 3232. Professional Nursing Issues. 2 Hours.
Professional Nursing Issues - Two semester hours 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 3311. Health Alterations. 3 Hours.

NURS 3311 Health Alterations - Three semester hours This course relates manifestations of disease, risk factors for disease, and the principles of pathology underlying illness and injury to therapeutic nursing interventions and outcomes. Prerequisites: BSC2401 and 2402.

NURS 3312. Principles of Pharmacology. 3 Hours.
NURS 3312 Principles of Pharmacology - Three semester hours This course focuses on the basic drug classification, 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. Prerequisites: BSC 2401 and 2402.

## NURS 3313. Nurse as Therapeutic Communicator. 3 Hours.

NURS 3313 Nurse as Therapeutic Communicator - Three semester hours 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 3414. Health Assessment. 4 Hours.

NURS 3414 Health Assessment - Four semester hours ( $3 \mathrm{lec} / 3 \mathrm{lab}$ ) Concepts and principles underlying assessment of the health status of individuals are presented. Emphasis is placed on interviewing skills, health histories, and the physical and psychosocial findings in the well person. Development of communication and assessment skills. Students implement in the nursing process by obtaining health histories, performing physical and psychosocial assessments, establishing a database, and formulating initial nursing plans.

NURS 3531. Nursing Care of Parents and Newborns. 5 Hours.
Nursing Care of Parents/Newborns - Five Semester hours (3 Lec/6 Lab) Focuses on nursing care of childbearing families using both nursing and developmental theories. Bio-psychosocial 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 are presented. Practice in providing nursing care to families during each phase of the childbearing cycle occurs in local hospitals and clinics. The nursing process is used with emphasis on the theoretical and empirical basis of practice. Experience in patient/family teaching such as childbirth classes is included. Prerequisites: NURS 3620.

## NURS 3620. Fundamentals of Nursing Care. 6 Hours.

Fundamentals of Nursing Care - Six semester hours (3Lec/6Lab) An introduction to the scope of human needs, utilization of the nursing process as a systematic approach to meeting those needs, and the role of the professional nurse in assisting individuals toward optimal health. Clinical settings are utilized in the application of fundamental concepts, principles of nursing, and communication skills that are employed in providing basic client care. Prerequisite: NURS 3312. Co-requisite: NURS 3311, 3312, 3313, 3414.

## NURS 3630. Nursing Care of Adults I. 6 Hours.

Nursing Care of Adults I - Six semester hours (3Lec/9 Lab) 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 3620.

## NURS 4342. Nurse as Research Consumer. 3 Hours.

Nurse as Research Consumer - Three semester hours 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. Prerequisites: MATH 453, NURS 3630, 3232.

## NURS 4540. Nursing Care of Mental Health Clients. 5 Hours.

Nursing Care of Mental Health Clients - Five Semester hours(3Lec/6Lab) Demonstrates the relevance of psychosocial nursing concepts to all areas of professional practice. Provides a conceptual integration of the nursing process, theories, and research from psychosocial sciences and humanities as these relate to the care of persons with mental disorders. Clinical experience provides an opportunity for application of psychosocial concepts and methods in using the nursing process to promote optimal levels of wellness for individuals, families, and target groups. Prerequisite: NURS 3630.

## NURS 4541. Nursing Care of Children/Families. 5 Hours.

Nursing Care of Children/Families - Five semester hours (3Lec/6Lab) Using 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 3620.

## NURS 4650. Nursing Care of Adults II. 6 Hours.

Nursing Care of Adults - Six semester hours - (3Lec/9Lab) Presents 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. Prerequisites: NURS 3630.

## NURS 4660. Rural and Community Health Nursing. 6 Hours.

Rural and Community Health Nursing - Six semester hours (3Lec/9Lab) Explores rural 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 rural community setting to promote, maintain, and restore health. Focuses on transcultural nursing concepts, rural, and home health care delivery. Diverse roles of the community and public health nurse are examined and a rural community assessment is completed using research and data processing skills. Prerequisites: NURS 4650.

NURS 4661. Leadership in Professional Nursing. 6 Hours.
Leadership in Professional Nursing - Six semester hours(3Lec/9Lab) 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 of leadership through supervised experiences gained in local health care institutions. Prerequisite: NURS 4650.

## Philosophy Courses

## PHIL 331. History of Philosophy I. 3 Hours.

History of Philosophy I. Three semester hours. Ancient, Medieval, and Renaissance philosophy. Greek philosophy from the beginnings (Thales, Anaximenes, Pythagoras, Heraclitus, Parmenides, the Atomists, Empedocles, Anaxagoras) to Plato's and Aristotle's rationalism, Epicure, the Stoics, and the Skeptics. Satisfies Humanities option of University Studies. Prerequisite: Eng 1302.

## PHIL 332. History of Philosophy II. 3 Hours.

History of Philosophy II. Three semester hours. From the Age of Reason to the present, this course may include Kant, Hegel, Schopenhauer, Comte, Nietzsche, Bergson, and Husserl. Satisfies Humanities option of University Studies. Prerequisite: Eng 1302.

## PHIL 360. General Ethics. 3 Hours.

General Ethics. Three semester hours. Theories concerning the nature of the good life, human conduct in society, value judgments, ethical standards, and current ethical issues. Satisfies Humanities option of University Studies. Prerequisite: Eng 1302.

## PHIL 362. Aesthetics. 3 Hours.

Aesthetics. Three semester hours. (2, odd years) Analysis of aesthetic experience. Problems of "taste" and evaluation in music, literature, painting, architecture, etc. Satisfies Humanities option of University Studies. Prerequisite: Eng 1302.

PHIL 489. Independent Study. 1-4 Hour.
Independent Study. Three or four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

PHIL 490. H Honors Thesis. 3 Hours.
Honors Thesis.
PHIL 491. H Ind Honors Readings. 3 Hours.
Individual Honors Readings.
PHIL 497. Special Topics. 1-4 Hour.
Special Topics. Three semester hours. Organized class. May be repeated when topics vary.
PHIL 1301. Introduction to Philosophy. 3 Hours.
(PHIL 1301) Introduction to Philosophy. Three semester hours. A general introduction to critical thinking and logic. Study of basic questions of existence and knowledge. Satisfies Humanities option of University Studies. Prerequisite: Eng 1302.
PHIL 2303. Logic. 3 Hours.
(PHIL 2303) Logic. Three semester hours. An introduction to nonformal logic and argumentation theory. The course emphasizes clear analysis of written arguments, common fallacies of reasoning, major types of arguments, and the relationships of argument principles to variant argument fields. Prerequisite: Eng 1302.

## Photography Courses

PHO 111. Introduction to Digital Media. 3 Hours.
US-Intro to Digital Media. Three semester hours. (3 lecture, 3 lab) This is an intensive semester-long course in which you will learn the technical and conceptual tools to understand the basics of digital media as well as begin to learn the language of the visual narrative. You'll begin to explore the photographic fundamentals of composition and lighting.

## PHO 112. Basic Photography I. 3 Hours.

Basic Photography I - Three semester hours Photography 112 is the continuation of PHO 111. The primary emphases of PHO 112 are digital camera techniques and controls. Students will learn the operation of aperture, shutter speed, and ISO, as well as the characteristics of different lenses as they relate to specific photographic requirements. This class will also explore advanced color and printing techniques and introduce sound and video. Students must have a fully adjustable digital camera for this class. 3 semester hours. Pre-requisites: PHO 111.

## PHO 209. Basic Photography II. 3 Hours.

Basic Photography II - Three semester hours In PHO 209, Students will study the basics of studio lighting using continuous lights. Students will explore table-top, product, portrait advertising and fine art photography both in the studio and on location. Students will explore the latest techniques in lighting and research the history of studio lighting from Hollywood portraits to the Bauhaus and early Czech photography. In this course students will further explore the photographic and video narrative. Students will create a final portfolio that includes prints, video and a published book.
PHO 210. Introduction to Studio Lighting. 3 Hours.
Introduction to Studio Lighting - Three semester hours (3 lec / 2 lab) This course introduces the use of advanced studio and location lighting to create photographic illustrations in controlled environments. Lighting techniques are demonstrated and applied in a series of photographic exercises of both tabletop and portraiture. Medium format digital cameras and electronic flash are used to attain control of design, composition, contrast and color temperature. Along with the physical principles of light, concentration on aspects of design, composition, perception and content with an emphasis on technical mastery of photography studio equipment will be addressed.

## PHO 212. Visual Perception in Photography. 3 Hours.

Visual Perception in Photography. Three semester hours. Involves photographic seeing and thinking, communicative camera techniques that organize the elements of composition. Students learn the psychology of photography in terms of space, light, time and emotional impact. Lecture only.
PHO 339. Environmental Portraiture. 3-4 Hour.
Environmental Portraiture. Four semester hours (3 lecture, 3 lab ). An exploration of the creative potential inherent in the relationship between subject and environment in portraiture. Basic portrait strategies in both location and studio settings will be covered. Considerations in lighting, composition, gesture and mood will be discussed. Contemporary issues in portraiture for commercial, editorial and art purposes will be covered. Prerequisite: Photography 112.

## PHO 341. Advertising and Commercial Photography. 3-4 Hour.

Advertising and Commercial Photography. Three semester hours (3 lecture, 3 lab). Emphasis on technical quality and the methods and techniques of commercial and advertising photography. The student will learn creative control of studio lighting and equipment, and will develop a capacity to generate and refine ideas. Prerequisites: Photography 209 and 210.
PHO 349. Nature and Wildlife Photography. 3-4 Hour.
Nature and Wildlife Photography. Three semester hours (3 lecture, 3 lab). Nature and wildlife photographic techniques with emphasis on digital capture and digital portfolio production. One week of shooting in a wilderness area is required. Prerequisite: Photography 111.
PHO 350. Advanced Digital Photography. 3-4 Hour.
Advanced Digital Photography. Three semester hours. (3 lecture, 3 lab ). A continuation of Photography 250, this course places increased emphasis on the computer as a tool for the enhancement of photographic images and illustration. Prerequisite: Photography 250.
PHO 351. Introduction to Photojournalism. 4 Hours.
Introduction to Photojournalism - Four semester An introduction to photojournalism. This class covers techniques and equipment needed when shooting for publication and places an emphasis on producing digital images. Pre-requisites : PHO111.

## PHO 352. Advanced Photojournalism. 4 Hours.

Advanced Photojournalism - Four semester hours Photojournalism students will refine their photo reporting skills while expanding techniques to include visual storytelling and documenting with emerging technology. Students must be published. An emphasis will be placed on students publishing assignments to further portfolios. Critiques will be an integral part of the course. Pre-requisites : PHO111, PHO351.

## PHO 353. Sports Photography. 4 Hours.

Sports Photography - Four semester hours An introduction to sports photography in the digital age. Topics include: equipment, shooting techniques, editing and critiquing photographs for submission, and obtaining press credentials. Pre-requisites : PHO111.
PHO 355. Food Photography. 4 Hours.
Food Photography - Four semester hours This course addresses theory and techniques specific to food photography and is presented through presentations, lectures and studio visits with professional photographers and food stylists. Food photography encompasses varieties of techniques and hands-on experimentation in the kitchen and studio. Pre-requisites: PHO 209, PHO 210.
PHO 357. Documentary Photography. 3-4 Hour.
Documentary Photography. Three semester hours. (3 lecture, 3 lab). A workshop on photographic documentary strategies. A range of documentary approaches will be covered. Each student will choose a semester long photographic project. At the conclusion of the class students will assemble an exhibition. Prerequisite: Photography 112.

## PHO 358. Architectural Photography. 4 Hours.

Architectural Photography - Four semester hours This course explores the technical challenges of photographing both interior and exterior architectural structures and the human-altered landscape for both personal expression and historical documentation. Lecture topics will include the historical and contemporary technical and conceptual aspects of photographing architectural spaces. Assignments will focus on photographing both rural and urban structures using both natural and artificial light. Individual and group critiques will guide student production. Pre-requisites : PHO 209.
PHO 359. Junior Photography Seminar. 3-4 Hour.
Abstract and Experimental Photography. Four semester hours (3 lecture, 3 lab). Abstraction deals with the pleasures and terrors of visual experience through photography, disassociated from a picture's intellectually or objectively descriptive content. Experimentation explores the extension of visual experience and the search for new vision through manipulation and modification of the camera and the use of unconventional films and processing techniques. Prerequisite: Photography 112.

## PHO 360. B \& W Darkroom Technique. 3 Hours.

B\&W Darkroom Technique - Three semester hours This course examines traditional wet darkroom techniques, including film cameras and processing, exposure, development and printing silver-gelatin paper. The student will explore different films, papers and processing techniques and how they relate to perception and content in traditional black-and-white photography. Pre-requisites: PHO 112.

## PHO 361. Abstract and Experimental. 3 Hours.

Abstract and Experimental - Three semester hours This course explores alternative approaches to the theory and practice of the photographic image. Using an assortment of techniques both when making an image and in its presentation, the student will investigate the language of the image outside of symbolic representation. This course extends the varieties of visual experience and the search for new vision through manipulation and modification of traditional photographic imagemaking. Pre-requisites: PHO 112.

PHO 369. Alternative Print Making. 3-4 Hour.
Alternative Print Making. Three semester hours. (3 lecture, 3 lab). Experimental, antique and non-silver processes and unconventional modes of presentation. The Gum-Bichromate process, the Cyanotype, "Photographic" processes involving, digital negative production, montage, collage, masking, toning, intensification, and reduction may be included. Prerequisite: Photography 111.

## PHO 370. Video Production Techniques. 4 Hours.

Video Production Techniques - Four semester hours This course introduces the basics of video production utilizing the latest recording technology and video editing equipment. Students study basic equipment operation, video composition, lighting and audio production planning, and visual narrative storytelling. Students work individually and in groups to create video projects.

PHO 379. Survey of Photographic History. 3 Hours.
History of Photography - Three semester hours. An examination of the scientific and aesthetic history of photography from its origins to the present. Emphasis is placed on early processes, the pioneers of photography, photography as a visual art and developments in modern photography. Media, trends, and the work of photographers are analyzed.
PHO 389. Independent Study. 1-4 Hour.
PHO 397. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. Topics will be selected from studio, fine art, or experimental photography. May be repeated when topics vary.

PHO 403. Business Practices in Photography. 3 Hours.
Business Practices in Photography. Three semester hours. This course introduces the student to business practices, copyright law, studio operation, marketing, financial management and other practical matters related to the business of photography. Prerequisite: Photography 111.

PHO 450. Senior Portfolio Review. 4 Hours.
Senior Portfolio Review - Four semester hours This course is a culmination of the student's educational and personal experiences in the photography program. On a practical level, this course prepares the student to take the next career step, whether they are going into the job market as a professional photographer, looking for gallery representation, or continuing their education at the graduate level. Students will explore the various opportunities for artists in a variety of fields by individual interviews and class visits from working professionals. Students will also participate in extended internships with professionals in their areas of interest. Pre-requisites : permission of instructor.
PHO 489. Independent Study. 1-6 Hour.
Independent Study. One to Three semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of a member of the Photography faculty.

PHO 490. H Honors Thesis. 3-6 Hour.
PHO 491. H Ind Honors Readings. 3 Hours.
PHO 495. Photography Internship. 3 Hours.
Photography Internship. Three semester hours. Approved work experience in photography. Supervision under the guidance of a practicing professional and departmental faculty member. Prerequisite: Photography 210.
PHO 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. Topics will be selected from studio, fine art, or experimental photography. May be repeated when topics vary.

## Physics Courses

PHYS 132. Basic Electronics for Scientists and Engineers. 4 Hours.
Basic Electronics for Scientists and Engineers. Four semester hours (3 lecture, 2 lab). AC and DC circuits, semiconductor devices, and linear integrated circuits. Applications include voltage dividers, timing circuits, power supplies, amplifiers, oscillators, and filters. Laboratory stresses basic electronic measurements and circuit prototyping.

## PHYS 141. Introduction to Musical Acoustics. 4 Hours.

Intro to Musical Acoustic - Four semester hours (3 lecture, 2 lab ) The course covers basic physical principles of waves required to understand the phenomenon of music, the characteristics of musical instruments and sound effects of rooms/halls for music majors and any one interested in the sciences behind the music, in musician-friendly format. Basic concepts such as frequency, harmonics, and pitch, physics-based questions on such topics as music acoustics, stringed instruments, wind instruments, singing and electronic instruments will be discussed in lectures. Hands on labs and web-based exercises will supplement the lectures. Pre-requisite: Math 141 or 175 or 179 or 191.
PHYS 201. Problem Solving in Mechanics. 1 Hour.
Problem Solving in Mechanics. One semester hours. Extension of concepts developed in introductory mechanics with emphasis on problem solving techniques.

## PHYS 202. Problem Solving in Electricity and Magnetism. 1 Hour.

Problem Solving in Electricity and Magnetism. One semester hour. Extension of concepts developed in introductory Electricity and Magnetism with emphasis on problem solving techniques.

## PHYS 317. Mathematical Physics I. 3 Hours.

Mathematical Methods for Physics \& Engineering - Three semester hours 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. Prerequisite Math 192, Corequisite Math 314 or 315 , or consent of instructor.

## PHYS 319. Scientific Computing. 3 Hours.

Scientific Computing. Three semester hours. Computer solutions to realistic problems in science and engineering using numerical, graphical, and simulation techniques. Includes the use of programming languages and mathematical software packages on computer workstations and distributedparallel computer systems. Prerequisites: Phys 2425, 2426, and CSCi 151 or consent of instructor.

## PHYS 321. Modern Physics. 3 Hours.

Modern Physics - Three semester hours An introduction to special relativity and elementary quantum mechanics. Topics include spacetime, relativistic energy and momentum, the uncertainty principle, Schrödinger's equation, observables and operators, bound states, potential barriers, and the hydrogen atom. Prerequisite Phys 2426, Math 314, or consent of instructor.

## PHYS 332. Digital Logic and Circuitry. 4 Hours.

PHYS 332 Digital Logic and Circuitry. Four semester hours (3 lecture, 2 lab). Boolean logic, digital circuits, digital integrated circuits, and programmable logic devices using VHDL . Laboratory instruction in basic digital instrumentation and circuit design tools.

## PHYS 333. Wave Motion, Acoustics, and Optics. 4 Hours.

Wave Motion, Acoustics, and Optics. Four semester hours. (3 lecture, 2 lab) An introduction to vibrational and wave motion with applications to acoustics, optics, and electromagnetic phenomenon. Prerequisites: Physics 2425, 2426 or consent of the instructor.

## PHYS 341. Broadfield Physics I. 4 Hours.

Broadfield Physics I - Four semester hours Core topics in advanced physics necessary for the in-depth understanding of the subject required for teaching high-school physics are discussed. Topics include classical mechanics, special relativity, electromagnetism and thermodynamics. Prerequisites: PHYS 2425,2426.

## PHYS 342. Broadfield Physics II. 4 Hours.

Broadfield Physics II - Four semester hours Core topics in advanced physics necessary for the in-depth understanding of the subject required for teaching high-school physics are discussed. Topics include quantum mechanics, kinetic theory and statistical mechanics. Pre-requisites : PHYS 341.

PHYS 389. Independent Study. 1-3 Hour.

## PHYS 401. Current Problems. 1 Hour.

Current Problems. One semester hour. Current problems or topics in research, employment, and trends in physics are considered. The course may be taken each of four semesters for credit. Prerequisite: Junior standing.

## PHYS 407. Science and Society, Contemporary Issues. 3 Hours.

Science and Society, Contemporary Issues. Three semester hours. (Same as Chem 407) In this University Capstone science course, two or three contemporary science issues of importance to global society will be studied from various points of view including scientific, political, and economic. This course cannot be used for a major or minor in science.

PHYS 411. Mechanics I. 3 Hours.
Mechanics I - Three semester hours A mathematical treatment of the 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; central force problems; accelerating coordinate systems; gravitation; Lagrange's equations and Hamilton's equations. Prerequisite PHYS 2426, Corequisite Math 314 or 315.
PHYS 412. Advanced Electricity and Magnetism. 3 Hours.
Advanced Electricity and Magnetism. Three semester hours. An advanced course in theoretical electricity and magnetism. Prerequisite: Physics 2426.

## PHYS 414. Thermodynamics and Kinetic Theory. 3 Hours.

Thermodynamics and Kinetic Theory. Three semester hours. Introduction to the kinetic theory of matter and to thermodynamics and statistical mechanics, with applications to physical and chemical systems.
PHYS 418. Undergraduate Research. 3 Hours.
Undergraduate Research. Three semester hours. A conference course designed to enlarge the library and laboratory experiences of students with decreasing dependence upon the teacher. Problems will be assigned and progress evaluated by reports and frequent conferences.
PHYS 420. Quantum Mechanics. 3 Hours.
Quantum Mechanics - Three semester hours The Schrödinger equation; one dimensional systems; the Heisenberg uncertainty principle; magnetic moments and angular momentum; two and three dimensional systems; approximation methods; scattering theory. Prerequisite Phys 321, Math 314 or Math 315, or consent of instructor.

## PHYS 421. Materials Science. 3 Hours.

Materials Science. Three semester hours. The physical, chemical and electrical properties of metals and semi-conductors and the relationship between these properties and the electronic and crystal structures of these materials is studied. Prerequisites: Phys 321 and 333.

## PHYS 430. Optics. 3 Hours.

Optics. Three semester hours. Fundamentals of geometrical and physical optics and applications to optical instrumentation. Prerequisites: Physics 333 or consent of the instructor.

## PHYS 432. Advanced Electronics. 3 Hours.

Advanced Electronics. Three semester hours (2 lecture, 2 lab). Embedded system design and programming. Topics include microcontroller selection, peripheral interfacing, low and high-level programming languages, and microcontroller development tools. Prerequisites: Physics 132 or 332 and Computer Science 151.

## PHYS 437. STOCHASC SIG PRO. 3 Hours.

Nuclear Physics - Three semester hours The study of nuclear phenomena and properties including mass, stability, magnetic moment, radioactive decay processes and nuclear reactions. The application of nuclear principles to other fields such as astronomy, engineering, manufacturing, and medicine. Prerequisites : PHYS 321.

## PHYS 441. Advanced Physics Laboratory. 2 Hours.

Advanced Physics Laboratory. Two semester hours. (4 lab) An introduction to the equipment and techniques of experimental physics. Experiments are selected from a wide range of fields in physics. Research grade equipment is used in many experiments. May be repeated for up to six hours credit. Prerequisites: PHYS 2425 and 2426, Junior standing in physics and consent of instructor.
PHYS 461. Physics Research Project. 3 Hours.
Physics Research Project - Three semester hours This is the first part of a two-semester course sequence. Each participating student will conduct literature surveys on a research topic agreed to between him/her and their local advisor. The research problem must be approved through the Consortium. Completion of the research will be consummated during the second semester. Areas of research will primarily be in those areas represented by the Consortium which include nuclear physics, high energy particle physics, medical/health physics, computational and mathematical physics, atomic and molecular physics, astrophysics, and other forefront areas. Pre-requisites: PHYS 321.

## PHYS 462. Physics Research Seminar. 3 Hours.

Physics Research Seminar - Three semester hours An experimental or theoretical project will be continued by the student and the results reported in a seminar. Students who have not yet taken the ETS Major Field Test in Physics are required to do so while enrolled in Seminar. Pre-requisites : PHYS 461.

PHYS 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: consent of department head.
PHYS 490. H Honors Thesis. 3 Hours.
PHYS 490 - H Honors Thesis - Three semester hours Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.
PHYS 491. H Ind Honors Readings. 3 Hours.
[Print Course] AG 491 - H IND HONORS RDGS Hours: 3 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.
PHYS 492. Instrumentation and Control. 3 Hours.
Instrumentation and Control. Three semester hours. Sensors and actuators in real-time systems. Topics include the physics of sensors and actuators, sensor signal conditioning, real-time data acquisition, elementary signal processing, motion control, and software for instrumentation and control.
PHYS 497. Special Topics. 4 Hours.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## PHYS 1401. College Physics. 4 Hours.

PHYS 1401) College Physics. Four semester hours (3 lecture, 2 lab ). Mechanics and heat; including one two-hour laboratory period per week.
PHYS 1402. College Physics. 4 Hours.
(PHYS 1402) College Physics. Four semester hours (3 lecture, 2 lab). Magnetism, electricity, sound, and light, including one two-hour laboratory period per week.
PHYS 2425. University Physics I. 4 Hours.
(PHYS 2425) University Physics I. Four semester hours (3 lecture, 3 lab). Calculus based physics course in mechanics for science, mathematics and engineering students. Prerequisite: Math 2413 or consent of instructor.
PHYS 2426. University Physics II. 4 Hours.
(PHYS 2426) University Physics II. Four semester hours (3 lecture, 3 lab). Second semester of calculus based physics with topics in electricity and magnetism for science, mathematics, and engineering students. Prerequisite: Phys 2425 or consent of instructor.

## Plant and Soil Science Courses

## PLS 115. Introduction to Plant Science. 4 Hours.

(AGRI 1407) Introduction to Plant Science. Four semester hours (3 lecture, 2 lab). An introduction to the principles of plant growth, general crop production, and ornamental and production horticulture.
PLS 230. Ornamental Plant Identification. 3 Hours.
Ornamental Plant Identification. Three semester hours. Ornamental trees, shrubs, vines, and garden annuals and perennials. Their identification, nomenclature, classification, cultural requirements and landscape uses.

## PLS 253. Economic Entomology. 4 Hours.

Economic Entomology. Three semester hours. This course introduces students to the major orders of insects and other arthropods of economic importance with specific emphasis on those beneficial and harmful to agricultural and horticultural crops, livestock, pets, and food products. Control techniques using Integrated Pest Management will be included.

## PLS 297. Special Topics. 1-4 Hour.

PLS 305. Landscape Design. 3 Hours.
Landscape Design. Three semester hours (2 lecture, 2 lab). Landscaping of homes and public buildings. Nomenclature, uses, placement, and care required by woody ornamentals used in landscaping. Prerequisite: PIS 115.
PLS 306. Plant Propagation. 3 Hours.
Plant Propagation. Three semester hours (2 lecture, 2 lab). Principles of plant propagation. Physiology and morphology pertaining to reproduction along with chemical aids. Prerequisites: PIS 115 and 309, and Chem 1411.
PLS 309. Soil Science. 4 Hours.
Soil Science. Four semester hours (3 lecture, 2 lab). Origin, formation, fertility and management of soils. Prerequisites: PIS 115, Chem 1411.

## PLS 320. Soil Fertility and Plant Nutrition. 3 Hours.

Soil Fertility and Plant Nutrition. Three semester hours. Elements required for plant nutrition and their effects on plant growth. Principles of uptake, transport and assimilation. Prerequisite: PIS 309.
PLS 321. Soil Morphology Classification and Mapping. 4 Hours.
Soil Morphology Classification and Mapping. Four semester hours (3 lecture, 2 lab). A comprehensive study of the morphological features of the soil profile in relation to soil utilization and management. Emphasis will be given toward soil development, classification, and mapping.
PLS 323. Field Crops. 3 Hours.
Field Crops. Three semester hours (2 lecture, 2 lab). Principles of agronomic crop production practices. Major field crops and management techniques will be studied. Prerequisite: PIS 115.

## PLS 326. Forage and Pasture Crops. 3 Hours.

Forage and Pasture Crops. Three semester hours. (2 lecture, 2 lab) The production, harvesting, storage, and uses of forage crops, hay and pasture crops, improvements, care and management of pastures given special emphasis. Practice work includes identification of seeds and plants, judging of hay, and field and pasture observation. Prerequisites: PIS 115, 309.

## PLS 328. Introduction to Range Management. 3 Hours.

Introduction to Range Management. Three semester hours. Principles of range management include plant identification, plant growth and nutrient cycling, range inventory (evaluation, condition, and improvement) and the effects of grazing.

## PLS 355. Interior Plantscaping. 3 Hours.

Interior Plantscaping. Three semester hours. (2Lec/2Lab) This course provides an introduction into interior plantscapes. The course will include identification, selection, installation, maintenance, and management of plants used in interior landscapes.

PLS 381. Crop Physiology. 3 Hours.
Crop Physiology. Three semester hours. (2 lecture, 2 lab) Physiological processes underlying crop management practices and their alternatives. Laboratory exercises will be designed to elucidate these principles. Prerequisites: PIS 115, Chem 1407 or 211 and Chem 1411 and 1412.
PLS 417. Geospatial Mapping. 3 Hours.
Geospatial Mapping. Three semester hours. The course will provide basic knowledge of the fundamentals of Geographic Information Systems (GIS), including GIS theory and applications. The course will take a hands-on and problem solving approach to learning GIS and will cover basic GIS including map characteristics and projections, spatial data models, relational databases, and spatial analysis with a focus on natural resource research and management and environmental science. Prerequisite: BSc 1407 or 1413.

## PLS 420. Crop Production Practicum. 3 Hours.

Crop Production Practicum. Three semester hours (1 lecture, 4 lab). Study of crop production practices in this area by actually planting, growing, harvesting, and marketing a crop: (a) Wheat or Oats; (b) Corn; (c) Grain Sorghum; (d) Cotton. A report, including costs and returns, will be due upon completion of the project. Course may be repeated when subject varies, up to a maximum of 9 hours. Prerequisite: PIS 115.
PLS 430. Greenhouse Management. 3 Hours.
Greenhouse Management. Three semester hours. (2 lecture, 2 lab) Greenhouse designs, coverings, heating, cooling and watering systems. Media, pasteurization and handling systems in connection with the growing of greenhouse crops. Economics of production. Prerequisites: PIS 115 and 309.

PLS 434. Weed Control. 3 Hours.
Weed Control - Three semester hours An introduction to the principles of weeds, weed control, and herbicides.
PLS 450. Landscape Management. 3 Hours.
Landscape Management. Three semester hours. (2 Lec/2 Lab) Establishing and maintaining plantings on residential and commercial grounds.

## PLS 455. Turfgrass Management. 3 Hours.

Turfgrass Management. Three semester hours. Establishment and maintenance of turfgrasses in lawns, sports fields, and golf courses. Course will include selection, planting, fertilization, maintenance, and pest and disease control.

## PLS 460. Plant Taxonomy. 3 Hours.

Plan Taxonomy. Three semester hours. A systematic overview of the plant kingdom focusing on classification and identification of unknown specimens.

## PLS 485. Plant Breeding. 3 Hours.

Plant Breeding. Three semester hours. (2 lecture, 2 lab) An applied study of genetics, plant breeding techniques and varietal improvement of both agronomic and horticultural crops. Prerequisites: PIS 115 and 381.

## PLS 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.
PLS 490. Independent Study. 3 Hours.
PLS 491. H Ind Honors Readings. 3 Hours.
PLS 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.
PLS 1415. Introduction to Horticulture. 4 Hours.
1415 - Introduction to the science and art of modern horticultural plant production, including propagation, fertilization, pest control, and pruning; major groups of garden crops including vegetables, fruits and nuts, ornamentals, houseplants, and florist crops; lab includes propagation and culture of garden plants in field and greenhouse.

## Political Science Courses

## PSCI 222. Introduction to Law (PS-R). 3 Hours.

Introduction to Law. Three semester hours. This course provides an overview of the law and the legal system. Topics include basic legal concepts and terminology in various areas of the law; structure, jurisdictions, functions, practices, and political impact of the judicial system at the local, state, and national levels; current issues in law; and ethical obligations of the paralegal. Prerequisite: PSci 220 or 221 or consent of the program coordinator.
PSCI 223. Legal Research (PS-R). 3 Hours.
Legal Research. Three semester hours. This course is designed to aid the beginning student in acquiring and enhancing legal research skills. Topics covered include the techniques of legal research and writing, sources of the law and how each can be found; case analysis, legal citation, and legal bibliography; and ethical obligations of the paralegal in legal research. Prerequisite: PSci 222 or consent of the program coordinator.
PSCI 310. Law Office Management (PS-R). 3 Hours.
Law Office Management. Three semester hours. (formerly PSci 420) This course is designed to acquaint the paralegal student with the fundamentals of law office management and organization. Topics include the organization and utilization of support personnel, time and billing systems, budgets, case and file management, calendaring and docket control, accounting systems, marketing, legal computer applications, ethical obligations of the paralegal in a law office, and career opportunities for paralegals. Prerequisites: PSci 222 and 223 or consent of the program coordinator.

PSCI 312. Bankruptcy for Paralegals (PS-E). 3 Hours.
Bankruptcy for Paralegals. Three semester hours. (Formerly PSci 423) This course introduces the student to bankruptcy law with emphasis on the paralegal's role. Topics include individuals and business liquidation and reorganization, debtor's and creditor's rights, litigation proceedings in bankruptcy court, legal concepts and terminology relating to bankruptcy law, ethical considerations for paralegals working in this area, and current computer applications utilized in bankruptcy practice. Prerequisites: PSci 222 and 223 or consent of the program coordinator.

## PSCI 321. Probate (PS-E). 3 Hours.

Probate. Three semester hours. This course provides the student with a basic understanding of Texas Probate code and forms of administration of decedents' estates and guardianship. Topics include preparation of probate and litigation documents, inventories, claims against estates, annual and final accountings, introduction to will contest proceedings, county and district court filings, and ethical obligations and professional responsibilities of the paralegal working in this area. Prerequisites: PSci 222 and 223 or consent of the program coordinator.

## PSCI 322. Civil Procedure (PS-R). 3 Hours.

Civil Procedure. Three semester hours. This course focuses on the Texas Rules of Civil Procedure while also giving students experience in the aspects of civil litigation in which a paralegal would be involved before trial. The student is introduced to rules regarding commencement of suits, citation, and pre-trail proceedings. The course also has a practical element requiring students to draft a petition, draft all types of discovery, and summarize a deposition. Prerequisites: PSci 222 and 223 or consent of the program coordinator.
PSCI 323. Business Law for Paralegals (PS-E). 3 Hours.
Business Law for Paralegals. Three semester hours. This course provides the paralegal student with a basic and thorough understanding of laws governing the creation and operation of businesses. Topics covered include the formation of business entities (including sole proprietorships, partnerships, corporations, and other business structures), corporate filings, minute book preparation, ethical obligations of the paralegal working in this field, and computer applications being utilized in corporate law practice. Practical skills are emphasized through assigned drafting and formation projects. Prerequisites: PSci 222 and 223 or consent of the program coordinator.

## PSCI 324. Criminal Law and Procedure (PS-E). 3 Hours.

Criminal Law and Procedure. Three semester hours. This course presents the Texas Penal Code and Texas Rules of Criminal procedure. Topics include review of the criminal justice system, stages in criminal prosecution, investigation procedures, legal rights of the accused; documents preparation, ethical obligations of the paralegal working in criminal law practice, and the application of computer applications in criminal proceedings. Prerequisites: PSci 222 and 223 or consent of the program coordinator.

## PSCI 325. Family Law (PS-E). 3 Hours.

Family Law. Three semester hours. This course is structured around the study of the Texas Family Code, including the principles of divorce, annulment, and suit to declare marriages void, with an overview of child custody and property division. Students are exposed through practical assignments to the legal aspects of marriage/other relationships, duties and liabilities of husband/wife/children, child custody and support, adoption, guardianship, public records research, and the paralegal's role in alternative dispute resolution/mediation processes. Additional topics covered include ethical obligations, family law terminology, and application of electronic resources in family law practice. Prerequisites: PSci 222 and 223 or consent of the program coordinator.
PSCI 328. Real Estate Law for Paralegals (PS-E). 3 Hours.
Real Estate Law for Paralegals. Three semester hours. (Formerly PSci 421) This course focuses on legal principles governing real estate transactions, with particular attention to sales contracts, deeds, mortgages, title insurance, and Texas community property and homestead laws. Emphasis is on the practical skills needed by paralegals to perform all types of real estate transactions, ethical considerations for a paralegal working in this area, and emerging computer applications and resources in real estate practice. Prerequisites: PSci 222 and 223 or consent of the program coordinator.

## PSCI 330. Introduction to Political Science. 3 Hours.

Introduction to Political Science. Three semester hours. (1) An introduction to the discipline of political science emphasizing the subjects studied by political scientists and the approaches used to illuminate them. Because this course provides a foundation for other upper-level political science classes (except paralegal courses), it should be taken by political science majors, minors, and composite social studies majors at the earliest possible opportunity in their program in the department.

PSCI 331. European Political Systems. 3 Hours.
European Political Systems. Three semester hours. An introduction to the comparative study of the political systems of Great Britain and selected European countries, representing different cultural, social, and political environments.

## PSCI 332. Democracy and Democratization. 3 Hours.

Conditions of Democracy. Three semester hours. A study of major theories concerning cultural, social economic, and political conditions that are favorable to the development of democracy. May be repeated when the focus varies.

## PSCI 333. Non-European Political Systems. 3 Hours.

Non-European Political System. Three semester hours. A comparative study of selected political systems in Africa, Asia, Latin America, and the Middle East. May be repeated when the regional emphasis varies.

## PSCI 335. Political Economy. 3 Hours.

Political Economy. Three semester hours. An introduction to the institutions and processes that shape U.S. domestic political economy including its increasing relationship to the global political economy. Emphasis will be placed on major political actors including Congress, the President, and the Federal Reserve Board and how decisions affect everyday citizens. These topics will be linked to the U.S.'s expanding influence in global institutions such as the WTO. Because this courses provides a foundation for other upper-level political science courses (except paralegal courses), it should be taken by political science majors and minors, and composite social studies majors and middle school social studies majors at the earliest possible opportunity in their program in the department.
PSCI 341. The American Presidency. 3 Hours.
The American Presidency. Three semester hours. The evaluation of the institution of the American Presidency within the framework of the U.S. Constitution, the American democratic and partisan political processes, and the processes by which the national government's public administrators administer and develop public policy.

## PSCI 342. Introduction to Global Public Policy. 3 Hours.

Introduction to Global Public Policy. Three semester hours. An introductory survey of the field dealing with the evolution, scope and nature of public administration in the United States and including such topics as organization, management, personnel, budgeting, decision making and public policy.

## PSCI 344. American Political Parties and Electoral Politics. 3 Hours.

American Political Parties and Electoral Politics. Three semester hours. A study of party and electoral politics, including campaigning and voting behavior.

## PSCI 345. Public Opinion. 3 Hours.

Public Opinion. Three semester hours. (2) A study of public opinion in the United States including the sources and characteristics of political opinions, the role of the media in shaping opinion, and the impact of opinion on elections and public policy. Methods used in conducting polls are examined and applied.

## PSCI 346. Introduction to Public Policy. 3 Hours.

Introduction to Public Policy. Three semester hours. (1) A course designed to familiarize the student with the problem solving activities of government in such areas as pollution, poverty, unemployment, taxation, education, health care, and technology.

## PSCI 347. Intro to Research Methods. 3 Hours.

Introduction to Research Methods in Political Science - Three semester hours This course focuses on the important empirical research methodology employed in Political Science. Topics covered include the scientific method, research design, sampling, probability, as well as descriptive and inferential statistics.

## PSCI 410. Political Theory I. 3 Hours.

Political Theory I. Three semester hours. (1) Ancient and medieval political theory from the pre-Socratics through St. Thomas Aquinas.

## PSCI 411. Political Theory II. 3 Hours.

Political Theory II. Three semester hours. (2) Political Theory from Machiavelli through the social contract theorists of the seventeenth century.

## PSCI 412. Political Theory III. 3 Hours.

Political Theory III. Three semester hours. (3) Political theory during the nineteenth, twentieth, and twenty-first centuries with particular attention to the development of ideological deformations of reality and the consequences thereof.
PSCI 414. American Political Thought. 3 Hours.
An examination of the development of the American liberal-democratic political tradition from the colonial era to the present and the influence of dissent upon that tradition.

## PSCI 415. Introduction to Comparative Politics. 3 Hours.

Introduction to Comparative Politics Introduction and survey of the structures and processes of political institutions in major types of political systems in the world. These include parliamentary systems, monarchies, Islamic systems, countries of the former Soviet Bloc system, and systems in developing countries.

## PSCI 421. Real Estate Law Legal Ast. 3 Hours.

PSCI 422. Trial and Appellate Litigation and Procedure (PS-E). 3 Hours.
Trial and Appellate Litigation and Procedure. Three semester hours. This course focuses on the Texas Rules of Civil Procedure pertaining to trails while also giving some introduction to rules pertaining to appeals. From a practical side, the course exposes students to the role of the paralegal in preparing cases for trial, including developing a trial notebook and all its components (depositions, summaries, designation of experts, witness lists, exhibit lists, objection to exhibits/witnesses, and trial testimony). Topics also include the role of alternative dispute resolution processes in civil litigation proceedings and ethical considerations for the paralegal. Prerequisite: PSci 322 or consent of the program coordinator.

## PSCI 423. Fundamental of Bankruptcy. 3 Hours.

PSCI 426. Paralegal Internship (PS-R). 3 Hours.
Paralegal Internship. Three semester hours. Basic internship for paralegals who lack experience in the legal field. Course integrates practical experience with the student's academic program through supervised work in an appropriate legal environment. Requires a minimum of 160 working hours.
Prerequisite: Completion of at least 18 hours of paralegal specialty courses or consent of the program coordinator.
PSCI 427. Torts and Personal Injury Law (PS-R). 3 Hours.
Torts and Personal Injury Law. Three semester hours. This course focuses on the fundamental common law and statutory concepts of tort law, with emphasis on the paralegal's role. Topics include intentional torts, negligence, strict liability, products liability, medical malpractice, special tort actions, including mass torts, immunities, and commonly employed defenses, and paralegal ethics. The course has a practical element requiring students to draft documents, such as a petition and motion for summary judgment, in addition to briefing cases. Students will become familiar with computer applications used in a torts practice. Prerequisites: PSci 222 and 223 or consent of the program coordinator.
PSCI 430. Revolutions and Revolutionary Movements. 3 Hours.
Revolutions and Revolutionary Movements. Three semester hours. A study of major theories of revolutions- their causes, processes and consequencesincluding close examination of selected cases. May be repeated when the focus varies.

PSCI 437. Foreign Policy. 3 Hours.
Foreign Policy. Three semester hours. A study of the multiple determinants that shape foreign policy including the individual, national, regional, and international levels of analysis. Particular attention will be given to the formation and substance of foreign policy in the post-Cold War era. Focus may vary from the U.S., Latin America, Europe, Middle East and North Africa, and the former Soviet Union and successor states. May be repeated when the focus varies.

## PSCI 438. International Relations. 3 Hours.

International Relations. Three semester hours. A study of the complex nature of both conflict-driven and cooperative interactions among nation-states and non-state actors that function in the international system. Focus may be on a particular region, law and diplomacy, and international organizations including NGOs and IGOs. May be repeated when the focus varies.
PSCI 441. Congressional Politics. 3 Hours.
Congressional Politics. Three semester hours. A study of politics and policy-making in the U.S. Congress. Topics include congressional elections, party and committee politics, constituent service, and legislative executive relations.
PSCI 442. Constitutional Law (NPS). 3 Hours.
Constitutional Law. Three semester hours. This course is an introduction to constitutional law in the United States. Attention is given to important constitutional and legal doctrines by examining major decisions of the US Supreme Court. Topic include the powers of the federal government, federal interbranch conflict, federalism and nation-state relations, and state regulatory power.

## PSCI 443. Civil Liberties and Civil Rights (NPS). 3 Hours.

Civil Liberties and Civil Rights. Three semester hours. This course focuses on American constitutional law as it relates to the procedural and substantive rights of individuals by examining major decisions of the US Supreme Court. Topics include the Bill of Rights and the Thirteenth, Fourteenth, and Fifteenth Amendments.

## PSCI 476. Internship in Government and Politics. 3 Hours.

Internship in Government and Politics. Three semester hours. Internship for students who have the opportunity to gain practical experience working for some level of government or in political campaigns. Prerequisite: Consent of department head.

## PSCI 488. Contemporary Ideas. 3 Hours.

Contemporary Ideas. Three semester hours. (Same as Eng, Hist, and Phil 488). (Capstone) The course studies contemporary writing, mostly non-fiction, that is characterized by originality of topic, breadth of subject matter, clarity of expression and audacity. In reading logs, students make observations, take notes, and explore questions. In finished writings, they work out connections among ideas from various fields, moving from analysis to synthesis and fresh insights. Prerequisite: Junior standing.
PSCI 489. Independent Study. 3 Hours.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: consent of department head.
PSCI 490. Honors Thesis. 3 Hours.
Honors Thesis.
PSCI 491. Honors Reading. 3 Hours.
Honors Reading.

## PSCI 497. Special Topics. 3 Hours.

Special Topics. One to four semester hours. (1, 2, 3, 4) Organized class. May be repeated when topics vary.

## PSCI 497A. Special Topics. 1-3 Hour.

Special Topics. One to four semester hours. (1, 2, 3, 4) Organized class. May be repeated when topics vary.

## PSCI 2301. Principles of United States and Texas Government. 3 Hours.

Principles of United States and Texas Government. Three semester hours A survey of the underlying ideas, principles, and participatory practices of constitutional government in the United States and Texas. Topics consider4ed include civil liberties and civil rights, constitutionalism, federalism, ideology, pluralism, political culture and socialization, political parties and interest groups, public opinion, republicanism, and voting and electoral politics.

PSCI 2302. United States and Texas Government: Institutions and Policies. 3 Hours.
United States and Texas Government: Institutions and Policies. Three semester hours. An examination of the United States and Texas political systems with emphasis on both formal and informal institutions and the roles they play in the creation and implementation of public policy. Topics considered include the legislative, executive, and judicial branches, bureaucracies and public policies (formulation and implementation).

## Psychology Courses

## PSY 210. Sport Psychology. 3 Hours.

An overview of the principles of psychology as applied to sport or recreational activity for enhanced interactions and performance.
PSY 214. Aspects of Psychology. 1 Hour.
Aspects of Psychology. One semester hours. This course examines professional and research opportunities in psychology and allied fields.

## PSY 297. Special Topics. 4 Hours.

PSY 300. Learning Processes and Development. 3 Hours.
Learning Processes and Development. Three semester hours. A course designed to provide the student with information about the application of psychological theory to the learning processes and development of children and adolescents. Principles and procedures of measurement and evaluation are also included. The primary objective is to facilitate a clear understanding of the complex, dynamic processes of learning and development. This course is required as part of the teacher preparation program.
PSY 302. Psychological Statistics: Descriptive and Inferential. 4 Hours.
Psychological Statistics: Descriptive and Inferential. Four semester hours. (3 lecture, 2 lab) The logic and methods of descriptive and inferential statistics and their relation to experimental design in psychology are studied.

## PSY 305. Experimental Psychology. 4 Hours.

Experimental Psychology. Four semester hours (3 lecture, 2 lab). This course is designed to familiarize the student with typical methods and techniques employed in psychology research. In addition to the three hours per week of classroom instruction, the student attends one two-hour laboratory per week to perform experiments in psychology. Prerequisite: Psy 302.

## PSY 310. Psychology and Sociology of Diverse Populations. 3 Hours.

Psychology and Sociology of Diverse Populations. Three semester hours. (Equivalent to Psy 311) (Capstone) This course will examine the variables which affect the perceptions, beliefs, and behaviors of the microcultures which comprise our population. This course will include, but will not be limited to, culture as a function of socioeconomic status, religion, gender, language, age, exceptionality, geographical origins and ethnicity. Prerequisite: Junior standing.

## PSY 311. US-Psy/Soc Div Cultures FB. 3 Hours.

Psychology and Sociology of Diverse Cultures. Three semester hours. (Equivalent to Psy 310) (Capstone) This field-based course examines the perceptions, beliefs, and behaviors of diverse cultures and their affect on our population. Culture will be examined as a function of socioeconomic status, religion, gender, language, age, exceptionality, geographical origins and ethnicity. Prerequisites: Senior Standing and Field-Based Program.

## PSY 315. Physiological Psychology. 3 Hours.

Physiological Psychology. Three semester hours. Provides a basis for understanding the way in which biological mechanisms participate in behavior. It emphasizes both peripheral and central mechanisms involved in responding, sensing, motivation, emotion, arousal/sleep, and learning. Pre-requisite: Psy 302, Psy 2301 or 131.

## PSY 316. Abnormal Psychology. 3 Hours.

Abnormal Psychology. Three semester hours. Emphasis is placed first on a study of the fundamental principles of understanding and appreciating mental disorder. Then a study of the types of disorders including incidence, causes, symptoms, therapy, and prognosis is made.

## PSY 317. Psychology of Personality. 3 Hours.

Psychology of Personality. Three semester hours. The various approaches to the study of personality and a consideration of its determinants, development, and assessment form the framework of the course.

## PSY 319. Child and Adolescent Development. 3 Hours.

Child and Adolescent Development - Three semester hours. How children grow and develop, the stages in the process, and the factors which influence growth and development are considered.

## PSY 321. Psychology of Adolescence. 3 Hours.

Psychology of Adolescence. Three semester hours. The course considers the patterns of "teenage" growth and development and the factors which influence them.

## PSY 322. Lifespan Development. 3 Hours.

Lifespan Development. Three semester hours. The course follows the life span development of the individual, emphasizing the theoretical and experimental approaches to the study of cognitive, personality, social, perceptual, and physical components of development from conception to death.
PSY 325. Evolutionary Psychology. 3 Hours.
Evolutionary Psychology This is a relatively new branch of psychology that has arisen from the confluence of psychology and evolutionary biology. This course will address how human minds and behavior have been shaped by natural and sexual selection originally identified by Charles Darwin.
PSY 327. Cognitive Social Psychology. 3 Hours.
Cognitive Social Psychology. Three semester hours. This class is designed to introduce the student to the basic principles of social psychology with an emphasis on the cognitive aspects of interpersonal influence. Topics that will be covered include: social cognition, heuristics, stereotypes, prejudice, discrimination, cognitive dissonance and self-justification, implicit personality theory, attribution, self-serving biases, obedience to authority, and eyewitness testimony.

## PSY 339. Forensic Psychology. 3 Hours.

This course focuses upon the application and practice of psychology in both the civil and criminal justice systems with the following topics examined in depth: police and investigative psychology, family forensic psychology, psychology of crime and delinquency, victimology and victim services, legal psychology, expert witness testimony, consulting psychology, and correctional psychology.

## PSY 341. Learning and Motivation. 3 Hours.

Learning and Motivation. Three semester hours. This course presents the basic data of learning and motivation and describes general theoretical approaches to understanding them. Pre-requisite: Psy 2301 or 131.
PSY 350. Cognition Psychology. 3 Hours.
Cognitive Psychology. Three semester hours. Examines human cognitive processes, including perception, attention, memory, language, problem solving, reasoning, and developmental trends; experimental methods and data, and contemporary theories of cognition.
PSY 389. Independent Study:. 1-4 Hour.
Independent Study - Hours: One to four Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisites Consent of department head. Note May be repeated when the topic varies.
PSY 397. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.
PSY 403. Development of Modern Psychology. 3 Hours.
Development of Modern Psychology. Three semester hours. An introduction to the major schools and systems of psychology as they have evolved and as they exist today.

## PSY 404. Organizational Psychology. 3 Hours.

Organizational Psychology. Three semester hours. This course applies behavioral science knowledge to professional organizations. The goal of this course is to understand how businesses can be designed so that both efficiency and the quality of employee life is improved. Topics will include employee selection, psychological testing, training and development, motivation, work stress and health, organizational design and change, consumer psychology, and engineering psychology.

PSY 407. DIFFERENTIAL PSYCHOLOGY. 3 Hours.

## PSY 411. Research Apprenticeship. 1 Hour.

Research Apprenticeship - One semester hours This course is an opportunity to gain experience conducting psychological research under the guidance of a faculty mentor. The course format follows an apprenticeship model - students will work with faculty and/or graduate mentor on existing projects, and students will be trained by the advisors. Students will gain knowledge in research design and implementation by assisting in material preparation, testing participants, and coding data. Along with developing research skills, the research internship provides students with a unique opportunity to learn more about a specialized topic of psychology. Registration requires consent of supervising instructor. $\mathrm{S} / \mathrm{U}$ grading; May be repeated -6 hour credit maximum.

## PSY 412. Research Apprenticeship. 2 Hours.

Research Apprenticeship - Two semester hours This course is an opportunity to gain experience conducting psychological research under the guidance of a faculty mentor. The course format follows an apprenticeship model - students will work with faculty and/or graduate mentor on existing projects, and students will be trained by the advisors. Students will gain knowledge in research design and implementation by assisting in material preparation, testing participants, and coding data. Along with developing research skills, the research internship provides students with a unique opportunity to learn more about a specialized topic of psychology. Registration requires consent of supervising instructor. $\mathrm{S} / \mathrm{U}$ grading; May be repeated -6 hour credit maximum.

## PSY 413. Research Apprenticeship. 3 Hours.

Research Apprenticeship - Three semester hours This course is an opportunity to gain experience conducting psychological research under the guidance of a faculty mentor. The course format follows an apprenticeship model - students will work with faculty and/or graduate mentor on existing projects, and students will be trained by the advisors. Students will gain knowledge in research design and implementation by assisting in material preparation, testing participants, and coding data. Along with developing research skills, the research internship provides students with a unique opportunity to learn more about a specialized topic of psychology. Registration requires consent of supervising instructor. $\mathrm{S} / \mathrm{U}$ grading; May be repeated -6 hour credit maximum.

## PSY 414. Introduction to Human-Computer Interaction Design. 3 Hours.

Students will learn the fundamental concepts of human-computer interaction and user-centered design thinking, through working in teams on an interaction design project, supported by lectures, reading, and discussions. They will learn to evaluate and design usable and appropriate software based on psychological, social, and technical analysis. They will become familiar with the variety of design and evaluation methods used in interaction design, and will get experience with these methods in their project. Pre-requisite: PSY 2301.
PSY 443. Psychology of Death and Dying. 3 Hours.
Psychology of Death and Dying. Three semester hours. (Capstone) This is the study of the processes of dying and the influence of the threat of death on human behavior. Prerequisite: Junior standing.

## PSY 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## PSY 490. Honors Thesis. 3-6 Hour.

AG 490 - H Honors Thesis - Hours: 6 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite: Consent of head. Note May be repeated when the topic varies.

## PSY 491. H Honors Readings. 3 Hours.

PSY 491 - IND HONORS RDGS - Hours: 3 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite: Consent of head. Note May be repeated when the topic varies.

## PSY 492. Health Psychology. 3 Hours.

Health Psychology - Three semester Description : This class is designed to introduce the basic concepts of Health Psychology. Students will be introduced to different medical disorders and diseases and the implications for the psychological health and impact on psychological functioning of individuals with these disorders. Students will study physical limitations and adaptations. They will understand basic ADA law and how to make buildings accessible. Psychological treatments for persons with disorders and physical limitations will be introduced. Topics covered will include depression and illness, traumatic injuries, neuromuscular diseases, cancer, and chronic pain. Also covered will be the use of psychological techniques to improve behaviors for wellness including smoking cessation, proper nutrition, and exercise. Such methods of treatment will include biofeedback, relaxation and behavioral goal setting. Graduate students will understand the applicability of foundations of health psychology to older adults and the study of geriatrics. Cross list with PSY 593 - Health Psychology.
PSY 497. SPECIAL TOPICS. 3 Hours.

## PSY 2301. Introduction to Psychology. 3 Hours.

(PSYC 2301) Introduction to Psychology. Three semester hours. The aim of this course is to give a general understanding of the basic principles of psychology.

## PSY 2306. Psychology of Sexual Behavior. 4 Hours.

(PSYC 2306) Psychology of Sexual Behavior. Four semester hours. 3Lec/2Lab A study of the physiological and psychological factors involved in normal and abnormal human sexual behavior with emphasis upon marital adjustment.

## PSY 2315. Psychology of Adjustment. 3 Hours.

(PSYC 2315) Psychology of Adjustment. Three semester hours. This course is a presentation of psychological principles which are fundamental to personal and social adjustment.

## Radio-Television Courses

## RTV 109. Beginning Audio. 1 Hour.

Beginning Audio. One semester hour. (1, 2, 3, 4) Supervised practice and instruction in audio production.

## RTV 151. Communication Technology. 3 Hours.

Communication Technology. Three semester hours. (1,2) A study of the processes and user interactions of communication technologies. The course covers the foundation of technologies used for audio and video production and the foundation of digital content distribution. Topics include personal computer and Internet historical developments, broadband, satellites, fiber optics, video gaming and virtual reality.
RTV 209. KKOM News and Programming. 1 Hour.
KKOM News and Programming - One semester hour Supervised practice and instruction in radio. Students work in production, news, announcing, writing, and other radio assignments at KKOM Radio. Required of all majors and minors. May be repeated.

## RTV 215. Media Performance. 3 Hours.

(COMM 2331) Media Performance. Three semester hours. (1, 2) A study of the principles of announcing and talent in radio, television and associated fields, including preparation and performance of commercials, news, interviews and similar broadcast-style content. Includes coverage of theory and practices in the broadcasting industry from the writing, studio and production points of view.

## RTV 221. Radio Programming. 3 Hours.

Radio Programming - Three semester hours Lectures and laboratory experience in audio production equipment, methods, and techniques. Emphasis is placed on radio programming and production. Attention is given to radio formats, new technology, production skills and program management.

## RTV 309. KETR-FM Practicum. 1 Hour.

KETR-FM Practicum - One semester hour Supervised practice and instruction in radio. Students work in production, news, announcing, writing, and other radio assignments at KETR-FM Radio. Required of all majors and minors. May be repeated.

## RTV 320. Radio and Television Writing. 3 Hours.

Radio and Television Writing. Three semester hours. (2) A study of the techniques, style, and format of script preparation for the radio and television media. Scripts include commercial, news documentary, and dramatic programs.

## RTV 322. Film-Style Shooting and Editing. 3 Hours.

Film - Style Shooting \& Editing. Three semester hours. (2) This course teaches the technical skills and creative principles required for single camera ('film style') video field shooting and post production using Final Cut Studio®. Topics include audio, video recording technology, composition, lighting, continuity, and editing. Experience planning, shooting and editing entertainment- and/or information-based video projects will be provided through hands-on exercises, projects and assignments.

## RTV 326. Electro Media Sales/Operations. 3 Hours.

Electronic Media Sales and Operations - Three semester hours An examination of the sales, programming, and management functions of radio, television and interactive media operations. Advertising techniques, audience ratings, and basic commercial practices will be examined, as will traditional and contemporary media programming and operations as related to developing content for an audience and monetizing that content.

## RTV 332. Multicamera TV Production. 3 Hours.

Multicamera TV Production - Three semester hours Lectures and laboratory experiences in control room and studio procedures for television broadcasting. Provides the students with an opportunity for learning pre-production, production and post-production of television programs using field shooting for pre-production and multi-camera production techniques of a TV studio. Experiences provided include operation of cameras, control panels, lights, and audio in directing and producing nondramatic programs such as news, commercials, and interviews. Attention is given to the television performance as well as to production techniques. Pre-requisites : RTV 322.

## RTV 360. Digital Audio Production. 3 Hours.

Digital Audio Production - Three Semester Hours Students will learn the fundamental skills required of sound engineers and/or producers working in the recording industry. Attention will be given to the basics of the mixing board, microphones and recording techniques for drums, bass, guitar, keyboards and vocals. Pre-requisites : RTV 221.

## RTV 380. Sports Broadcasting. 3 Hours.

Sports Broadcasting - Three semester hours Students will learn the basic aspects of live play-by-play broadcasting; color commentary; and sports reporting, anchoring and producing for radio, TV and online communications. Emphasis will be on practical experience in helping to produce sports programming for KETR, student radio KKOM and student television KETV. Pre-requisites : RTV 215.

## RTV 409. Television Practicum. 1 Hour.

Television Practicum - One semester hours Supervised practice and instruction in video and broadcast procedures. Students work at video/television assignments in field production, studio production, news, announcing, writing, and editing. Practicum includes work at KETV Cable Channel 3. Required of all majors and minors. May be repeated.

## RTV 420. Interactive Media. 3 Hours.

Interactive Media - Three semester hours The course explores the Internet, particularly the World Wide Web, as it is used in mass communication, as a modern extension of media that have been traditionally associated with newspaper, television and radio station operations. Students will develop a greater appreciation for the history and implications of computer-mediated communication, explore cultural, social and economic issues of interactive media, and learn basic practical skills in interactive media production and management. Prerequisite RTV 322 or consent of instructor.

## RTV 440. Broadcast and Digital Journalism. 3 Hours.

Broadcast \& Digital Media Journalism The course covers basic rules of broadcast news writing and visual storytelling, along with radio- and Internetnews creation and production and studio and newsroom procedures. Students will research, write, shoot and edit TV news stories and participate in producing a TV newscast. Prerequisite: RTV 322.

## RTV 451. Broadcasting Seminar. 3 Hours.

Broadcasting Seminar. Three semester hours. (1, alternate years) A course designed to acquaint the student with current problems, issues, and practices in the area of commercial broadcasting.

## RTV 453. Social Media. 3 Hours.

Social Media. Three semester hours. (1, alternate years) This theory-based course will examine concepts of communication, social interaction and community in a digital world. The course will include such interactive media applications as chat, blog, wiki, avatar, comment, Twitter®, Flikr®, Facebook $®$, MySpace $®$, Second Life $®$, podcast and similar Internet sites and techniques of digital media communication. Students are expected to use social media practices to create multimedia learning journals, and small groups will use social media to produce and present projects.

## RTV 480. Professional Seminar and Portfolio. 3 Hours.

Professional Seminar \& Portfolio - Three semester hours The course synthesizes content from previous courses in commercial broadcasting, investigates current trends and issues in broadcast and digital media production, and includes a thorough investigation of the job search process. Also, investigation of new trends in broadcast and digital media production, management, research, programming and government regulation. Prerequisite: at least 30 hours completed in RTV courses.

## RTV 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head or RTV head.

## RTV 490. Honors Thesis. 1-6 Hour.

## RTV 491. Ind Honors Readings. 3 Hours.

## RTV 495. Internship. 1-3 Hour.

Internship - One, Two, or Three Semester Hours Students receive professional experience with radio, television or other electronic media, supervised both by a faculty member and an electronic-media professional. Students must have a GPA of not less than 2.6 in a minimum of three RTV courses, and the approval of the RTV division director before being approved for the internship.

## RTV 497. Special Topics. 1-4 Hour.

Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## RTV 1335. Studies in Electronic Communications. 3 Hours.

(COMM 1335) Studies in Electronic Communications. Three semester hours. (1) A survey course to provide an understanding of the origin, operation, organization and history of broadcasting in the United States.

## Reading Courses

## RDG 350. Reading and Literacy I. 3 Hours.

Reading and Literacy I. Three semester hours. This course introduces the theoretical foundations of reading and literacy for the teacher in training. The teacher-in-training will explore how reading, literacy, and cognitive processes are developed. Fifteen hours of lab will provide time for field observations of children and teachers to connect theory with actual practice. The focus of this course is an examination of how to implement TEKS when facilitating literacy acquisition and development. An emphasis on teaching approaches, text genre, writing, listening, speaking, linguistics, cueing systems, phonemic awareness, phonics, word recognition, spelling, and professional resources are included. Prerequisites: Minimum overall GPA of 2.50 and must have passed TSI.

## RDG 360. Word Analysis Skills. 3 Hours.

Word Analysis Skills This course examines the English phonological system used in reading and writing for English Language Learners. The focus of this course is an examination of the competencies and TEKS related to word analysis skills of all learners. Specific attention is given to strategies that are useful to readers and writers in the development and assessment of word knowledge and word analysis. Prerequisite Rdg 350. Prerequisite and/or Corequisite EIEd 300; minimum overall GPA of 2.50 , must have passed TSI and THEA 250 Reading score or ACT 23 Composite and 23 English or SAT 1070 Combined and 550 Critical Reading or Verbal.
RDG 370. Reading and Literacy II. 3 Hours.
Reading and Literacy II This course builds upon the theoretical foundations of reading and literacy presented in the previous course, Rdg 350. The teaching-in-training will explore how to integrate school reading and writing instruction. The focus of this course is an examination of how TEKS can be implemented with basal readers, trade books, literature, cognition, reading comprehension, comprehension strategies, formal assessments, and informal assessment strategies. Prerequisite Rdg 350 and EIEd 300; minimum overall GPA of 2.50 must have passed TSI and THEA 250 Reading score or ACT 23 Composite and 23 English or SAT 1070 Combined and 550 Critical Reading or Verbal.

## RDG 380. Comprehension and Vocabulary in Middle and High Schools. 3 Hours.

Comprehension and Vocabulary in Middle and High Schools This course provides an understanding of factors which influence learning from content area text and teaches specific instructional strategies which promote comprehension, vocabulary development, effective study strategies, and test-taking skills. Includes ways to modify text for diverse learners. Attention is given to the principles of research-based reading instruction. Prerequisite minimum overall GPA of 2.50 must have passed TSI and THEA 250 Reading score or ACT 23 Composite and 23 English or SAT 1070 Combined and 550 Critical Reading or Verbal.

RDG 417. Reading and Learning in the Content Area. 3 Hours.
Reading and Learning in the Content Area Description : This course emphasizes reading comprehension and strategies for interacting with expository materials. The following are examined: the role of text in reading, text analysis methods, content area reading lesson formats, teacher-directed strategies, reader based strategies, levels of thought/questioning, and infusing literature into the content curriculum.

## RDG 448. Characteristics of English Language Learners. 3 Hours.

Characteristics and Challenges of English Language Learners in Field Based Setting - Three semester hours The characteristics and challenges of English language learners will be explored. Attention will be given to the development of reading fluency and written communications in the content areas with second language learners. Language assessments including the SOLOM will be studied. Prerequisites: Admission to Teacher Education and Placement in NET CPDT Center.

RDG 450. Middle School Reading: Theory \& Practice. 3 Hours.
Building a Community of Readers. Three semester hours. This course focuses on schema theory, metacognitive theory, critical theory, reader response theory, transactional theory, and social cultural theory as each applies to teaching reading at the middle levels. Comprehension processes for both narrative and expository text will be explored for traditional text and the emerging technologies that encompass literacy. Demonstration of effective strategies to support struggling readers and experience with reading assessments will be included.

## RDG 489. Independent Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## RDG 490. H - Honors Thesis. 3 Hours.

RDG 491. H Ind Honors Rdgs. 3 Hours.
RDG 497. Special Topics. 3 Hours.
Special Topics. One to four semester hours. Organized class. May be graded on a satisfactory (S) or unsatisfactory (U) basis. may be repeated when the topic varies.

## School of Social Work Courses

## SWK 225. Introduction to Social Work. 3 Hours.

(SOCW 2361) Introduction to Social Work. Three semester hours. (1) Examines the historical development and current characteristics of the social welfare institution, the nature of professional social work practice, and the educational preparation for generalist social work practice; and clarifies the individual student's interest in and potential for social work practice. Prerequisites: Eng 1301, 1302.
SWK 250. Foundations of Social Work Practice. 3 Hours.
Foundations of Social Work Practice. Three semester hours. (2) Provides an overview of the generalist social work approach to practice. Students develop relationship-building, problem-identification and data-gathering skills which are used with all levels of client systems. Interviewing and written documentation skills are developed through videotaped interviews, role plays and written assignments. Special attention is given to ethical practice and issues of diversity. Prerequisite SPC 1315 or 1321 Concurrent enrollment with SWk 275.

SWK 275. Human Behavior and the Social Environment I. 3 Hours.
Human Behavior and the Social Environment I. Three semester hours. (2) Examines biophysical, psychological, and behavioral domains of human development. Individuals and families' interactions with the environment are emphasized during each phase of the life cycle: infancy and early childhood, adolescence and young adulthood, middle adulthood, and the later years. Major theories to underpin assessment and intervention with individual and family client systems are presented, within the broader context of a systems approach. Prerequisite/Concurrent enrollment in PSY 2301, Concurrent enrollment with SWk 250.

## SWK 322. Human Behavior and the Social Environment II. 3 Hours.

Human Behavior and the Social Environment II. Three semester hours. (1) Examines the theoretical basis for understanding groups, organizations and communities. Emphasis is placed on providing students with theoretical knowledge which can then be applied to assessing and intervening with mezzo and macro client systems. Systems theory is utilized as a framework for understanding interactions between and among social units. Prerequisites: SWk 225, 250, 275 and Soc 1301. Concurrent enrollment in SWk 328, 329,370 required; Anth 2351 may be taken prior to or concurrently with this course. Restricted to social work majors and social welfare minors.
SWK 325. Social Work Practice with Mezzo Systems. 3 Hours.
Social Work Practice with Mezzo Systems. Three semester hours. (2) The practice course teaches the application of social work skills to work with groups. Students will learn the dynamics of task and process groups and how to apply a systematic approach to the development, implementation, termination and evaluation of groups. Prerequisites: SWk 225, 250, 275, 322, 328, 329, 370. Concurrent enrollment in SWk 331, 348, 350 required. Restricted to social work majors.

## SWK 328. Social Welfare Policy and Services. 3 Hours.

Social Welfare Policy and Services. Three semester hours. (1) Students are acquainted with the social welfare institution and learn to analyze how its policies and services interact with other social forces in responding to social problems of clients at all levels of systems. Emphasis is given to the examination of how social policies affect oppressed populations. Prerequisites: SWk 225, 250, 275; PSci 2301; Hist 1302. Concurrent enrollment in SWk 322, 329, 370 required. Restricted to social work majors and social welfare minors.

## SWK 329. Social Work Practice with Micro Systems. 3 Hours.

Social Work Practice with Micro Systems. Three semester hours. (2) This practice course teaches the application of social work skills with individuals and families. Students will apply a systematic approach to interviewing, assessment, intervention and evaluation of work with individuals and families. Special attention will be given to issues of diversity and ethics in practice. Skills are developed through class exercises, videotaped role plays, and written assignments. Prerequisites: SWk 225, 250, 275. Concurrent enrollment in SWk 322,328 and 370 required. Restricted to social work majors.

## SWK 331. Social Work Practice with Macro Systems. 3 Hours.

Social Work Practice with Macro Systems. Three semester hours. (2) This practice course teaches the application of social work skills with organizations and communities. Students will apply a systematic approach to data gathering, assessment, planning, intervention and evaluation with organizations and communities. Special attention will be given to issues of diversity and ethics in practice. Skills are developed through class exercises, role plays, and written assignments. Prerequisites: SWk 225, 250, 270, 275, 322, 328, 329. Concurrent enrollment in SWk 325, 348 and 350.

SWK 340. Global Perspectives of Human Welfare. 3 Hours.
Global Perspectives of Human Welfare. Three semester hours. (Capstone) This social work elective focuses on the development of student awareness of meeting global human needs. Students are taught to assess and plan culturally appropriate interventions as well as integrate macro theory into international social work practice. Students will be encouraged to develop awareness that they are part of an international community.
SWK 348. Promoting Mental Health Across Populations. 3 Hours.
Promoting Mental Health Across Populations - Three semester hours This course teaches skills for understanding and promoting mental health for people with developmental disabilities, the aged, people with AIDS and other special needs. Prerequisite SWk 322, 328, 329, 370. Restricted to social work majors. Corequisite Concurrent enrollment in 325, 331, 350 required.

## SWK 350. Social Work Research Methods. 3 Hours.

Social Work Research Methods. Three semester hours. (2) This course develops students' knowledge and skills in the use of research designs appropriate for the evaluation of practice with all levels of client systems. Students are also taught to critically evaluate the appropriateness of designs used in published research. Prerequisites: Math 1314 or 1324 or $179 ; 8$ sh US Science; SWk 225, 250, 275, 328, 329, 370. Restricted to social work majors and social welfare minors.

## SWK 360. Human Service Careers with Children. 3 Hours.

Human Service Careers with Children. Three semester hours. This social work elective is designed to provide students with the knowledge base necessary for work with children/families and professionals in a multitude of human service settings. The content of this course will enhance the knowledge, values, and skills obtained in an undergraduate curriculum. Topics include the functions of a Human Service Worker, Child Protective Services, Education, Juvenile Justice, Community Agencies, Law Enforcement, Legal/Judicial, Medical, and presentation on other areas such as advocacy, client relationships and community-based agencies. Social Work elective.

SWK 361. Issues in Family Treatment. 3 Hours.
Issues in Family Treatment. Three semester hours. This elective course is designed to enable students to understand the theories and processes of helping families. Information is provided on diverse family structures and work with families facing divorce, death, domestic violence, and other social problems. Social Work elective.

## SWK 362. Child Welfare. 3 Hours.

Child Welfare. Three semester hours. (2) This elective course introduces the student to the practice field of child welfare. Topics include child protection laws and their enforcement, and problems of family and parent functioning that impinge on children's well-being and the policies and services that relate to these problems.

## SWK 370. Writing and Technology Skills in Social Work. 3 Hours.

Writing and Technology Skills in Social Work. Three semester hours. (1) This course develops students' computer and writing skills for human service settings. Students will learn APA style, Web-based research, Excel, and appropriate documentation skills for practice. Prerequisites: Math 141 or 175 or 179; 8 sh US Science; SWk 225, 250, and 275. Concurrent enrollment in SWK 322, 328, 329 required. Restricted to social work majors.

## SWK 422. Integration of Practice. 3 Hours.

Integration of Practice. Three semester hours. (3) This course is designed to pull together content from SWk 250, 325, 329 and 331 by examining the generalist problem solving approach in its entirety. Assignments are made to facilitate student's application of the required skills in their field practicum settings. Students will discuss their field experiences in order to link classroom theory with agency-based practice. Prerequisites: SWk 325, 329, 331. Concurrent enrollment in SWk 425 is required. Restricted to social work majors.
SWK 424. Generalist Practice in the Field. 3 Hours.
Generalist Practice in the Field. Three semester hours. (1) This course provides students with a review of BSW course content, information and skills for professional development, and requires students to demonstrate an understanding of the application of social work theory in practice settings. Prerequisites: SWk 422, 425; concurrent enrollment in 426 required; restricted to Social Work majors.

## SWK 425. Field Instruction I. 3 Hours.

Field Instruction I. Three semester hours (3) Students enrolled in this course participate in educationally directed field practice under supervision in a social service agency. Students must complete a total of 160 clock hours of work in the field agency. Prerequisites: SWk $225,250,275,322,325,328$, $329,331,348,350,370$. Concurrent enrollment in SWk 422 and the permission of the instructor is required A GPA of 2.5 overall, and in the major is required to enter Field. Restricted to social work majors.

## SWK 426. Field Instruction II. 6 Hours.

Field Instruction II. Six semester hours. (1) Students enrolled in this course participate in a continuation of Field I in an educationally directed field practice experience under supervision in a social service agency. Students must complete a total of 340 clock hours of work in the field agency and must attend a weekly university instructed seminar on campus, which is designed to help students process and understand field experiences. Prerequisites: SWk 422, 425; concurrent enrollment in SWk 424; permission of the instructor is required. Restricted to social work majors.
SWK 489. Independent Study. 1-6 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of program director.

## SWK 490. H Honors Thesis. 3-6 Hour.

SWK 490-H Honors Thesis - Hours: 3 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

## SWK 491. H Ind Honors Readings. 3 Hours.

SWK 491 - H IND HONORS RDGS Hours: 3 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

## SWK 497. Special Topics. 1-4 Hour.

Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## Secondary Education Courses

## SED 200. Education in a Global Society. 3 Hours.

(EDUC 1301) Education in a Global Society Description : This course explores the culture of schooling and classrooms from global perspectives of current political, social, and familial issues impacting schooling and classrooms worldwide. Students will participate in early field experiences with varied and diverse student populations; designed to analyze the learning environment and the human experiences of teachers and learners and compare U.S. schools and the American educational system to those of other countries. Note: Ten clock hours of professional field experiences are required.
SED 300. The Teaching Profession. 3 Hours.
The Teaching Profession This course provides prospective teachers with a beginning foundation for understanding learners, enhancing student achievement, and understanding the teaching environment. The course will emphasize the structure, organization, management, and governance of the American school system and current issues related to the semiprofessional legal, ethical, and multicultural foundations of teaching also will be discussed. Prerequisite minimum overall GPA of 2.50 must have passed TSI and THEA 250 Reading score or ACT 23 Composite and 23 English or SAT 1070 Combined and 550 Critical Reading or Verbal. Note Thirty clock hours of professional field experiences are required.

## SED 302. Teaching Styles and Learning Styles in Pluralistic Field-Based Environments. 3 Hours.

Teaching Styles and Learning Styles in Pluralistic Field-Based Environments. Three semester hours. Affords an experiential component in which public school teachers demonstrate ways to adapt their teaching styles to accommodate students' learning style preferences. Prospective teachers will achieve knowledge and skill by observing and assisting middle/secondary public school teachers in classroom situations. Prerequisite: SED 300 and Psy 300.
SED 389. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.
SED 401. Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field-Based Environments. 3 Hours.
Curriculum, Teaching Strategies, and Classroom Assessment in Pluralistic Field- Based Environments. Three semester hours. An experiential component in which public school teachers design and implement culturally diverse curriculum and model the use of a variety of teaching strategies and classroom assessment techniques. Special attention will center on the alignment of curriculum, instruction, and testing. Prospective teachers will achieve knowledge and skill by observing and assisting middle/secondary public school teachers in classroom situations. Prerequisites: SED 302 and.

SED 404. Internship in Secondary Schools Field-Based. 3 Hours.
Internship in Secondary Teaching. Three semester hours. Supervised intern experiences in the secondary school classroom. Regular seminar sessions will focus on concerns directly related to secondary teaching. The course is to be taken the semester preceding full-time student teaching. Prerequisites: SED 300 and Psy 300.
SED 405. Residency in Secondary Teaching. 3-6 Hour.
Residency in Secondary Teaching. Six semester hours. Directed teaching for one full semester in the secondary school.

## SED 414. Management and Curriculum Development for Diverse Learners. 3 Hours.

Mgmt and Curr Dev for Div Lrnr. Three semester hours. Contains the professional body of knowledge necessary for effective teaching. This course emphasizes methods of organizing and managing a classroom based on an understanding of diverse environments. Teacher skills which have been proven to be effective in supporting diversity ithe classroom will be developed. The content of this course will include classroom management strategies, curriculum and lesson planning, teaching models, assessment models, and certification issues. Students will exhibit an understanding of the Texas teacher competencies as outlined on the Profession Development portion of the TEXES test. Enrollment is limited to students accepted into the aide waiver program. Co-requisite SED 422.
SED 415. Effective Teaching in a Diverse Environment. 3 Hours.
Eff Tchg in a Div Environment. This course contains the professional body of knowledge necessary for effective teaching. This course focuses on understanding theories and strategies that address the needs of a diverse population. Included in this course will be diversity issues, refinement of classroom management and planning techniques, teaching strategies, and informal and formal assessment practices. Students will exhibit an understanding of the Texas Teacher competencies as outlined on the Professional Development portion of the TEXES test. Enrollment is limited to students accepted into the Aide Waiver program.

## SED 416. Educational Research for Effecting Teaching. 3 Hours.

Edu Research for Eff Tchg. Three semester hours. This course contains the professional body of knowledge necessary for effective teaching. This course emphasizes theories and issues of education that are directly related to teacher professional growth. The content of the course will include site based management, professional ethics, school environment issues, communication issues, educational research and political influences. Students will exhibit an understanding of the Texas teacher competencies as outlined on the Professional Development portion of the TEXES test. Enrollment is limited to students accepted into the Aide Waiver Program.

## SED 422. Internship in Teaching. 3 Hours.

Internship in Teaching. Three semester hours. (Same as EIEd 422) Supervised experiences in the secondary school designed for post-baccalaureate students who are seeking initial certification at the graduate level. Students will be supervised by teachers, administrators, and University liaisons. Regular seminar sessions may be held and will focus on concerns related to classroom management practices, curriculum development, and/or instructional strategies.

## SED 489. Independents Study. 1-4 Hour.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.
SED 490. Honors Thesis. 3 Hours.
SED 491. H Ind Honors Rdg. 3 Hours.
SED 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## Sociology Courses

## SOC 310. Psychology and Sociology of Diverse Populations. 3 Hours.

Psychology and Sociology of Diverse Populations. Three semester hours. (Same as Psy 310; equivalent to Psy 311) This course will examine the variables which affect the perceptions, beliefs, and behaviors of various microcultures which comprise our population. The course will include, but will not be limited to, culture as a function of socioeconomic status, religion, sex and gender, language, age, exceptionality, geographical origins and ethnicity. Included in the course will be an analysis of issues related to race, age, sex, and handicap. Prerequisite: Junior standing.
SOC 311. Social Class, Wealth, and Power. 3 Hours.
Social Class, Wealth, and Power. Three semester hours. The relations among social classes are examined as systems of privilege with inequalities of wealth, power, and prestige among individuals and groups. Forces giving rise to social classes, how one's position in a class system affects behavior and personality, class conflict, and the impact of other social institutions, especially the economic and political, are studied.

## SOC 316. Marriage and Family. 3 Hours.

Marriage and Family - Three semester hours This course is a general introduction to marriage and family relationships in the United States, along with comparative examples of other cultures for critical thinking. Topics covered include an overview of the institution of marriage and family, theoretical perspectives on the institution, research approaches in studying the institution, gendered identities, love and intimacy, human sexuality, dating and courtship, the single life, kinship responsibilities, cohabitation, communication, dual career marriages, conflict and divorce, aging process, and marital adjustment and enrichment.

## SOC 318. Urban Sociology and Anthropology. 3 Hours.

Urban Sociology and Anthropology. Three semester hours. This course examines the city and urban life in international perspective. Sociological and anthropological studies will be used to examine the development and growth of cities. The course examines concepts such as urbanism, overurbanization, and urban primacy as well as social problems characteristic of contemporary urban life.
SOC 320. Deviant Behavior. 3 Hours.
Deviant Behavior. Three semester hours. An introduction to the general phenomenon of social deviance. The course focuses on criminal as well as non-criminal deviance such as mental disorders, drug use, and prostitution. Theoretical approaches which seek to explain deviance will be critically explained.

## SOC 323. Sociology of Health and Illness. 3 Hours.

This course examines the social contexts of health, illness, and medical care. It gives prominence to the debates and contrasting theoretical perspectives which provide insight into the political, economic and cultural factors which affect the recognition, distribution and response to illness and disease. Topics include the social construction of health and illness; the global nature of the AIDS epidemic; the patient's perspective on illness; the development of the health professions and the health work force; alternative systems of healing; ethical issues in medicine as they relate to medical technology; and comparative health care reform.

## SOC 331. Introduction to Social Research. 3 Hours.

Introduction to Social Research. Three semester hours. An introduction to the process, logic, and skills of social science research inquiry. The range of research designs, their strengths and weaknesses, the specific research tools needed for the collection of sociological data, and introductory analytical techniques are examined. Required of all majors and a prerequisite for Sociology 332.

## SOC 332. Methods of Statistical Analysis. 4 Hours.

Mthds of Stat Analys. Four semester hours. (3 lecture, 1 lab ) This course provides an in-depth introduction to descriptive and inferential statistics that are especially appropriate in quantitative analysis used in the social sciences (including $t$ tests, $z$ scores, regression, measures of central tendency, etc.). Setting up data files, manipulating variables and running statistical programs using SPSS (Statistical Package for the Social Sciences) are integral components of the course. Prerequisites: Sociology 1301, and 331 or SWk 350, and Math 1314 or 1324 or 179.

## SOC 333. Social Psychology. 3 Hours.

Social Psychology. Three semester hours. The study of the importance of others' influence on one's attitudes, perceptions, motivations, and behavior, the dynamic fragility and power of group participation, and the extent to which human potential is enhanced or severely limited in the context of group life.

## SOC 335. Global Social Issues. 3 Hours.

Global Social Issues. Three semester hours. This course examines a variety of social issues from a global perspective. In today's world nations are linked by vast networks of trade, communication, and travel. As a result, social issues once thought of as "local" are rapidly becoming globalized. Issues associated with these increasing linkages are the focus of this class. They include human rights issues, the implications of global media, the transnationalization of crime and terrorism, global environmental issues, international migration, urbanization, and global social and economic inequalities.

## SOC 341. Sociology of Complex Organizations. 3 Hours.

Sociology of Complex Organizations. Three semester hours. The purpose of this course is to introduce students to the nature of contemporary complex organizations and leadership from a critical perspective. An array of concepts, perspectives and theories, corresponding to the three major sociological approaches, will be presented. These approaches are Rational, Natural, and Open Systems. Different aspects of complex organizations will be analyzed through the use of scholarly journal articles from recognized publications in the United States and overseas. The course will examine the topic of complex organizations on a global scale so international corporations can also be studied. This course contributes three credit hours toward students' fulfillment of degree requirements. The target students are sociology, criminal justice, social work, business and education administration.

## SOC 350. Drugs and Society. 3 Hours.

Drugs and Society. Three semester hours. This course examines the major categories of drugs- stimulants, depressants, hallucinogens, and narcotics. It also investigates other drug related topics and events such as the use of steroids and inhalants; the abuse of over-the-counter drugs; dependency and addiction; and intervention topics. As a capstone this course includes critical thinking about the drug culture, and emphasis is placed on a crossculture perspective. Integrating the viewpoints of other disciplines and professions about the drug culture is also a goal of this course. Prerequisite: Junior standing.

## SOC 370. Minority Groups. 3 Hours.

Minority Groups. Three semester hours. A general survey of race, ethnic, and minority relations in the United States. Emphasis is placed on theories of prejudice/discrimination and institutional racism in education, politics, and economics.

## SOC 436. Sociological Theory. 3 Hours.

Sociological Theory. Three semester hours. This course examines the nature of theory and reviews major sociological theories, especially structuralfunctionalism, conflict theory, exchange theory, and interactionism. Special attention is given to leading figures representative of the above schools of thought. Prerequisite: Sociology 1301 or its equivalent.

## SOC 470. Sociology Internship. 3 Hours.

Sociology Internship - Three semester hours This course will be an academically-based work experience within selected organizations related to the discipline of sociology. The purpose of the internship is to provide an arena for the application of classroom principles within the context of the day-today reality of the professional world of employment. The internship includes field supervision as well as classroom experiences. Pre-requisites : Soc 1301 and Soc 331.

## SOC 485. Senior Seminar in Sociology. 3 Hours.

Senior Seminar in Sociology. Three semester hours. (1) The course examines ways sociology majors can synthesize sociology curriculum and apply the sociological perspective to the real world, along with their knowledge and skills outside the academic world in real work settings. In addition, this course will guide students in the process of resume preparation, interviewing skills, graduate program, and career opportunities available with a sociology major. Special attention will be given to leadership skills needed in the world of work. Pre-requisites: Soc 111, 331, 332, 436, and a senior status.

## SOC 489. Independent Study. 3 Hours.

Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## SOC 490. H Honors Thesis. 3 Hours.

PSY 490 - H Honors Thesis - Hours: 3 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

## SOC 491. H Independent Honors Rdgs. 3 Hours.

## SOC 497. Special Topics. 1-4 Hour.

Special Topics. Three semester hours. Organized class. May be repeated when topics vary.

## SOC 1301. Introduction to Sociology. 3 Hours.

This course is designed to help students better understand the social world in which they live as well as provide a foundation for other in sociology. It provides an overview of major concepts and principles of sociology, including culture, socialization, social order, social control, social stratification, sex and gender, race and ethnicity, social deviance, social institutions, and social change.

## SOC 1306. Social Problems. 3 Hours.

A critical discussion of the sociological perspective on studying descriptions, causes, and prevention of social problems such as crime, mental illness, drug abuse, environmental degradation, poverty, terrorism, and declining quality of life in today's world.

## Spanish Courses

## SPA 131. Elementary Spanish I. 3 Hours.

(SPAN 1311) Elementary Spanish I. Three semester hours. Pronunciation, elements of grammar, vocabulary, and conversation and composition based on situations in everyday life. Emphasis on the spoken language. Introduction to Spanish culture.

## SPA 132. Elementary Spanish II. 3 Hours.

(SPAN 1312) Elementary Spanish II. Three semester hours. A continuation of Spa 131 with emphasis on reading and comprehension and on the spoken language. Prerequisite: Spa 131 or approved placement or CLEP or consent of department head.

## SPA 231. Intermediate Spanish I. 3 Hours.

(SPAN 2311) Intermediate Spanish I. Three semester hours. Review of language fundamentals and continuation of conversation and composition. Emphasis on pronunciation, listening, and reading skills. Study of Hispanic civilization. Prerequisites: Spa 131 and 132 or consent of the department head.

## SPA 232. Intermediate Spanish II. 3 Hours.

(SPAN 2312) Intermediate Spanish II. Three semester hours. Introduction to Spanish prose, poetry, or drama, or to Spanish essays on scientific and technical topics. Expansion of vocabulary and syntactical analysis. Further development of reading comprehension. Prerequisite: Spa 231 or consent of department head.

## SPA 331. Spanish Conversation for Oral Proficiency. 3 Hours.

Spanish Conversation for Oral Proficiency. Three semester hours. Develops oral proficiency through discussion of contemporary issues in the Hispanic world. Special attention to fluency in spontaneous situations and to developing skills for oral use. Prerequisite: Spa 232 or consent of the department head.

## SPA 332. Spanish Composition and Grammar. 3 Hours.

Spanish Composition and Grammar. Three semester hours. Written communication through creative expression as well as essays, stressing situations that challenge students to think and speak more creatively in Spanish. Development of self-correction techniques. Prerequisite: Spa 232.

## SPA 333. Spanish for Heritage Speakers I. 3 Hours.

Spanish for Heritage Speakers I. Three semester hours. This course is designed for heritage speakers of Spanish who demonstrate, by taking the Spanish Placement Exam, the CLEP exam or special permission from a Spanish faculty member (or a combination thereof), an ability to comprehend and produce Spanish but who lack previous formal instruction in the language. Capitalizes upon students' existing language skills, expands their knowledge base, and develops their ability to read, write and communicate more effectively in the language. Special attention is given to building vocabulary and strengthening composition skills in Spanish. Taught exclusively in Spanish, and for heritage or native speakers only. For students majoring or minoring in Spanish or bilingual education, this course replaces the Spa 331 requirement. Prerequisite: Spa 232 or equivalent by exam.

## SPA 334. Spanish for Heritage Speakers II. 3 Hours.

Spanish for Heritage Speakers II. Three semester hours. A continuation of Spa 333, consisting of a detailed study of advanced Spanish grammar with emphasis on written expression. Capitalizes upon students' existing language skills, expands their knowledge base, and develops their ability to read, write and communicate more effectively in the language. Exclusively for heritage or native speakers of Spanish. For heritage or native speakers majoring or minoring in Spanish or bilingual education, this course replaces Spa 332. Prerequisite: Spa 333 or permission of instructor.

## SPA 335. Advanced Conversation and TOPT Preparation. 3 Hours.

Advanced Conversation and TOPT Preparation. Three semester hours. Spanish 335 is an advanced conversation course for students who need to improve their oral proficiency and/or who plan to take the TOPT to become certified in bilingual or Spanish education. The course fosters oral proficiency through learning scenarios designed to reflect contemporary issues in the Hispanic world and in the bilingual and Spanish classroom. Special attention to developing skills for the Texas Oral Proficiency Test. This course does not count toward the major or minor. Prerequisite: Spa 331 or permission of advisor.

## SPA 341. Introduction to Spanish Literature. 3 Hours.

Introduction to Spanish Literature. Three semester hours. An introduction to four genres of Spanish literature: poetry, drama, fiction, and non-fiction prose. The course is designed to develop discriminating reading and writing skills. Prerequisite: Spa 332 or 334 or permission of instructor.

## SPA 353. Spanish Culture and Civilization. 3 Hours.

Spanish Culture and Civilization. Three semester hours. Explores the history, politics, social structures and traditions of Spain from the XII Century until today. Special emphasis on contemporary life in Spain and the relations with the Americas and the European Market. Prerequisite: Spa 232.
SPA 354. Latin American Culture and Civilization. 3 Hours.
Latin American Culture and Civilization. Three semester hours. Explores the history, politics, social structures and traditions of Latin America. Begins with the pre-Columbian civilizations and continues through independence movements and the Latin America of today. Prerequisite: Spa 232.
SPA 471. Literature, history and society of Latin America I: From Re-Columbian to Modernismo. 3 Hours.
Literature, history and society of Latin America I: From Pre-Columbian to Modernismo. Three semester hours. An introduction to the literature, history and society of Latin America from Pre- Columbian to Modernismo (1888). Readings will be from novels, poetry and drama about relevant historical and cultural events. Prerequisites: Spa 341 or permission of instructor.

## SPA 472. Literature, history and society of Latin America, II: From Modernismo to the Present. 3 Hours.

Literature, history and society of Latin America, II: From Modernismo to the Present. Three semester hours. An introduction to the literature, history and society of Latin America from Modernismo to the present. Readings will be from novels, poetry and drama about relevant historical and cultural events. Prerequisites: Spa 341 or permission of instructor.

SPA 475. Methods for Teaching Spanish as a Second Language. 3 Hours.
Methods for Teaching Spanish as a Second Language - Three semester hours This course is a practical introduction to second language acquisition theories, and familiarizes students with different methodologies specifically for the instruction of Spanish as a second language. Beginning with an overview of traditional and current foreign language teaching methods, the course focuses on current pedagogical trends. This class presents a number of techniques designed to develop students' skills pursuant to language and learning theories, learning objectives, and the role of teachers and students. Students are made familiar with the components of effective teaching tools such as lesson planning, student needs analysis, class materials, and tools for assessment. A large part of the course consists of hands-on activities, discussions, and practical applications to promote meaningful and active learning. Pre-requisites: SPA 232.

## SPA 481. Survey of Early Spanish Literature (1300-1700). 3 Hours.

Survey of Early Spanish Literature (1300-1700). Three semester hours. An introduction to Medieval, Renaissance, and Baroque literature in Spain. Students will ready selections from novels, poetry, and dramatic works and will study relevant historical and cultural events. Prerequisites: Spa 341 or permission of instructor.

## SPA 482. Survey of Modern Spanish Literature (1700 to the present). 3 Hours.

Survey of Modern Spanish Literature (1700 to the present). Three semester hours. An introduction to Neoclassical, Romantic, Realist, and Contemporary literature in Spain. Students will ready selections from novels, poetry, and dramatic works and will study relevant historical and cultural events. Prerequisites: Spa 341 or permission of instructor.

## SPA 485. Seminar in Spanish. 3 Hours.

Seminar in Spanish. Three semester hours. A theme-based course presenting diverse aspects of the history, culture, and literature of the Spanishspeaking world. This seminar course requires an original research project that includes an annotated bibliography, active participation in weekly discussions, and an oral presentation based on the research project. May be repeated when topic varies. Prerequisites: Spa 341 or permission of instructor; Junior or Senior standing. May be repeated when topic varies.
SPA 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

## SPA 490. Honors Thesis. 3 Hours.

Honors Thesis. Three semester hours.
SPA 491. H Independent Honors Rdgs. 3 Hours.
Individual Honors Readings. Three semester hours.
SPA 495. Internship. 3 Hours.
Internship. Three credit hours. Approved work experience in a professional organization. Supervision under the guidance of a practicing professional and departmental faculty member. Prerequisite: Junior standing and approval of the department head. May be repeated once when the internship organization changes.

## SPA 497. Special Topics. 3 Hours.

Special Topics. One to four semester hours. Organized class. May be repeated when topics vary. Prerequisite: Permission of the department head.

## Special Education Courses

## SPED 346. Introduction to Exceptional Children. 3 Hours.

Introduction to Exceptional Children. Three semester hours. A survey of exceptional populations with attention given to the cause of these deviations and their effect upon the individual's development.

## SPED 420. Meth/Mat Teaching Restrictive. 3 Hours.

Learners with Special Needs in Restrictive Environments. Three semester hours. This course will develop skills for planning and organizing special needs populations in restrictive settings, including individuals requiring extensive/pervasive supports. Emphasis will be given to the areas of oral language development and life adjustment skills.

## SPED 449. Assessment and Evaluation. 3 Hours.

Assessment and Evaluation. Three semester hours. A variety of assessment and evaluation procedures will be presented. Normative and criterion referenced procedures will be presented as well as formative and summative evaluation strategies. Prerequisites: SpEd 346 .

## SPED 463. Managing Special Needs Populations. 3 Hours.

Managing Special Needs Populations. Three semester hours. Development of skills in managing behaviors of students with disabilities at school, at home with parents and family, in the community, and in employment situations will be emphasized. Professional training in working with parents in the A.R.D. process, professional organizations and referral agencies is included.

SPED 464. Special Populations in the Community. 3 Hours.
Special Populations in the Community. Three semester hours. This course examines programs and services available for students, families and adults planning for transition. Examined are variables influencing competitive and sheltered employment, community living and extended care in private and public agencies as well as sources of services, networks and organizations for individuals with disabilities. Prerequisite: SpEd 346 and 420.

## SPED 466. Practicum with Special Needs Populations. 3 Hours.

Practicum with Special Needs Populations. Three semester hours. Observation and guided practice with special needs populations in field-based settings. Activities include the application of developmental and learning theories in applied settings. Prerequisites: SpEd 346, 420, and 463.

## SPED 470. Special Needs Populations in Least Restrictive Settings. 3 Hours.

Special Needs Populations in Least Restrictive Settings. Three semester hours. Students will plan, develop, implement and evaluate social/behavioral and educational programs for special needs students in a field-based environment. Collaboration and transition planning are included. Prerequisite: SpEd 449 and 466.

## SPED 472. Delivery Services in Special Education. 6 Hours.

Delivery Services in Special Education. Three semester hours. This course requires observation, participation and direct teaching at the elementary and secondary levels for students seeking the all-level generic special education certification.

SPED 475. Collaboration, Accommodation and Modification. 3 Hours.
Collaboration, Accommodation and Modification. Three semester hours. Collaboration models and accommodation and modification strategies are presented for content area instruction.

SPED 478. Physical and Medical Management. 3 Hours.
Physical and Medical Management. Three semester hours. Techniques and procedures used to manage the physical and medical needs of individuals with severe physical disabilities, multiple handicaps, health impairments, and sensory disabilities. Prerequisites: SpEd 346 and 420.

SPED 480. Issues for Inclusion. 3 Hours.
Issues for Inclusion. Three semester hours. Identifying the social/emotional and academic needs of students with special needs in field based inclusive settings. Management strategies, social skill development and academic modifications will be developed. Limited to interdisciplinary majors only.
SPED 489. Independent Study. 1-6 Hour.

## SPED 490. Honors Thesis. 3 Hours.

PSY 490 - H Honors Thesis - Hours: 3 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

## SPED 491. Ind Honors Readings. 3 Hours.

H Ind Honors Readings Hours: 3 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

SPED 497. Special Topics. 1-4 Hour.
Special Topics. Three semester hours. Organized class. May be repeated when topics vary.

## Speech Communication Courses

## SPC 112. Voice and Phonetics. 3 Hours.

(SPCH 1342) Voice and Phonetics. Three semester hours. (1, 2) A study of the voice mechanism and the International Phonetic Alphabet in order that the student may improve vocal performances and correct careless and ineffective speech habits. Required for all majors.

## SPC 201. US-STUDIES IN HUMAN/COMM. 3 Hours.

Studies in Human Communication. Three semester hours. A study of human communication and language process, speaking and listening and semantics and meaning. How humans are able to reach meaning and understanding through communication.
SPC 312. Persuasive Communication. 3 Hours.
Persuasive Communication. Three semester hours. (1) Speeches and techniques are of a persuasive nature. The course includes a critical analysis of the principles and methods influencing belief and action.
SPC 317. Interpersonal Communication. 3 Hours.
Interpersonal Communication. Three semester hours. (1) A study of environmental conditions that affect interpersonal interactions. Attention is given to verbal and non-verbal interactions, interpersonal behavior, communication models and networks, and social influences.
SPC 318. Small Group Communication. 3 Hours.
Group Process and Decision Making. Three semester hours. (2) Theory and practice of communicating in small groups. Common barriers to communication will be examined.

## SPC 319. Leadership \& Comm. 3 Hours.

Leadership \& Comm - Three semester hours This course investigates the communication variables that create effective leadership. Through written assignments, discussion, case studies, and practical application, the student learns about the theories, strategies, and ethics involved in successful leadership and management decisions. Pre-requisites: Spc 2301.
SPC 389. Special Topics. 1-4 Hour.
SPC 397. Special Topics. 3 Hours.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.
SPC 408. Intercultural Communication. 3 Hours.
Intercultural Communication. Three semester hours. Overview of the study of cross-cultural communication. Includes a survey of nonwestern culture, communication concepts, intercultural communication problems and approaches to their resolution. Introduces students to the differences in meaning between co-cultures.

## SPC 412. Theory of Communication. 3 Hours.

Theory of Communication. Three semester hours. (2) A survey of communication from Aristotle to modern times.

## SPC 414. Political Communication. 3 Hours.

Political Communication. Three semester hours. (1) Communication by individuals, groups, and the mass media as major political influences on public policy decisions.

## SPC 418. Communication and Social Change. 3 Hours.

Communication and Social Change. Three semester hours. The study of the role of communication and mass media in social change. Emphasis is given to the mass media as a prime component for change, although community action and interpersonal approaches are included. Students investigate methods employed by opinion leaders and change agents to accomplish specific goals. Variables addressed include how media defines and disseminates information about issues, how advertising promotes or rejects issues, how lifestyles are portrayed with respect to issues, and how mass media ownership and regulatory policies affect the communication act.
SPC 419. Diffusion of Innovations. 3 Hours.
Diffusion of Innovations - Three semester hours Diffusion of Innovations is a theory that seeks to explain how, why, and at what rate new ideas and technology spread through cultures. It describes the manner in which a product is disseminated in the marketplace. The diffusion of innovation spans an unspecified period of time from new product introduction through market saturation and affects the total sales level of a product. Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. Diffusion is a special type of communication concerned with the spread of messages that are perceived as new ideas. Communication is the process by which participants create and share information with one another in order to reach a mutual understanding. A communication channel is the means by which messages get from one individual to another. Mass media channels are more effective in creating knowledge of innovations, whereas interpersonal channels are more effective in forming and changing attitudes toward a new idea, and thus in influencing the decision to adopt or reject a new idea. Pre-requisites : Speech 201, Speech 418, or professor agreement.

SPC 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head or speech communication head.
SPC 490. H Honors Thesis. 3-6 Hour.
SPC 491. H Ind Honors Readings. 3 Hours.

SPC 1315. Fundamentals of Public Speaking. 3 Hours.
(SPCH 1315) SPC 111 - Fundamentals of Speech. Three semester hours. Basic course in organizing and developing effective oral communication. Particular stress is placed on voice and diction, and general public speaking.
SPC 1321. US - Business and Professional Speaking. 3 Hours.
(SPCH 1321) Business and Professional Speaking. Three semester hours. ( $1,2,3,4$ ) Designed to aid the prospective business or professional person in preparing various types of speaking assignments such as he/she might encounter in his/her career. It is planned for agriculture and business majors, and for other students seeking one course in public speaking. Emphasis is upon structure and techniques of presentation.

## Technology Management Track Courses

## TMGT 311. Environmental and Safety Management. 3 Hours.

Environmental \& Safety Management - Three semester hours Study of the history and application of OSHA and EPA regulations and regulatory effects on program management.

TMGT 335. Construction and LEED Systems. 3 Hours.
Construction \& LEED Systems - Three semester hours This course will emphasize the techniques and methods of sustainable construction/ development. Importance of a collaborative team effort from owner, developers, architects, engineers, constructors, and consultants will be integrated into the course. Pre-requisite: MATH 142 or MATH 176.

TMGT 336. Construction Cost Estimating. 3 Hours.
Construction Cost Estimating - Three semester hours Study of the principles and application of construction estimating including quantity takeoff, pricing of materials, classification of work, labor, overhead, specifications, bid procedures, and project scheduling. Pre-requisite: MATH 142 or MATH 176.

TMGT 350. Principles of Technology Management. 3 Hours.
Principles of Technology Management - Three semester hours Study of leadership and management methodologies necessary to be successful and effective in contemporary technology intensive organizations.

## TMGT 351. Managing Cultural Differences. 3 Hours.

Managing Cultural Differences - Three Semester Hours Study of change management, culture differences and common operating practices in global organizations.

## TMGT 352. Principles of Cost Engineering. 3 Hours.

Principles of Cost Engineering - Three semester hours Cost engineering is concerned with the application of scientific principles and techniques to problems of cost estimating, cost control, business planning and management science, profitability analysis, project management, and planning and scheduling. Pre-requisite: ACCT 221.

TMGT 411. Risk Management. 3 Hours.
Risk Management - Three semester hours This course explores the management of risk including environmental, occupational, financial, security, disaster, risk to the corporate image, and other risks. Prevention, mitigation, and transference of risk are presented. Pre-requisite: TMGT 311.

TMGT 439. Construction Management. 3 Hours.
Construction Management - Three semester hours Study of construction operations, project management and project planning. Includes scheduling, rough diagram preparation, calculating costs, presentations, and controlling. Pre-requisite: TMGT 336.

TMGT 454. Contracts and Specifications. 3 Hours.
Contracts \& Specifications - Three semester hours Principles and analysis of construction contracts and specifications. Additional aspects of construction management will be included. Pre-requisite: BA 301.

TMGT 455. Project Planning and Scheduling. 3 Hours.
Project Planning and Scheduling - Three semester hours Study of the concepts used in planning and scheduling of projects in both industrial and construction applications. Pre-requisite: TMGT 352.

TMGT 456. Value Chain Control and Management. 3 Hours.
Value Chain Control \& Management - Three semester hours Value chain is a high-level management model of how businesses receive raw materials as input, add value to the raw materials through various processes, and sell finished products to customers. Pre-requisite: TMGT 350.

TMGT 457. Enterprise Analysis and Trends. 3 Hours.
Enterprise Analysis \& Trends - Three semester hours Value chain is a high-level management model of how businesses receive raw materials as input, add value to the raw materials through various processes, and sell finished products to customers. Pre-requisite: TMGT 350 .

TMGT 458. Project Management. 3 Hours.
Project Management - Three semester hours Value chain is a high-level management model of how businesses receive raw materials as input, add value to the raw materials through various processes, and sell finished products to customers. Pre-requisite: TMGT 350.

TMGT 497. Special Topics. 4 Hours.
Special Topics. Three semester hours. Organized class. May be repeated when topics vary.

## Theatre Courses

## THE 109. Practicum. 1 Hour.

Practicum. One semester hour. Supervised practice and instruction in theatre production experiences including: set construction, acting, ushering, costuming, house management, lighting, directing, and other activities related to the production of plays. Required of all majors for each semester of study. Practicum is required in addition to the regular course of study.
THE 122. Stage Movement. 3 Hours.
Stage Movement - Three semester hours This course explores the movement skills necessary for the actor with emphasis on physical training and practical application in realistic and abstract performance efforts.

## THE 209. Practicum. 1 Hour.

THE 209 A-B - Practicum - Hours: 1 Supervised practice and instruction in theater production experiences including: set construction, acting, ushering, costuming, house management, lighting, directing, and other activities related to the production of plays. Note Required of all majors for each semester of study. Practicum is required in addition to the regular course of study.
THE 211. Oral Interpretation. 3 Hours.
SPCH 2341) Oral Interpretation. Three semester hours. (1) Analysis of theme, mood, imagery, and style in order to interpret prose and poetry. Practice in planning and presenting these materials is included.

## THE 213. Fundamentals of Acting. 3 Hours.

(DRAM 1351) Fundamentals of Acting. Three semester hours. (2) Basic acting techniques of characterization, role analysis, stage movement, voice and body control.

## THE 215. Technical Theatre. 1-4 Hour.

Technical Theatre. Four semester hours (2 lecture, 4 lab ). Lecture and laboratory in the basic techniques of scene construction, lighting, painting, drafting, and rigging. Laboratory hours include the crewing of one production in addition to supervised labs on the various production areas.

## THE 218. Stage Make-up. 3 Hours.

(DRAM 1341) Stage Make-up. Three semester hours (2 lecture, 2 lab). Theory and practice in straight and character make-up for stage and television. Attention to the study of physiognomy, prosthetic pieces, and character make-up. Included is the crewing of one production.

## THE 236. Voice and Diction. 3 Hours.

Voice and Diction - Three semester hours This course involves a practical and theoretical study of the voice mechanism and the broad International Phonetic Alphabet in order that the student may improve vocal performances onstage.
THE 305. Integrated Arts for Elementary Teachers. 3 Hours.
Integrated Arts for Elementary Teachers. Three semester hours. This course is designed to introduce students to various theatre, visual, and musical arts content and experiences in the elementary school classroom.

## THE 308. Playwriting. 3 Hours.

Playwriting. Three semester hours. (2) Developing the skill of writing plays is emphasized. Play criticism and review of plays by professionals and students will be stressed.
THE 309. Practicum. 1 Hour.
THE 309 A-B - Practicum Hours: 1 Supervised practice and instruction in theatre production experiences including: set construction, acting, ushering, costuming, house management, lighting, directing, and other activities related to the production of plays. Note Required of all majors for each semester of study. Practicum is required in addition to the regular course of study.

## THE 310. Survey of Visual Arts for Theatre. 3 Hours.

Survey of Visual Arts for Theatre - Three semester hours A team-taught course which resents the visual trends in history, in which the social arts relate to the visual arts of Architecture, Furniture, Chattels, and Costumes. Course covers the time of Shakespeare up through 1940.

## THE 311. Readers Theatre. 3 Hours.

Readers Theatre. Three semester hours. (2) A study of literary materials with a view to their use in the presentation of programs for adults and children. Practice in planning and presenting these programs is included.
THE 312. Theatrical Design Seminar. 3 Hours.
Theatrical Design Seminar Desc A team-taught course in which the basic fundamentals of design are related to the particular disciplines involved in all of the theatre arts (the course is a prerequisite for all the other design courses and for student designs on stage.).

THE 314. Voice and Movement for the Actor. 3 Hours.
Voice and Movement for the Actor - Three semester hours This course is designed for the intermediate and advanced student actor and teaches the student to incorporate effectively the connection of the body and voice into the art of stage acting in both realistic and non-realistic performance constructions. Pre-requisites: The 213.

## THE 315. Stage Dialects. 3 Hours.

Stage Dialects. Three semester hours. A survey of the basic techniques for learning and applying stage dialects. The following dialects are studied: Standard British, French, German, American Southern, and Irish. Prerequisite: Speech 112 (Voice and Phonetics).

## THE 316. Lighting for the Theatre. 3 Hours.

Lighting for the Theatre. Three semester hours. (1, 2) The basic techniques of the principles and practices of lighting design for stage and television. Included are design functions, instrumentation, electricity, history and theories of design. Prerequisite: The 215.

## THE 317. Stage Movement. 3 Hours.

Stage Management - Three semester hours This course is an in-depth look at the role of the stage manager within the theatre industry. Topics will include: terminology, management skills, production books, blocking notes, interpersonal skills, duties (pre-production, production, and post-production), communication, and training of assistants and crew members.

## THE 318. Scenic Painting. 3 Hours.

Scenic Painting - Three semester hours The course will cover the techniques and skills necessary in scenic painting. Topics include: terminology, tools, faux finishes, abstract techniques, realistic reproduction, as well as washes and glazes.

## THE 319. Stage Properties. 3 Hours.

Stage Properties - Three semester hours This course will cover the techniques and skills necessary to create stage properties for use in theatrical productions. Topics will include: terminology, tools, sculpting, adaptation of pre-formed objects, slip cast molds, plaster casting, and vacuform.

## THE 340. History of the Theatre I. 3 Hours.

History of the Theatre I. Three semester hours. (1) Detailed study of the development of all phases of theatre art and drama from its origins to Elizabethan Theatre. Includes study of theatre plants, plays and major dramatic movements. Prerequisite: The 1310 or permission of the instructor.

## THE 345. Acting Period Styles. 3 Hours.

Acting Period Styles - Three semester hours For the intermediate and advanced student actor, this course places primary emphasis on the development of characterization techniques, participation in physical and vocal acting exercises, and practical performance application through stylistic scene and monologue work. Period/Styles covered in this course include the following: Ancient Greek, Shakespearean, Farce, and Comedy of Manners. Prerequisites: THE 213.

## THE 349. Theatrical Costuming. 4 Hours.

Theatrical Costuming. Four semester hours (3 lecture, 3 lab). (1, 2) Theory of costume design in relation to unified stage production. A study of fabric, texture, line, mass, color, and periods of dress. Laboratory in costume construction and the crewing of one production.

## THE 366. Introduction to Scene Design. 3 Hours.

Introduction to Scene Design. Three semester hours. (2) An introduction to the elements of design with a concentration on proper techniques of drafting ground plans and other design drawings. Included is the designing of a final design project. Prerequisite: The 215 or permission of the instructor.

## THE 389. Independent Study. 1-4 Hour.

Independent Study - Hours: One to four Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisites Consent of department head. Note May be repeated when the topic varies.

## THE 397. Special Topics. 3 Hours.

Special Topics. One to four semester hours. Organized class. May be repeated when topics.

## THE 409. Practicum. 1 Hour.

A-B - Practicum - Hours: 1 Supervised practice and instruction in theatre production experiences including: set construction, acting, ushering, costuming, house management, lighting, directing, and other activities related to the production of plays. Note Required of all majors for each semester of study. Practicum is required in addition to the regular course of study.

## THE 415. Stage Directing. 3 Hours.

Stage Directing. Three semester hours. (2) The procedure and the problems involved in directing a play from selection of the script, tryouts, and conducting rehearsals to the final production.

THE 440. History of the Theatre II. 3 Hours.
History of the Theatre II. Three semester hours. (2) Detailed study of the development of all phases of theatre art and drama from the French Renaissance to the present. Includes study of theatre plants, plays and major dramatic movements. Prerequisite: The 1310 or permission of the instructor.

## THE 445. Projects in Acting. 3 Hours.

Projects in Acting. Three semester hours. (2) Advanced speech and movement for stage. The work includes pantomime, characterization, and materials for interpretation for director as well as for actor. Prerequisites: The 213.
THE 450. Voyages of Discovery: Artists and Critics at Work. 3 Hours.
Voyages of Discovery: Artists and Critics at Work. Three semester hours. (Capstone) A University Studies Capstone course that examines form, context and audience in works of art drawn from drama, literature, music, painting, and film and considered from the viewpoint of both the artist and the critic. Prerequisite: Junior standing.

## THE 461. Meisner Acting I. 3 Hours.

Meisner Acting I - Three semester hours Through exercises, performance activities, and presentations this course provides the student with a practical introduction to Sanford Meisner's approach to actor training.

## THE 462. Meisner Acting II. 3 Hours.

Meisner Acting II - Three semester hours For the student-actor who has previously acquired a working knowledge of the foundational principles of Sanford Meisner's approach to actor training, this course provides more advanced instruction in the following concepts: emotional preparation, interpretation, the personalization of text, the deeper wish and spine, personalizing the deeper wish, doings and personalizing the doings, provocative statements, and key facts.

THE 480. Lyric Theatre. 3 Hours.
Lyric Theatre. Three semester hours. (Capstone) This course will concern the questions and problems raised by fusion of words and music in musical theatre. Classical and popular repertory from many different nations and cultures are examined. Prerequisite: Junior standing.
THE 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

THE 490. H Honors Thesis. 3 Hours.
H Honors Thesis Hours: 6 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

## THE 491. H Honors Readings. 3 Hours.

[Print Course] AG 491 - H IND HONORS RDGS Hours: 3 Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. Prerequisite Consent of head. Note May be repeated when the topic varies.

## THE 495. Senior Theatre Project. 3 Hours.

Senior Theatre Project. Three semester hours. Theatre research and/or creative work that is intended to be the culmination of the theatre or broadfield theatre major. The work consists of a project proposal, outline, paper, and bibliography. Prerequisite: Senior standing.
THE 497. Special Topics. 1-4 Hour.
Special Topics. One to four semester hours. Organized class. May be repeated when topics vary.

## THE 499. Rehearsal and Performance. 3 Hours.

Rehearsal and Performance. Three semester hours. Preparation and performance with laboratory related to the special problems of Summer Theatre, touring, indoor and outdoor productions. Techniques, practices, and processes in lighting, scenic, costume, sound, management, and acting for the undergraduate student.
THE 1310. Introduction to the Theatre. 3 Hours.
(DRAM 1310) Introduction to the Theatre. Three semester hours. (1, 2, 3) A survey of the fields of theatre activity designed to provide introductory knowledge of all phases of drama, literature, performance, theatre plants and equipment, and production procedures.

## Training \& Development Courses

## TDEV 320. Adult Learning. 3 Hours.

Adult Learning - Three semester hours This course explores adult learning to promote an expanded understanding of issues and practices in adult education. The course focuses on three core areas of concern in adult education: acknowledgement of learner experience, promotion of autonomy and self-direction, and establishment of teacher-learner relationships in the adult environment.

TDEV 322. Piaget and Pedagogy. 3 Hours.
Piaget and Pedagogy - Three semester hours This course examines the pedagogical ramifications of Piaget's theories concerning cognitive development. Emphasis is placed on the stages of sensorimotor, preoperational, concrete operational, and formal operational. Students will develop and evaluate instructional methodologies appropriate to each developmental stage.
TDEV 324. Modern Learning. 3 Hours.
Modern Learning - Three semester hours This course provides an introduction to generational issues appropriate to instructional training and design. Topics include a comparison of the strengths and weaknesses of generational learning styles, parallels between the different generations, and a pedagogy/andragogy for the 21st century.
TDEV 370. Sup Wrk Exper Indus \& Bus. 3 Hours.
Supervised Work Experience in Industry and Business. Three semester hours. Full-time occupational experience at an approved work situation under supervision of a university faculty member. Designed to meet work experience requirements for teacher certification, to provide opportunities to develop competence in an occupational area, and to acquaint students with standards and procedures used in the industry and business. May be repeated to a maximum accumulation of eight courses or 32 hours.
TDEV 389. Independent Study. 3 Hours.
TDEV 410. Utilizing Effective Instructional Techniques. 3 Hours.
Utilizing Effective Instructional Techniques. Three semester hours. Career and technology teachers and business/industrial trainers acquire the knowledge and skills for selecting, applying and evaluating basic instructional techniques and learning principles. Students will demonstrate competencies in presentations utilizing various instructional technologies and techniques.

## TDEV 411. Managing the Instructional Environment. 3 Hours.

Managing the Instructional Environment. Three semester hours. Provides career and technology teachers and business/industrial trainers knowledge and skills for implementing classroom management strategies. Students will conduct learner assessments to develop program performance standards which will be documented through career portfolios. Budgeting procedures, safety practices, legal issues, and instructor liability will be discussed.

## TDEV 412. Systems Management. 3 Hours.

Systems Management. Three semester hours. Focuses on modern theories regarding systems management applications in organizations. Special attention will be given to realities of leadership, power, motivation, group dynamics, decision-making, and organizational change. Prerequisite: Mgt 305 or departmental approval.

TDEV 420. Adult Literacy \& Interven. 3 Hours.
Adult Literacy and Intervention - Three semester hours The purpose of this course is to examine both conceptual and practical knowledge about planning professional programs for adults using both research and practice perspectives. The course introduces models of program planning, management, and evaluation appropriate for a variety of adult learners. The course focuses on developing practitioner skills in assessing needs, negotiating program content and logistics, using technology appropriately, and evaluating program effectiveness in a variety of settings. Students gain practical experience by creating a design, management, and evaluation strategy for an adult learning program.

## TDEV 422. Internship in Teaching. 3 Hours.

Internship in Teaching. Three semester hours. (Same as EIEd 422) Supervised experiences in the secondary school designed for post-baccalaureate students who are seeking initial certification at the graduate level. Students will be supervised by teachers, administrators, and University liaisons. Regular seminar sessions may be held and will focus on concerns related to classroom management practices, curriculum development, and/or instructional strategies.
TDEV 423. Leadership Applictns Career/Te. 3 Hours.
Leadership Applications for Career and Technology. Three semester hours. Furnishes career and technology teachers and business/industrial trainers with basic theories and strategies for developing effective leaders. Leadership applications such as leadership styles, organizational structures, community service, personal and professional ethics, and career-enhancing technologies will be discussed.

## TDEV 424. Transformation in TH \& Pr. 3 Hours.

Transformation in Theory and Practice - Three semester hours This course examines the implications and ramifications associated with instruction change to include an organizational perspective. Specific attention is given to the development, implementation, and improvement of practical step-bystep strategies for enacting change and minimizing organizational disruption.

TDEV 425. Human Relations for Career and Technology Teachers and Business/Industrial Trainers. 3 Hours.
Human Relations for Career and Technology Teachers and Business/Industrial Trainers. Three semester hours. Furnishes career and technology teachers and business/industrial trainers with knowledge and concepts for developing effective working relationships within the school, community, and workplace. This course includes the development of skills related to problem solving, group dynamics, motivation, communication, and change theory.

## TDEV 427. Developing Instructional Resources. 3 Hours.

Developing Instructional Resources. Three semester hours. Imparts career and technology teachers and business/industrial trainers with knowledge and skills for developing and using instructional resources.
TDEV 448. Designing and Evaluating Curriculum. 3 Hours.
Designing and Evaluating Curriculum. Three semester hours. Supplies career and technology teachers and business/industrial trainers with the knowledge and skills needed for designing, developing, and evaluating curricula. Emphasis will be placed on formulating course goals and objectives and on developing a variety of measurement instruments.
TDEV 450. Practicum. 3 Hours.
Practicum. Three semester hours. Supervised training in which theory and practice are related to bringing about improvement in job performance.

## TDEV 460. Org \& ImpI Wrk-Bsd Lrn. 3 Hours.

Organization and Implementation of Work Based Learning - 3 semester hours This course provides career and technology teachers with knowledge and skill for identifying, evaluating, and selecting work-based training stations. Emphasis will be placed on training opportunities, training agreements, legal issues, and criteria for work-based learning. Specific attention will be given to leading a work-based educational program in the secondary setting.

## TDEV 479. Hist/Prin Career \& Tech Edu. 3 Hours.

History and Principles of Career and Technology Education. Three semester hours. Traces the history and principles of career and technology education. In addition, emphasis will be placed on the administration of career and technology education as it relates to public education.

TDEV 489. Independent Study. 1-4 Hour.
Independent Study. One to four semester hours. Individualized instruction/research at an advanced level in a specialized content area under the direction of a faculty member. May be repeated when the topic varies. Prerequisite: Consent of department head.

TDEV 497. Special Topics. 3 Hours.
Special Topics.

Faculty

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[^0]:    - The College of Business \& Entrepreneurship at Texas A\&M University-Commerce is an accredited member of the AACSB International-Association to Advance Collegiate Schools of Business.
    - The Master of Science in Community Counseling, the Master of Science in School Counseling and the Doctor of Philosophy in Counselor Education and Supervision are accredited by the Council for Accreditation or Counseling and Related Educational Programs (CACREP).
    - The Bachelors and Masters Programs in Social Work at Texas A\&M University-Commerce are accredited by The Council on Social Work Education (CSWE).
    - The Bachelor of Science in Industrial Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

[^1]:    - University Studies. A minimum of 43 semester hours in general studies is required for a degree (see University Studies Requirements).

[^2]:    Environmental Science

[^3]:    * This course can be used to satisfy the University Studies Requirement

[^4]:    * These courses may apply on a second major or minor

[^5]:    * These courses should be used to satisfy the University Studies Requirements in Social and Behavioral Science, Natural Sciences, and Mathematics, respectively; otherwise, the credit hours required to earn the B.S. in CONE will exceed 127.

[^6]:    Total Hours: 120-121

