## Texas Christian University



2016-17
Academic Undergraduate Catalog

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## Academic Calendar

## Fall Semester 2016

| Registration | Friday, August 19 |
| :---: | :---: |
| First classes meet, 8 a.m. | Monday, August 22 |
| Last day for late registration, changing or adding courses | Friday, August 26 |
| Last day for semester-fee students (only) to drop below 12 hours and receive partial-tuition refund | Friday, August 26 |
| Labor Day Recess | Monday, September 5 |
| Last day to withdraw from class and receive: |  |
| 100\% tuition refund | Friday, August 26 |
| 75\% tuition refund | Friday, September 2 |
| 50\% tuition refund | Monday, September 12 |
| 25\% tuition refund (no refunds after this date) | Monday, September 19 |
| Mid-semester reports of unsatisfactory work due in the Office of the Registrar, 9 a.m. | Wednesday, October 12 |
| Fall Recess |  |
| Classes recess, 10 p.m. | Friday, October 7 |
| Classes resume, 8 a.m. | Wednesday, October 12 |
| Last day to remove "I" grade from prior long semester | Thursday, October 20 |
| Last day students may withdraw from a class | Friday, November 4 |
| Last day for electing Pass/No-Credit grading option | Monday, November 7 |
| Schedule advising for spring semester | Monday-Friday, October 24- November 11 |
| Advance registration for spring semester | Monday-Friday, November 7-11 |
|  | Monday-Friday, November 14-18 |
|  | Monday-Tuesday, November 21-22 |
| Thanksgiving Recess |  |
| Classes recess, 5 p.m. | Tuesday, November 22 |
| Classes resume, 8 a.m. | Monday, November 28 |
| Last day of classes | Wednesday, December 7 |
| Study days | Thursday-Friday, December 8-9 |
| Final examinations | Monday-Friday, December 12-16 |
| Baccalaureate and Commencement | Saturday, December 17 |
| Residence halls close | Saturday, December 17 |

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Spring Semester 2017

| Registration | Friday, January 13 |
| :--- | :--- |
| First classes meet, 8 a.m. | Tuesday, January 17 |
| Last day for late registration, changing or adding courses | Monday, January 23 |
| Last day for semester-fee students (only) to drop below 12 hours and receive partial-tuition refund | Monday, January 23 |
| Martin Luther King Jr., holiday | Monday, January 16 |
| Last day to withdraw from class and receive: | Monday, January 23 |
| 100\% tuition refund | Monday, January 30 |
| 75\% tuition refund | Monday, February 6 |
| 50\% tuition refund | Monday, February 13 |
| 25\% tuition refund (No refunds after this date) | Wednesday, March 8 |
| Mid-semester reports of unsatisfactory work due in the Office of the Registrar, 9 a.m. | Monday, April 10 |
| Last day students may withdraw from a class | Tuesday, April 11 |
| Last day for electing Pass/No-Credit grading option | Friday, March 10 |
| Spring Recess | Monday, March 20 |
| Classes recess, 10 p.m. | Friday, March 17 |
| Classes resume, 8 a.m. |  |
| Last day to remove "I" grade from prior long semester | Thursday, April 13 |
| Good Friday Recess | Monday, April 17 |
| Classes recess, 10 p.m. | Monday-Monday, March 27-April 7 |
| Classes resume, 8 a.m. | Monday-Thursday, April 3-April 13 |
| Schedule advising for summer session and fall semester | Wednesday, May 3 |
| Advance registration for fall semester | Thursday-Friday, May 4-5 |
| Last day of classes | Saturday, May 13 |
| Study days | Saturday, May 13 |
| Final examinations | Baccalaureate and Commencement |
| Residence halls close |  |

## Summer Semester 2017

| May (three week) and eight week sessions begin | Monday, May 15 |
| :--- | :--- |
| Memorial Day holiday | Monday, May 29 |
| May (three week) session ends | Friday, June 2 |
| June (five-week) session begins | Monday, June 5 |
| Independence Day holiday | Tuesday, July 4 |
| June (five-week) session ends | Friday, July 7 |
| July (four-week) session begins | Monday, July 10 |
| July (four-week) session ends | Friday, August 4 |

Texas Christian University is a major private teaching and research university with the residential, person-centered environment usually found on a small college campus. While accomplishing its mission of educating individuals to think and act as ethical leaders and responsible citizens in the global community, the University provides the unique TCU experience. This experience gives students an uncommon balance of at least four factors:

1. TCU offers the strengths and choices of a major university, tempered with the true humanity of a small college, and works to develop and nourish the individual talents of each student.
2. The University's teacher-scholars and artists conduct and publish research; express themselves artistically; and teach in a friendly, academic community. Professional staff members strive to be national leaders in their fields of expertise. TCU students, too, are uncommon and impressive, well-rounded individuals with high potential for success and leadership.
3. The University takes pride in its historic relationship with the Christian Church (Disciples of Christ), which has always stressed a broad interpretation and respect for faith traditions. TCU does not seek to impose a particular religious point of view, but challenges each student to consider what he or she believes.
4. TCU's emphasis on the development of the individual takes place in part in an arts and science-centered education that is global in the broadest sense of the word, which is embraced by all seven schools and colleges. The University promotes study abroad and encourages faculty, staff and students to think about the future and what will be required to build a just, ethical and productive world community.
Comprising seven academic divisions-AddRan College of Liberal Arts, M.J. Neeley School of Business, the Bob Schieffer College of Communication, the College of Education, the College of Fine Arts, Harris College of Nursing \& Health Sciences, and the College of Science \& Engineering-TCU is independent and self-governing.
Nationally recognized Division I-A athletics contributes to the vital collegiality of the campus. Of the 20 sports_football and baseball for men; volleyball, rifle, equestrian, and soccer for women; and basketball, cross country, track, tennis, golf, and swimming and diving for men and womenseveral are ranked in the nation's Top 25.
International study, an institutional priority at TCU, provides students an opportunity to live and learn abroad. The Center for International Studies: TCU Abroad offers a wide range of academic programs, including summer courses led by TCU faculty members and semester programs in London, Seville and Florence. Other study abroad opportunities include partner programs and exchange programs in various locations around the world.
The school that was to be TCU was born in the troubled years following the Civil War. In 1869, young brothers Addison and Randolph Clark began holding classes in the village of Fort Worth, from which cattle trails ranged northward. In 1873, they moved 40 miles away to establish AddRan Male and Female College at bucolic Thorp Spring. Inclusion of women in the title is arguably the first instance of coeducation in the Southwest.
After 20 years, the school affiliated with the Christian Churches of Texas and became AddRan Christian College. Moved to Waco in 1895, the school changed its name in 1902 to Texas Christian University. Fire destroyed its main building in 1910, and the University returned to Fort Worth and opened in its present location in 1911. Its future was assured in 1923 with a gift by Mrs. Mary Couts Burnett.
With a controlled enrollment of about 8,700 students, TCU draws from all 50 states and more than 75 countries. Of the 479 full-time faculty, 54 percent are tenured; the student-faculty ratio is about 14:1. The 283-acre campus, located only a few miles from downtown Fort Worth, houses more than 3,300 students and offers a full range of activities and recreational facilities for students.
In short, higher education may be a business to some, but at TCU, we consider it our mission:
To educate individuals to think and act as ethical leaders and responsible citizens in the global community.

## Academic Organization

TCU is composed of seven academic units offering undergraduate bachelor's degrees in 101 majors. These colleges and schools also offer graduate degrees (see TCU Graduate Studies Catalog for more information). In addition, students can earn certificates in University programs in ranch management or take a full range of non-credit courses through the Office of Extended Education.
While students normally concentrate their work in the school or college of their major field, they may have classes in any or all. All undergraduates will have some courses in AddRan College of Liberal Arts and the College of Science \& Engineering, for a broad, liberal arts-based educational background in the humanities, natural and social sciences.

## The M.J. Neeley School of Business

The M.J. Neeley School of Business at TCU prepares students to contribute to the professional world and the larger community through emphasis on a balanced curriculum. A unified program provides a solid knowledge base upon which students add principles of accounting, decision sciences, finance, management, marketing, information systems and supply chain management, as well as distinct competencies that allow them to lead in the business world.

## Bob Schieffer College of Communication

The Bob Schieffer College of Communication combines liberal arts studies with professional training. Within the Department of Journalism, Department of Strategic Communication, Department of Communication Studies and Department of Film, Television, and Digital Media, students learn to apply their classroom experiences. Located in the eighth largest media market in the United States, graduates find ample opportunity to develop their skills in their desired fields. Personal counseling and relatively small classes allow the faculty to give attention to the work of each student.

## College of Education

The College of Education offers programs to prepare teachers, counselors and administrators who serve children from pre-school through college. Undergraduate programs prepare teachers for certification in early childhood through grade 6, composite and academic subjects in middle and high school, along with an educational studies minor. These programs combine theory with intensive field-based practice and focus on effective teaching; solving instructional problems; resolving ethical issues; and making curricular decisions with special emphases on urban schools, English as a second language and special education.

## College of Fine Arts

The College of Fine Arts represents a vital and integral part of TCU's educational history. The college houses the School of Music, the School for Classical and Contemporary Dance, and the School of Art; Department of Graphic Design, Interior Design and Fashion Merchandising; and Theatre. These academic programs exact an appropriate balance between professional training and liberal arts studies. Small classes allow the faculty to give personal attention to the work of each student.

## AddRan College of Liberal Arts

AddRan College of Liberal Arts is the center of TCU's well-developed tradition of emphasis on liberal arts. Courses in the humanities and social sciences form a major part of the core studies for all students. Degree programs within AddRan's 12 departments provide the solid liberal arts base needed for professional study toward the ministry, law, medicine, business, teaching or other related fields. Some have a professional orientation within themselves, with specialized study leading toward specific career objectives. In all of the programs, students find flexibility and freedom balanced by structure and discipline.

## Harris College of Nursing \& Health Sciences

The Harris College of Nursing \& Health Sciences unites Nursing, the School of Nurse Anesthesia, the Davies School of Communication Sciences and Disorders, Kinesiology and Social Work into an integrated unit. Degree programs offered by the college build on a strong liberal arts foundation and prepare graduates for complex and varied professional settings. Many of the courses enable students to learn through experience as they encounter diverse disciplines, practitioners and clients.

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## College of Science \& Engineering

The College of Science \& Engineering provides an interdisciplinary program that bridges liberal arts studies with the technical skills the world demands. Composed of the departments of Biology, Chemistry \& Biochemistry, Computer Science, Engineering, Environmental Science, Geology, Mathematics, Nutritional Sciences, Physics and Astronomy, and Psychology, the college offers the Bachelor of Science degree with majors in eighteen fields of study and the Bachelor of Arts degree with majors in seven fields. The college also administers and the Pre-Health Professions programs (predentistry, pre-medicine, pre-veterinary medicine).

## John V. Roach Honors College

Dedicated to enriching the intellectual life of TCU, the John V. Roach Honors College seeks to empower, inspire, and motivate high-achieving students to become leaders in our global society. The John V. Roach Honors College offers academic programs for students of all majors. Students who complete all the Honors College requirements for both lower-division and upperdivision Honors graduate as a John V. Roach Honors College Laureate and are recognized at a special ceremony prior to the University commencement.

## University Programs

Certificates in ranch management and women and gender studies, BS in ranch management, minors in ranch management and women and gender studies, intensive English and classes at all levels. Credential in Global Citizenship available to undergraduates of all majors.

## Office of Extended Education

The mission of the Office of Extended Education is to engage the University with the community through high-quality non-credit courses, programs, conferences and other offerings that seek to educate, enlighten, renew and serve. Non-degree admissions, portfolio assessment, community courses, certificate programs, professional education workshops and selected summer institutes are coordinated through this office.

## Mission, Vision and Values

## Mission

To educate individuals to think and act as ethical leaders and responsible citizens in the global community.

## Vision

To create a world-class, values-centered university experience for our students.

## Core Values

TCU values academic achievement, personal freedom and integrity, the dignity and respect of the individual, and a heritage of inclusiveness, tolerance and service

## Heritage, Philosophy and Goals

Founded in 1873, TCU has grown from a small school on the cattle frontier to a major center of independent higher education in a dynamic city. As agents of change the TCU's faculty, staff, students and trustees are united in striving for the constant improvement of the University.
A community dedicated to learning, the University affirms its commitment to rationality, objectivity, diversity, freedom of inquiry, creativity and civility. TCU is committed as well to the preservation, appraisal and transmission of knowledge and wisdom and to the discovery of new ideas and knowledge by which the understanding of truth may be extended or corrected.
An independent and self-governing institution, TCU attests that a representative democracy provides the context within which free inquiry may best be protected and encouraged; and the University acknowledges that independent higher education can thrive only in an economic system that prompts and rewards individual initiative. TCU has a historical and intentional connection with a religious body, the Christian Church (Disciples of Christ), that embraces pluralism, rejects sectarian narrowness, encourages a reasoned faith and affirms the rights of informed individual conscience in religious preference. The University welcomes students, faculty and staff of all religious faiths and takes pride in the diversity of its academic community.
Much of the knowledge students seek is related to their specific career goals. The University, however, regards as essential the advancement and communication of general knowledge, which enables students to understand the past, to comprehend the natural and social order, to search for the good and the beautiful, and to integrate knowledge into significant wholes.

Education fosters the capacity for rational decision-making, creative thinking and expression, and responsible living. Though knowledge may be treated as ethically neutral, the University believes that questions of value are vital and exploration of the moral and religious dimensions of human existence is basic to the love of wisdom. At the center of the educational endeavor are people. Affirming the incalculable worth of each individual, TCU seeks to be a caring community, encouraging close working relationships among all members of the University and challenging students, faculty and staff alike to high achievement. In such a setting, the enhancement of mental, physical and spiritual gifts contributes to the integration of the self and the enrichment of the community and humankind.
The University intends to maintain and establish only undergraduate and graduate programs that are aimed toward excellence, the well-being of students and the wholeness of the University. There must be a general compatibility among the values and daily practices of the University and its several units.
Among TCU's many goals are to:

- Conduct curricular and co-curricular activities designed to fulfill the mission and vision of the University.
- Foster undergraduate and graduate studies of excellent quality.
- Provide faculty and staff of high qualification and dedication.
- Expect and encourage excellent teaching and fruitful creativity and research.
- Preserve and contribute to knowledge by aiding in its organization, storage, retrieval and dispersal; and to use appropriate technology to this end.
- Employ admission, advising and retention policies that enable qualified and dedicated students to enter and successfully pursue their collegiate work.
- Provide a variety of support services that enhance the educational experience of all students.
- Promote the development of mature individuals who respect others; cherish a free and just society; and are prepared to act as responsible citizens, literate, broadly informed, self-educating, appreciative of the arts and the fruitful uses of leisure, and capable of both entering and changing careers.
- Support co-curricular as well as curricular opportunities for an informed understanding of religious tradition.
- Contribute to the quality of life, work and leisure of citizens in the surrounding metropolitan area through regular instructional programs; continuing education; cultural and intellectual events; research; and through participation of faculty and staff in civic, religious and other affairs.
- Earn the growing support from those who share the conviction that strong, independent institutions of higher learning are necessary to the continuation of a free society.


## Accreditations

Accreditations provide evidence of TCU's high educational standards. Throughout the higher education system, numerous examining bodiesboards, agencies and commissions-attest annually the credibility of a University's education program. These bodies review and assess the worth of an institution's offerings.
TCU is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia, 30033-4097; 404.679.4501) to award bachelor's, master's and doctoral degrees.
The institution's membership in numerous academic societies provides further evidence of high standards. Of particular note are Phi Beta Kappa and Sigma Xi. Phi Beta Kappa, the prestigious academic society in the liberal arts, approved TCU for membership in 1970. TCU is also approved for a chapter of Sigma Xi, the Scientific Society of North America.

## Program-Related Accreditations

Several individual programs and departments are accredited by discipline specific bodies.
Engineering Accreditation Commission of ABET, http://www.abet.org (Engineering program, Department of Engineering)
Accrediting Council on Education in Journalism and Mass Communication (Department of Journalism)

American Chemical Society (Department of Chemistry \& Biochemistry)
ASHA Council on Academic Accreditation in Audiology and SpeechLanguage Pathology (CAA) (Davies School of Sciences and Disorders)
Association of Graduate Liberal Arts Programs (MLA Program)
Association to Advance Collegiate Schools of Business (M. J. Neeley School of Business)
Association to Advance Collegiate Schools of Business-Accounting (Department of Accounting)
Commission on Accreditation of Athletic Training Education (CAATE) (Athletic Training Program)
Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (Coordinated Program in Dietetics, Didactic Program in Dietetics and Department of Nutritional Sciences)
Commission on Collegiate Nursing Education (CCNE) (Nursing)
Computing Accreditation Commission of ABET http://www.abet.org (BS in Computer Science)
Council for Interior Design Accreditation (Interior Design Program in the Department of Interior Design and Fashion Merchandising)
Council on Accreditation of Nurse Anesthesia Educational Programs (COA) (School of Nurse Anesthesia)
Council on Social Work Education (CSWE) (Department of Social Work)
National Association for the Education of Young Children (KinderFrogs)
National Association of Schools of Art and Design (School of Art and Interior Design in the Department of Interior Design and Fashion Merchandising)
National Association of Schools of Dance (School for Classical and Contemporary Dance)
National Association of Schools of Music (School of Music)
Southern Association of Colleges and Schools, Council on Accreditation and School Improvement (Starpoint School)
Southern Association of Independent Schools (Starpoint School)
Texas Board of Nursing (BON) (Nursing)
Texas Education Association (College of Education)

## Finances

## Tuition and Fees

An independent church-related institution of higher education, Texas Christian University is chartered as a private nonprofit corporation financed by gifts from alumni and friends, endowment earnings, and tuition and fees. The University receives no direct support from the state or federal government.
Tuition and fees are set at a level consistent with the educational services the University provides and are usually available in the spring to be effective with the following fall session. Current tuition and fee schedules are available from:

## Office of Admissions

TCU Box 297013
Fort Worth, TX 76129
(817) 257-7490

## Financial Services

TCU Box 297011
Fort Worth, TX 76129
(817) 257-7836

## Residential Services

TCU Box 297360
Fort Worth, TX 76129

## (817) 257-7865

A large program of scholarships and financial aid helps over 70 percent of the student body with educational costs each year. For more information, see Student Financial Aid (p.13) in this catalog or visit the Office of Scholarships and Student Financial Aid online at www.financialaid.tcu.edu.

## Payment

TCU has a monthly billing cycle. Payment of a minimum 20 percent of total basic charges (tuition, fees, room, meal plan and student health and tuition insurance less approved financial aid) is required by the due date of the month that classes begin (August for the fall semester and J anuary for the spring semester). The remaining net basic charges must be paid in full by the due date of the following month (September for the fall semester and February for the spring semester). Students who do not pay the net basic charges in full by the September due date for the fall semester and by the February due date for the spring semester will be automatically enrolled in the payment plan. Students in the payment plan will be billed for the remaining net basic charges in three monthly installments over the remainder of the semester. A payment plan enrollment fee will be assessed on the September bill for the fall semester and the February bill for the spring semester. To avoid automatic enrollment in the payment plan and the resulting enrollment fee ( $\$ 100$ maximum), net basic charges must be paid in full by the September due date for the fall semester and by the February due date for the spring semester.
The payment plan is an extension of credit by TCU. Each payment plan will not exceed three months. Students enrolled in the payment plan receive a disclosure statement as required by the federal Truth in Lending Act. Disclosure statements are provided in September for the fall semester and in February for the spring semester. The disclosure statement shows the amount included in the payment plan and the enrollment fee required for participation in the payment plan, which will be added to the other charges due on the student's account. Students may review the disclosure statement upon receipt and may cancel the payment plan within 10 days of receipt ("Cancellation Period") by submitting written notice to the TCU student financial services office if not satisfied with the proposed terms. If the payment plan is cancelled during the cancellation period, the student's account will be credited for the enrollment fee. After 10 days of receipt of the disclosure statement, students may cancel the payment plan by submitting written notice to the TCU student financial services office, but the student's account will not be credited for the enrollment fee. If the payment plan is not cancelled, the student is committed to pay the total of payments shown on the disclosure statement according to the payment schedule shown on the disclosure statement. (Since the disclosure statement only includes basic charges, payments should include all charges on the actual monthly billing statements.) Cancellation of the payment plan will not release the student from financial obligation to TCU. If the payment plan is cancelled either within the cancellation period or after the cancellation period, payment in full of the unpaid basic charges for the semester will be due immediately.
More detailed information about the payment plan option is available from the TCU student financial services office. The payment plan option is not available for summer sessions. All summer registration charges (tuition, fees and housing) are due and payable by the due date specified on the first bill received after summer registration occurs.
Late fees will be assessed on the unpaid minimum amount due for payments not received within 10 days of the stated due date.
Students receiving financial aid may participate in the payment plan option. The amount due on the billing statement should be the total semester amount due less any financial aid awarded (except work study, which is paid directly to the student during the semester).
Payment deadlines must be met or the student may be denied advance or current registration. The ability to register in subsequent semesters may be denied if the student account is in arrears. Transcripts will not be released nor will a degree be awarded unless the student has satisfied all financial obligations to the University, including loans made through the University.
Student accounts must be current to be eligible to make residential housing reservations and to make charges to student accounts using the student's University identification card.

## Miscellaneous Charges

University Store purchases, library and parking fines, health center services and medications, parking permits, copying charges, dining add-on charges and other miscellaneous charges are billed monthly, and must be paid in full each month. Late fees will be assessed for payments not received within 10 days of the stated due date.

## Refunds

For a fall or spring semester, a student who withdraws from the University on or before the fifth class day may receive a 100 percent tuition refund. If withdrawal from the University occurs on or before the 10th class day, a 75 percent tuition refund is made. A 50 percent tuition refund is made upon withdrawal from the University on or before the 15th class day, and a 25 percent tuition refund is made if withdrawal is made on or before the 20th class day.

For a fall or spring semester, a student who initially enrolls for 12-18 hours but drops to less than 12 hours on or before the fifth class day is refunded the difference between the flat-rate tuition for the semester and the applicable hourly tuition amount for the reduced number of hours. A student who drops to less than 12 hours on or before the 10th class day receives a refund for 75 percent of the difference between the flat-rate tuition for the semester and the applicable hourly tuition amount for the reduced number of hours. A student who drops to less than 12 hours on or before the 15th class day receives a refund for 50 percent of the difference. A student who drops to less than 12 hours on or before the 20th class day receives a refund for 25 percent of the difference.
For a fall or spring semester, a student who withdraws from a class on or before the fifth class day may receive a 100 percent tuition refund for the class if the student initially enrolled for less than 12 hours and remains enrolled for less than 12 hours at the end of the fifth class day. If withdrawal from the class occurs on or before the 10th class day, a 75 percent tuition refund is made. A 50 percent tuition refund is made upon withdrawal from the class on or before the 15th class day, and a 25 percent tuition refund is made if withdrawal is made on or before the 20th class day.

## Tuition Refund Plan

Undergraduates taking at least 12 hours are automatically enrolled in the Tuition Refund Plan (TRP). Cost is included in the first bill of each fall and spring semester. The plan does not cover summer sessions.
Students who do not wish to participate in the TRP can opt out of the Plan by waiving coverage for the entire academic year through the online Tuition Insurance Waiver function at my.tcu.edu. Deadline for opting out is $5 \mathrm{p} . \mathrm{m}$. on the fifth class day of each semester. The charge for the TRP will be removed from the student's account following completion of the online waiver process.
The Plan provides coverage for tuition costs if medical problems, including mental health issues, require the student's withdrawal from the University before a semester ends. Students enrolled in the TRP and withdraw due to medical problems are assured, in most cases, of an $80 \%$ refund of tuition even after the University's refund schedule has expired.
A.W.G. Dewar, Inc., administers the plan, which complements the University's tuition refund policy. Tuition refunds due to medical withdrawals are not processed outside of the University's standard refund policy. For more information go to the Student Financial Services link under Financial Services or call A.W.G. Dewar at 617.774.1555.

## Return of Federal Financial Aid

A student who withdraws from the University before the 60 percent point in the enrollment period (summer, fall or spring) may have to return a prorated portion of the financial aid he or she received or that TCU received on his or her behalf. Detailed information about the federal policy on the Return of Title IV Funds is available in the Office of Scholarships and Student Financial Aid.

## Admission

Texas Christian University does not discriminate on the basis of personal status, individual characteristics or group affiliation, including but not limited to, classes protected under federal and state law.
Applications for admission to the undergraduate schools/colleges and requests for further information should be addressed to the Office of Admission, Mary Wright Admission Center; the mailing address is:

## Office of Admission

Texas Christian University
TCU Box 297013
Fort Worth, TX 76129
Non-degree students should contact:
Office of Extended Education
Texas Christian University
TCU Box 297026
Fort Worth, TX 76129

## Admission Policies

## Admission to the University

Qualified undergraduate students are admitted to the University rather than to a specific program, school or college. Application deadlines and notification dates for freshman and transfer applicants are stated in the Application for Undergraduate Admission. Deadlines for applying for financial aid may be obtained by contacting the Office of Scholarships and Financial Aid.

## Health Record and Insurance

All new students, regardless of academic classification, must have a Report of Medical History on file in the Brown-Lupton Health Center. All undergraduate students taking nine or more semester hours are required to have health insurance either through the TCU Student Health Insurance Plan or through another individual or family plan. Students who do not choose to participate in the University's Student Health Insurance Plan must waive participation online by entering before a specific deadline the name of their private insurance carrier.

## Residence Hall Requirement

Unmarried students under 21 years of age classified as freshmen or sophomore at the time of registration and enrolling for nine or more semester hours are required to live on campus unless living at their parents' residence. Students who are 17 years old or younger at the time of registration will be approved to live in residence halls on a case-by-case basis.

## International Visa Students

Refer to the section in this catalog titled International Student Admission (p. 10).

## Non-Discrimination Statement

TCU is committed to providing a positive learning and working environment free from discrimination and harassment. In support of this commitment, TCU prohibits discrimination and harassment on the basis of age, race, color, religion, sex, sexual orientation, gender, gender identity, gender expression, national origin, ethnic origin, disability, genetic information, covered veteran status, and any other basis protected by law. Inquiries about TCU's policies and compliance with Title IX, The Age Discrimination Act of 1975, or the aspects of TCU's equal opportunity or affirmative action programs should be directed to: Dr. Darron Turner, Associate Vice Chancellor, Student Affairs, TCU Box 297090, Jarvis Hall 228, Fort Worth, TX 76129, ext.5557, d.turner@tcu.edu.

## Examination and Portfolio Assessment Credit - Detail

Through several methods, students may earn academic credit for collegelevel learning by taking an examination in the appropriate area. Credit granted usually can be used to satisfy specific and general degree requirements. Refer to the section in this catalog titled Bachelor Degree Requirements (p.41).

The credit by examination procedures are reviewed and updated annually. A current brochure is available from the Office of Admission; information is also available online at www.admissions.tcu.edu.
On a limited basis, portfolio assessment is another method used to earn academic credit for college-level learning. A portfolio is a formal, written document including a résumé, detailed personal history, description of skills and competencies, and documentation to support the student's request for credit. Only limited credit has been approved using this method. More information on the portfolio assessment program may be obtained by contacting Office of Extended Education at 817.257.7130.

## Military Service Credit Admission Information

The University follows, with limitations, the recommendations of the American Council on Education (ACE) as published in the Guide to the Evaluation of Educational Experiences in the Armed Services in granting credit for military service schools.
Courses must be in the baccalaureate/associate degree category as defined by the ACE guide. This requirement precludes acceptance of vocational, technical or certificate category courses, or military occupational specialties or job experience.
For consideration of credit from military service schools, the applicant must submit the following military records:

- Certified original of the DD Form 295, or
- Copy of the DD Form 214, or
- Course completion certificates, or
- A Community College of the Air Force transcript.

The Office of the Registrar will assist persons eligible for veterans education assistance benefits.

## Nonresidential Coursework

The University examines all nonresidential learning experiences and grants credit on a case-by-case basis.

## Undergraduate Student Admission

## Freshmen Students

TCU invites applications from qualified high school students who have graduated or expect to graduate from an accredited secondary school. The student should request information about TCU early in the high school career.
Students applying from secondary schools should complete and return application forms following their junior year in high school. Applicants are considered for admission after the Office of Admission receives:

- Completed application form
- Official secondary school transcript
- SAT or ACT scores
- $\$ 40$ application fee
- Essay and résumé of activities
- Secondary school counselor's evaluation of applicant
- Evaluation from one teacher in a core academic subject

It is the student's responsibility to complete the application procedure. Students accepted to the University prior to high school graduation are admitted on a tentative basis, pending completion of their senior year with academic performance consistent with that upon which the admission decision was based. Verification of graduation is required.
Any college-level coursework attempted after admission but before matriculation must be reviewed by the Office of Admission prior to enrollment and may nullify the offer of admission.
Admitted students must submit a nonrefundable tuition deposit by May 1 (National Candidate Reply Date) to secure a place in the fall class.
Several factors are considered when selecting candidates for admission, including:

High school record. Students are expected to have completed upon graduation a minimum of four units of English, three units of mathematics (including two units of algebra and one of geometry), three units of science (including one laboratory science), three units of social studies, two units of foreign language and two units of academic electives. The quality and quantity of coursework taken, grades earned and subsequent rank in the high school class are important in assessing a candidate's probability for success at TCU.
Admission tests. Candidates must present results of the SAT or the ACT. Arrangements to take one of these tests should be made through the student's secondary school. In addition, prospective performance music majors must audition either in person or by recording. Prospective ballet, modern dance and theatre majors must also audition.

Essay, teacher evaluation and counselor evaluation. The student's essay is a significant part of the application, as are the high school counselor and teacher evaluations. If the candidate has been out of high school more than three years, the counselor evaluation requirement is waived.
Extracurricular participation. Meaningful activities outside class, including employment, community/volunteer work and leadership experiences.
College courses taken while in high school. Emphasis is on the quality of coursework completed and the grades earned. Official college transcripts must be presented to determine transferability of credit.
Special talents. Special consideration will be given to students whose application profiles diverge from the general population of students admitted and enrolled, including, but not limited to, artists, athletes, dancers, musicians, poets and others who demonstrate exceptional ability or potential in their chosen academic, athletic or other area of interest. Special talent admission decisions will be made by committees or admission officers empowered by the chancellor.

## Transfer Students

A transfer student is defined as one who has been out of high school for at least one full semester and has attempted college or university work for credit.
Students planning to transfer from another college or university should submit the following for admission consideration:

- Completed application form;
- Official transcripts from each college attended;
- \$40 application fee; and
- Secondary school transcript and SAT or ACT scores if, at the time of application, fewer than 24 semester hours of transferable work have been completed.
Admission to TCU as a transfer student is based upon evidence of ability to succeed in college-level work. The applicant's total record will be assessed, taking into account the following:
- Cumulative GPA;
- Quality of curriculum;
- Number of hours and GPA in core subjects;
- High school record and test results (if possessing fewer than 24 transferable semester hours at the time of application);
- Extracurricular activities, achievements and honors; and
- Essay.

The applicant must be in good academic standing and be eligible to return to all previous institutions. Official transcripts must be submitted from each college attended whether the work was satisfactory, unsatisfactory or interrupted. Failure to disclose any part of a previous academic record is a serious violation of trust and will subject a student to dismissal and forfeiture of credit earned while in attendance at TCU.
Evidence of acceptable academic standing at an accredited college or university and appropriate academic credentials are required. A minimum cumulative GPA of 2.00 is necessary for consideration although a cumulative GPA of 2.75 or higher is generally required for admission. Every application will be reviewed on an individual basis. In most cases, greater emphasis is placed on academic work completed in recent semesters than on work completed in the more distant past.
Grades on all attempted transferable courses except physical education activity courses (including repeated courses and those in which grades of " $F$," " $\mathrm{D}^{\prime}$ or "I" were received) will be used in calculating the GPA to determine the applicant's qualification for admission. Once admitted, a student's transfer grades will not be entered on the student's permanent record at TCU.

Academic Fresh Start is provided for undergraduate students who have demonstrated better than average academic performance in recent college coursework. Only applicants who have completed academic course work ten or more years prior to their current application may be considered for Academic Fresh Start. Students electing to use the Academic Fresh Start policy may request forfeiture of all credits earned prior to ten years from the date of their currently requested admission to TCU. Students must submit transcripts from all colleges attended and the Academic Fresh Start form for consideration.
Special consideration will be given to admission of students with special talents whose application profiles diverge from the general population of students admitted and enrolled, including artists, athletes, musicians, poets, as well as others who demonstrate exceptional ability in their chosen academic, athletic or other area of interest. Special Talent admission decisions will be made by a committee empowered by the Chancellor.
Students admitted to the University will receive, with their letter of admission, a transcript evaluation sheet listing all transferable courses. A course listed as "transferable" on the transcript evaluation is not necessarily applicable or acceptable under certain degree programs.

- Courses that do not transfer to TCU include the following:
- Courses in which a grade lower than "C" was earned;
- Courses considered to be developmental (e.g., orientation, time management, library skills) or remedial (e.g., those in English, math and reading); and
- Vocational-Technical courses.

No more than 66 hours from a community college may be credited toward a bachelor's degree, and no course transferred from a community college may be used to satisfy the TCU advanced-hour requirement. No more than eight semester hours of physical education activity courses may be applied toward graduation requirements.
Note: Students transferring to TCU must present a record of all transfer work for evaluation to the Office of Admission for approval by the appropriate academic dean prior to their enrollment in the University. Transfer coursework not presented prior to enrollment may not be counted toward a degree.
After enrolling at TCU:

- All students must receive prior written approval of the academic dean of their major if they wish to take courses at another institution and have those courses count toward a degree at TCU. Coursework taken without prior written approval may not be applied to a degree.
- No more than 12 total semester hours, except those earned in an approved study abroad program, may be transferred from other schools.
- No credit may be transferred from a community college once 54 cumulative semester hours have been earned.
Some programs have certain requirements that must be met to enroll in upper-division courses. Transfer applicants who plan to study business, nursing, pre-health or strategic communication should refer to those special requirements set forth in the appropriate programmatic sections of this catalog.


## International Students

International (non-immigrant) undergraduate applicants for admission to TCU must demonstrate:

- High scholastic achievement, with above-average academic performance in their secondary or high school studies and on national examinations, where such examinations are administered. Students transferring from a university or other institution of higher education should have above-average grades in their postsecondary studies. Former TCU international students should refer to the section in this catalog titled Re-Enrollment of Former Students on page 12.
- A satisfactory command of English as demonstrated by such examinations as TOEFL (Test of English as a Foreign Language), the SAT, the ACT or another widely recognized test of English proficiency. The minimum TOEFL score accepted for admission of beginning undergraduate students is 550 on the paper-based exam, 213 on the computer-based exam or 80 on the Internet-based exam. Transfer students may demonstrate proficiency by successfully completing English composition and having 24 hours of transferable credit from a U.S. college.

Applicants who have not achieved the required level of English proficiency are encouraged to enroll in TCU's Intensive English Program, which offers sessions during the academic semesters and during the summer each year. Regardless of the level of English language proficiency, all admitted
international students are tested upon arrival at the University and, depending on their test results, may be required to take certain English language credit courses to overcome deficiencies. Admitted students must eliminate any deficiencies determined by the TCU English Proficiency Exam within the first two full semesters in order to continue their studies at TCU.

## Procedures

Non-immigrant applicants should request the International Student Application for Undergraduate Admission. The application contains detailed instructions regarding documents that must be submitted and deadlines for application. Admission for summer sessions is considered only for applicants with at least 24 semester hours of higher education in the United States.

When the application is complete, the Committee on International Admissions will evaluate the credentials and send the applicant a letter stating its decision. If admitted, the applicant will be provided information regarding dates of arrival, orientation, testing and additional requirements. Students must submit a health record and provide proof of the availability of funds to cover all educational and living expenses.

## Admission

International orientation is required of all new international students. Advanced credit may be granted for certain courses considered to be beyond the level of U.S. secondary school courses, provided that the grades are at least average. Results from exams such as the International Baccalaureate, the German Abitur, the British General Certificate of Education (GCE) "A" Levels and other similar national exams can be considered for possible advanced credit.

The University standards and procedures regarding international students are consistent with those expressed in the Admissions Standards and Procedures of NAFSA: Association of International Educators

## Housing

Undergraduate applicants in their first two years of higher education and who are less than 21 years of age are required to reside in on-campus housing. Other applicants may apply for housing on campus after being granted admission and may receive a reservation depending on space availability at the time of application.
Additional information can be obtained from:

## Office of International Admission

Texas Christian University
TCU Box 297013,
Fort Worth, TX 76129, U.S.A
or by calling 817.257.7871 or sending a fax to 817.257.5256

## Non-Degree Students

Students interested in taking courses for academic credit but not in seeking a degree from TCU may be admitted for non-degree study. Non-degree students are held to the same standards governing academic progress (including probation/suspension) as degree students.
Non-degree status would apply to persons:

- Taking only ROTC at TCU and enrolled at another college or university;
- Seeking Ranch Management certification;
- Seeking only teacher certification;
- With an undergraduate degree desiring additional undergraduate coursework;
- Applying as summer visiting students; and
- Enrolled at another college or university seeking concurrent enrollment at TCU for one semester.

Persons who do not fit into any of these categories, but who want to take credit courses, will be considered for limited enrollment status. Limited enrollment status is open to persons who

- Are 22 years of age or older with a high school diploma and/or equivalency diploma based on the GED;
- Are in good standing at all colleges where they are currently enrolled or have ever been enrolled; and
- Have not been previously denied admission or readmission to TCU.

A limited enrollment student may not enroll in more than six semester hours of coursework per semester or three hours per summer session. Exceptions must be approved by the Office of Extended Education. A maximum of 12 semester hours may be accumulated. At that time a student may apply as a
degree-seeking student or receive special permission to continue beyond the 12 hours limitation.
Applications for non-degree study may be obtained from the Office of Extended Education.

Non-immigrant students may be considered for non-degree status without the limitations stated above, but must abide by the regulations stipulated by the Office of International Student Services. These applicants should contact the Office of International Student Services for specific limitations, application forms, and procedures for international students.

## Non-Degree to Degree Status

Undergraduate students who wish to change from non-degree to degree status must submit the appropriate application form obtained from the Office of Admission. The semester hours earned as a non-degree student can be applied toward a degree program if applicable.

## Individual Approval

Students who demonstrate outstanding academic achievement and potential, but have not yet graduated from high school, may be admitted by individual approval. Such students seeking concurrent enrollment or early admission should contact the Office of Admission for further information.

Applicants 21 years of age or older who submit results of a GED examination may be considered for admission on an individual basis. Such applicants generally are encouraged to attend a two-year college for a semester or more in preparation for university studies.

## Re-Enrollment of Former Students

Students previously enrolled and in acceptable academic standing in an undergraduate degree program who wish to re-enter TCU after absence of a full fall or spring semester must apply for re-enrollment and pay an application fee. Official transcripts from each college or university attended since the last enrollment at TCU must be submitted to the Office of the Registrar (see exception under Re-enrollment following Suspension (p.11)). Eligibility for re-enrollment will be determined upon review and assessment of the student's entire record.

Former TCU students originally awarded an academic scholarship who are applying for re-enrollment may petition for the restoration of that scholarship or may be eligible to compete for a transfer academic scholarship if coursework has been completed at another university. Students may not receive a scholarship that exceeds the original TCU scholarship.

Non-immigrant students should apply for re-enrollment at least two months prior to registration in order to meet all requirements of the Office of International Student Affairs.

## Re-Enrollment Involving a Change of Major

When a student is re-enrolled with a change of major, the Office of the Registrar will initiate the Change of Major form. Permission to change major requires approval of the dean of the new major. All entrance requirements specific to the new major must also be met. (Refer to the section titled Requirements for Graduation (p.41).)

## Re-Enrollment Following Suspension

All students suspended from TCU for academic or disciplinary reasons must apply for re-enrollment through the Office of the Registrar. No enrollment will be permitted following a period of suspension until re-enrollment is approved by the Office of the Registrar after consultation with the appropriate dean. (Refer to the section titled Academic Probation and Suspension. (p. 41))

A student suspended from TCU may not transfer credit that was earned at another college or university during the period of enforced suspension, but must submit all transcripts of any work attempted or completed during that period.
A student may not re-enter TCU while on academic suspension from another college or university.

## Re-Enrollment Following Extended Separation from the University

A student accepted for re-enrollment after a 10-year separation from TCU may petition to have all prior coursework at TCU (selected course exclusion is not permitted) excluded from the TCU GPA calculation and credit toward graduation. The petition should be filed no later than the end of the first semester of re-enrollment in a degree program and be addressed to the registrar who will seek the approval of the appropriate academic dean. If the petition is granted, it is irrevocable. Excluded courses and corresponding grades will still appear on the official transcript but will not be included in
calculation of the GPA, will not be counted as meeting credit-hour requirements for graduation and will not be used to satisfy course requirements.

## Additional Bachelor's Degree (Reenrollment)

First-time applicants should complete the Application for Undergraduate Admission for Transfer Students. Students who have previously attended TCU should complete the Application for Re-enrollment and refer to the sections titled Re-Enrollment of Former Students (p. 11) and Additional Bachelor's Degree (p.42) in The Bachelor's Degree section of this catalog. The student's entire academic record, as well as credentials submitted with the application, will be assessed prior to an admission decision.

## Student Financial Aid

Texas Christian University provides an extensive, individually designed financial aid program. Certain principles guide the administration of the various programs in the TCU Office of Scholarships and Student Financial Aid.

- Financing a university education is a joint venture between the student, the student's family and TCU.
- Eligibility for Title IV federal financial assistance and state financial aid programs is based upon information and methodology provided by the Free Application for Federal Student Aid (FAFSA), as provided by the family. Institutionally funded grants are based on the results of the College Board's CSS Profile application.
- Academic scholarships are based upon the academic achievement of the students. Those who have excelled academically are given the largest share of TCU-funded dollars.
Applicants for assistance must be admitted to the University before aid is committed. Students who submit academic credentials at the level required for scholarship consideration will automatically be reviewed for those awards. No separate application is necessary.
Applicants for financial assistance are encouraged to submit the FAFSA no later than March 15 for fall entry and Nov. 1 for spring entry. Financial assistance files completed after March 15 or Nov. 1 will be reviewed; however, there may be a reduction in the aid offering due to budget limitations. (Deadlines for ranch management applicants, student-athletes and fine arts performance majors may be extended due to University recruitment practices and for transfer students whose admission is pending due to the availability of final transcripts.) All individuals whose FAFSA is selected for verification will be required to provide appropriate tax information and other documentation as needed, to confirm the accuracy of the application.
Students generally receive aid from a variety of sources. Scholarships, federal, state and institutional grants, work and/or loans are combined or "packaged" to form the financial assistance award. Approximately 83 percent of the current TCU student body is receiving financial assistance of some sort. Questions regarding the University's aid program may be directed to:


## Financial Aid Staff

www.financialaid.tcu.edu

## Financial Aid General Policies

1. Students may receive more than one TCU-funded award. However, most university-funded grants and scholarships, when combined, may not exceed the value of a full-tuition award. Note: With the exception of the Pell Grant, most federal and state grant programs are also limited to paying tuition costs.
2. Any aid granted by the University may be withdrawn at any time for unsatisfactory conduct.
3. If invited to participate in the Honors College, scholarship recipients are encouraged to do so.
4. All students receiving financial aid from sources outside the University must notify the Office of Scholarships and Student Financial Aid of the amount and source of such aid.
5. Most financial aid awards are granted for one year and may be renewed if the recipient meets required stipulations. All reapplications and required documents must be received prior to May 1 to ensure funding.
6. Maximum duration of TCU-funded awards will be eight semesters or a total of 124 TCU semester hours of undergraduate study, whichever occurs first. A ninth semester of aid is allowed for students in a program requiring more than 124 hours for a baccalaureate degree.
7. Students who receive financial eligibility-based assistance through TCU may not receive funds from any additional source that will exceed their eligibility. Any student who has been "over-awarded" will have his/her awards reduced by the Office of Scholarships and Student Financial Aid so that all aid received will comply with federal and state guidelines. When possible, this reduction takes place in either the employment or loan programs.
8. Most TCU-funded assistance is restricted to tuition costs for first-degree undergraduates. (Exceptions are made for the Ranch Management, Piano Certificate or Artist Diploma programs and for recipients of Alumni Half-Tuition and Professional/Personal Development Grant.)
9. Most academic scholarships may only be applied to tuition costs. Students receiving awards from other sources that are restricted to tuition charges must choose which award(s) to accept in the event these funds exceed tuition.
10. To be eligible for most TCU-funded aid, a student must have a TCU cumulative GPA of 2.5 or better and must register for at least 12 semester hours, unless the aid is designated for part-time students. Note: Twenty-four semester hours of "letter-grade" credits each academic year (fall/spring) are required for academic scholarship renewal. See renewal requirements in the section titled Academic Scholarships on page 13 in this catalog.
11. To be eligible for federal and state aid, a student must have a TCU cumulative GPA of 2.0 or better and must register for at least six semester hours to receive federal loans.
12. Students must maintain the requirements outlined in the Undergraduate Student Financial Aid Statement of Satisfactory Academic Progress in order to apply for and receive financial aid.
13. With the exception of TCU International Summer Study programs, grant assistance is generally not available during the summer terms.
14. Graduating seniors in their last semester may register as part-time students. Aid is offered on a pro-rated basis, provided the student enrolls in at least six hours of credit.
15. Students participating in TCU-sponsored international programs are eligible for all TCU-administered aid. Students participating in the Institute of European Studies (IES) or the Council on International Educational Exchange (CIEE) are eligible for all TCU-administered aid except Federal Work/Study, Federal Perkins Loan and Nursing Student Loan. State and federal aid, other than Federal Work/Study, Perkins Loan and Nursing Student Loan, is available for other U.S. university programs and non-U.S. university programs if the student receives TCU credit for the study abroad coursework.

## Academic Scholarships

TCU rewards academic achievement. The following list of awards is designed to recognize entering students who have excelled academically. Freshman scholarships are offered on a continuing basis until funds are exhausted. Transfer student applicants must be admitted by April 15 for the fall semester and Oct. 1 for the spring semester. These awards are based solely on academic performance without regard to the family's financial condition as evidenced by the FAFSA.

## Freshman Awards

Specific renewal requirements common to all academic awards are:

- Successful completion of 24 semester hours of "letter-grade" TCU coursework each academic year (fall and spring). Note: Summer courses do not satisfy the requirement.
- A TCU cumulative GPA of 3.0 is required at the conclusion of the freshman year. Thereafter, a 3.25 TCU cumulative GPA is required at the conclusion of each spring semester.
- "F" grade, "W" or "Q,", "II," "AU," Advanced Placement (AP), College Level Examination Program (CLEP) and College Board Achievement Tests in Foreign Languages (ACH) do not count toward satisfying requirements.
- Duration of freshman awards is eight semesters or 124 TCU semester hours, whichever occurs first.


## John V. Roach Family Endowment

Provides full room, board and books for the top four students in the class who have been offered full tuition from another academic scholarship.

## Chancellor Scholarship

Amount: Full tuition for up to 18 hours per semester for up to eight undergraduate semesters. Total value in excess of $\$ 170,680$.

## Trustee Scholarship

Combines with other academic awards to provide a full scholarship covering room, board and books.

## Deans Scholarship

Amount: $\$ 20,000$ per year for up to eight undergraduate semesters. Total value $\$ 80,000$.

## Faculty Scholarship

Amount: \$15,000 per year for up to eight undergraduate semesters. Total value $\$ 60,000$.

## TCU Scholarship

Amount: $\$ 12,000$ per year for up to eight undergraduate semesters. Total value $\$ 48,000$.

## Founders Scholarship

Amount: $\$ 10,000$ per year for up to eight undergraduate semesters. Total value \$40,000.

## National Merit <br> National Achievement <br> National Hispanic

Amount: $\$ 2,000$ per year for up to eight undergraduate semesters. Total value \$8,000.
Note: Scholars must be designated as finalists in the competition and Merit finalists must officially designate TCU as their first choice. This scholarship may be awarded in addition to another TCU scholarship if the total amount of the institutional merit scholarship does not exceed the cost of tuition at TCU.

## TCU Academic Achievement Award

This award is for current TCU students who were at the top of their class at the end of the freshman year and were not awarded an academic scholarship upon entering the University.

## Transfer Awards

Transfer scholarships are highly competitive. Candidates must present a minimum cumulative college GPA of 3.25 and at least 27 hours of transferable coursework. Other factors that are considered include strength of curriculum, GPA earned during the last 30 hours of coursework, communication skills and extra-curricular activities. Scholarship renewal is based on the successful completion of at least 24 hours of letter-grade coursework at TCU during the academic year (fall and spring terms). A TCU cumulative GPA of 3.25 is required at the conclusion of the spring term.
Note: Merit Scholarships are only for new full-time students and will not be awarded to current or former TCU Students. Only one scholarship is awarded per student.

## Transfer Deans Scholarship

Amount: $\$ 20,000$ per year for up to six undergraduate semesters. Total value $\$ 60,000$.

## Transfer Faculty Scholarship

Amount: \$15,000 per year for up to six undergraduate semesters. Total value \$45,000.

## Transfer TCU Scholarship

Amount: $\$ 12,000$ per year for up to six undergraduate semesters. Total value \$36,000.

## Phi Theta Kappa Alumni Scholarship

Amount $\$ 13,000$ per year for up to six undergraduate semesters. Total value of \$39,000.
Note: Active PTK membership is also a prerequisite for this TCU-sponsored award.

## Sponsored Scholarships, Outside Awards

Individuals, foundations and other agencies also provide scholarships for TCU students. These are awarded by the University in keeping with the standards and/or conditions stipulated by the donor. Qualified students are considered for these scholarships on the basis of the TCU admissions application. In addition, financial assistance is offered by a number of corporations, foundations and other organizations that provide funding directly to the student, who may then select the institution where the award
is to be used. High school principals and counselors usually have information concerning such awards.

## Performance Awards

TCU also offers talent-based scholarships. Recipients are recommended by individual department(s), and the awards may or may not be based in part on results of the FAFSA.

## Athletic Scholarships

Scholarships for student-athletes are granted in accordance with NCAA and Big 12 Conference regulations. Student-athletes applying for financial aid from federal, state or other TCU-funded sources must meet additional eligibility requirements specific to those programs.

## Nordan Fine Arts Scholarship

These awards are made to exceptionally talented students in art, ballet/modern dance, music and theatre. They may reach \$40,000 over four years for undergraduate students and are renewable subject to the recipient fulfilling performance expectations. Information:

## Dean, College of Fine Arts

Texas Christian University
TCU Box 298000
Fort Worth, TX 76129

## Band Awards

Funds are available to some members of the Horned Frog Band. The amount depending on talent and availability of other aid. Awards are made on recommendation from the director of bands after an audition. Awards may be renewed.

## Orchestra and Choral Awards

Funds are available to some members of the University orchestra and choral programs. The amount depends upon talent and availability of other aid. Awards are made on recommendation from the director of the orchestra and the director of the choir after an audition. Awards may be renewed.

## Religiously Affiliated Programs

To receive aid from more than one religiously affiliated program, applicants must demonstrate financial eligibility through the FAFSA and CSS profile.

## Beasley Foundation Grants

These grants are for members of the Disciples of Christ Church and are made available through the Theodore and Beulah Beasley Foundation, Inc. Eligibility is determined by the results of the CSS Profile, academic achievement and leadership potential. Most awards range from $\$ 1,000$ to $\$ 10,000$. Consideration for renewal is based upon successful completion of at least 24 hours and a minimum TCU cumulative GPA of 2.5. The FAFSA must be received by May 1 for priority funding.

## Bermont Family Undergraduate Jewish Student Scholarship

This scholarship is for entering freshmen or transfer students who are Jewish. Preference is given to student applicants who demonstrate financial need as evidenced by the FAFSA. Amount varies.

## Church Vocation Grant

TCU offers financial assistance to students, regardless of denomination, preparing to become ordained clergy, church musicians or directors of religious education in a full-time church vocation. The minister and the board (or governing body) of the applicant's home congregation must certify the applicant as a member in good standing and as a candidate for full-time church-related work. In addition, an essay from the candidate reflecting on the individual's theological development and commitment to devote his/her life to the ministry of the Gospel of Christ as a full-time vocation is required. This certification should be received by TCU prior to May 1 for the fall semester and Nov. 1 for the spring semester.
Recipients of a Church Vocation Grant must enroll in an undergraduate religion program leading to a baccalaureate degree from TCU. They are required to major in religion or church music.
Prior to May 1 each year, all recipients must recertify their commitment to enter a full-time church vocation and present evidence of their progress toward that goal. The home congregation, the TCU Scholarship Committee and the Department of Religion reviews the recertification. Award decisions
are based on several factors, including academic record, applicant essay and letter of recommendation.
Students must file a FAFSA each year. Although financial eligibility is considered, it is not a prerequisite for receiving the award.

Awards provide one-half tuition for up to 18 hours per semester and are renewable for up to eight semesters. Minimum renewal requirements are a 2.5 TCU cumulative GPA and successful completion of at least 24 semester hours during the academic year. Applications for the Church Vocation Grant may be obtained from the Grant section of www.financialaid.tcu.edu.
Applications must be received by May 1 each year.

## Christian Youth Fellowship (CYF) Grant

Through the cooperation of the Christian Church (Disciples of Christ), TCU is able to offer tuition assistance to regional officers of the Christian Youth Fellowship. These awards provide one-half tuition for up to 18 hours per semester and are renewable for up to eight semesters. Minimum renewal requirements are a 2.5 TCU cumulative GPA and successful completion of at least 24 hours during the academic year.
Applications must be received by May 1 each year.

## Minister and Minister's Dependent Grant

Through funds provided by the Christian churches of Texas, New Mexico and Louisiana, partial-tuition grants are available to certain categories of students attending TCU. Included are:

- Spouses of full-time students of Brite Divinity School, the graduate seminary
- Unmarried youths under 23 years of age who are dependent children of Christian church (Disciples of Christ) ministers in full-time active service (including missionaries) and youths of Juliette Fowler Home (including employees of the home)Spouses of full-time Christian church (Disciples of Christ) ministers
- Spouses of full-time Christian church (Disciples of Christ) ministers
- Full-time Christian church (Disciples of Christ) ministers who wish to continue their education on a part-time basis in the undergraduate program
Awards will be in an amount not to exceed one-half tuition for up to 18 hours per semester and is renewable for up to eight semesters. Renewal requires the student is meeting satisfactory academic progress. Applications must be received by May 1 each year.


## Federal Grant Programs

Eligibility for the following programs is based upon receipt and evaluation of the FAFSA. These programs are subject to the provisions stated in the section titled Student Financial Aid General Policies in this catalog, as well as specific programmatic requirements as defined.

## Federal Pell Grant

This is a federally funded grant for undergraduate students only. The maximum amount of the grant is established by the U.S. Department of Education on an annual basis. Grants range from \$598 to \$5,815.

## Federal Supplemental Educational Opportunity Grant (FSEOG)

This is a federally funded grant for undergraduate students only. The average FSEOG award at TCU is approximately $\$ 2,000$ per academic year. All FSEOG awards are dependent on the funding levels approved by federal government appropriations and awards to the institutions. Priority is given to students who qualify for the Federal Pell Grant.

## Teacher Education Assistance for College and Higher Education (TEACH) Grant

This is a federally funded program for students preparing to teach full-time in a low-income elementary or secondary school (as defined by the Department of Education) and in a high-need field (as listed by the Department of Education), which include teaching areas such as science, math, foreign language, special education, etc.) for a period of four years. Recipients are required to complete mandatory counseling sessions as well as sign an Agreement to Serve. Failure to meet all requirements of the TEACH Grant Program results in the TEACH Grant being converted to a Federal Direct Unsubsidized Stafford Loan with interest. Grants vary, up to $\$ 4000$ per year. Additional information regarding the TEACH Grant can be found at http://www.studentaid.ed.gov/PORTALSWebApp/students/english/TEACH.js p.

## State and Institutional Grant Programs

Eligibility for the following programs is based upon receipt and evaluation of the FAFSA. In order to receive priority funding for these awards, the FAFSA must be submitted before May 1 for fall entry and Nov. 1 for spring entry. These programs are subject to the provisions stated in the section titled Student Financial Aid General Policies (p. 13) in this catalog, as well as specific program requirements as defined by the Texas Higher Education Coordinating Board.

## TCU Grant

Students with financial eligibility are considered for participation in this program. The results of the CSS Profile, class rank and SAT/ACT are reviewed. The award is based upon the quality of the entire applicant pool. Renewal is based upon results of the FAFSA and a minimum TCU cumulative GPA of 2.5.

## Middle Income Assistance Program

Students with financial eligibility are considered for participation in this program. The results of the CSS Profile, class rank and SAT/ACT are reviewed. The award is based upon the quality of the entire applicant pool. Renewal is based upon results of the FAFSA and a minimum TCU cumulative GPA of 2.5. Awards vary, generally between $\$ 500$ and $\$ 5,000$.

## Tuition Equalization Grant (TEG)

The State of Texas sponsors a program to help equalize the cost of tuition between independent universities and the state public institutions. Awards vary, generally between $\$ 200$ and $\$ 5,046$. TCU participates in this program and funds are limited by the allocation awarded to TCU by the state. To qualify, a student must:

- Be a Texas resident as defined by the Texas Higher Education Coordinating Board;
- Establish financial eligibility as evidenced by the FAFSA
- Not be the recipient of an athletic scholarship during the semester the student is receiving the TEG
- Not be enrolled in a program leading to licensure or ordination to preach
- Provide results of a processed FAFSA no later than May 1 for fall and Nov. 1 for spring


## Non-Traditional Student Award Programs

Responding to the needs of several types of part-time, adult and nontraditional students, TCU offers the following programs. Information and applications may be obtained by contacting the Office of Scholarships and Student Financial Aid, Sadler Hall Room 2108; 817.257.7858. Students receiving assistance through these programs must maintain the standards set forth in the Undergraduate Student Financial Aid Statement of Satisfactory Academic Progress outlined elsewhere in catalog.

## Personal/Professional Development Grant

Awards are available to qualified part-time, independent students at least 22 years of age. This first-come, first-serve grant is available to students who often do not qualify for other forms of financial assistance. With the exception of Pell Grants and educational loans, these grants may not be combined with other TCU-administered aid.

## Alumni Half-Tuition

Persons with a TCU degree are eligible to take additional undergraduate courses, except for performance music, at half-tuition. Funds for this program are limited and some restrictions apply. A student may not be receiving tuition funds from any other source with the exception of educational loans and may not combine this award with other financial aid administered by TCU. A student concurrently enrolled in a graduate degree program at TCU may not combine this award with aid through a graduate department. Readmission to the University as a non-degree student is available through the Office of Extended Education. For admission as a degree-seeking student, contact the Office of Admission. This assistance is awarded on a funds and space-available basis to students who register on the second day of class.

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## Employment Programs

## Federal Work/Study Program (FWS)

This federally funded program provides a portion of the wages earned by students employed on campus. To receive a Work/Study Program award, the applicant must have financial eligibility as evidenced by the FAFSA. Students employed through this program must be capable of maintaining good standing in their course of study while employed. To research current job listings, visit https://careers.tcu.edu/frogjobs/. Once a student finds a position in which he/she is interested, follow the instructions for application. Student employees are paid every two weeks for actual hours worked. The University strongly encourages all employees to utilize direct deposit for paychecks.

## University Student Employment

TCU offers a number of student jobs through the various departments on campus. To research current job listings, visit
https://careers.tcu.edu/frogjobs/. Once a student finds a position in which he/she is interested, follow the instructions for application. Student employees are paid every two weeks for actual hours worked. The University strongly encourages all employees to utilize direct deposit for paychecks. Eligibility is not necessarily related to the FAFSA; however, some departments may prefer to hire students with work/study awards.

## Employment in the Fort Worth Area

Students may also find employment in the Fort Worth area. Business establishments adjacent to the campus frequently employ TCU students. Other business enterprises in more distant areas of the community also employ TCU students who have means of transportation to and from the job. Employment opportunities in the area are particularly advantageous to students who are pursuing certain career fields where on-the-job training may be helpful. The Office of Career Services provides assistance in helping students locate these types of employment opportunities.

## Residence Hall Assistants

There are several staff positions for upper-class students as resident assistants in each residence hall. Required are leadership ability, an appreciation for the University's educational philosophy and a concern for other students' needs. Applications should be made to the Office of Housing and Residence Life. Dates for applications are announced each spring.

## Student Loan Programs

Loans must be repaid and require the signing of a promissory note. Several types of loans are available.

## William D. Ford Federal Direct Loan Program, often called the Direct Stafford Loan

The U.S. Department of Education is the lender. Three types of Direct Loans are available for undergraduates who file the FAFSA:

## Direct/Stafford Subsidized Loan

Loans are made to eligible undergraduate students who demonstrate financial need through the FAFSA. Interest rate for 2015-2016 is 4.29 percent. The federal government pays the interest during the period of at least halftime enrollment. Repayment begins six months after the student is no longer enrolled at least half time. Several repayment options are available.
Undergraduate students may borrow up to $\$ 3,500$ as a freshman, $\$ 4,500$ as a sophomore and $\$ 5,500$ per year for subsequent years of study to a maximum of $\$ 23,000$. First-time borrowers as of July 1,2013 , are also limited to 150 percent of their current enrollment degree program length, i.e., a four-year bachelor program has six years maximum eligibility for Subsidized Direct Loans. The federal government will deduct an origination fee of 1.067 percent from the loan proceeds at the time of disbursement.

## Direct/Stafford Unsubsidized Loan

Loans are made to eligible undergraduates, but in this case the student does not have to demonstrate financial need. Interest rate for 2015-2016 is 4.29 percent. Interest on the Direct Unsubsidized Loan may be paid monthly, quarterly or added to the principal. Repayment begins six months after the student is no longer enrolled at least half time. Several repayment options are available.
Dependent undergraduate students may combine the Direct Subsidized Loan with the Direct Unsubsidized Loan and borrow up to $\$ 5,500$ as a freshman, $\$ 6,500$ as a sophomore and \$7,500 per year for subsequent years
of study to a maximum of $\$ 31,000$. The federal government will deduct an origination fee of 1.068 percent from the loan proceeds at the time of disbursement.
Independent undergraduate students may combine the Direct Subsidized Loan with the Direct Unsubsidized Loan and borrow up to \$9,500 as a freshman, $\$ 10,500$ as a sophomore and $\$ 12,500$ per year for subsequent years of study to a maximum of $\$ 57,500$. The federal government will deduct an origination fee of 1.073 percent from the loan proceeds at the time of disbursement.

## Direct PLUS Loan

A parent of an undergraduate student may borrow an amount up to the estimated cost of attendance as defined by federal law minus other forms of financial aid. The parent must be credit approved. The program has a 6.84 percent fixed interest rate and a 4.272 percent origination fee, which will be deducted from the disbursement. Several repayment plans are available.

## Nursing Student Loan

TCU is the lender for eligible nursing students who demonstrate financial need through the FAFSA. Funding is limited. Loan limits are $\$ 3,300$ per year for freshmen and sophomores, $\$ 5,200$ per year for juniors and seniors. Aggregate limit is $\$ 17,000$. This loan has a fixed interest rate of 5 percent. Repayment begins and interest begins to accrue nine months after the student is no longer enrolled at least half time. Payment is a minimum of \$15 per month over a period of up to 10 years.

## College Access Loan (CAL)

The lender is the Texas Higher Education Coordinating Board. This loan is for Texas residents who are enrolled at least half time. Financial need is not required, but applicants must submit the FAFSA. A credit-worthy co-signer may be required. Loan amounts are limited each year based on the state's allocated amount to TCU. This program has a 4.50 percent fixed simpleinterest rate. Interest begins accruing on the date of disbursement. Repayment begins six months after the student is no longer enrolled at least half time. Origination fees vary from 0 to $5 \%$ based on credit of the borrower or co-borrower and are deducted from the loan proceeds at the time of disbursement.

## Etta Newby Loan

TCU is the lender. This program requires Texas residency with preference given to Fort Worth high school graduates. A FAFSA must be filed, and applicants must have at least a 2.5 overall GPA. Loan amounts vary, with an $\$ 8,000$ aggregate limit. There is no interest charged; however, recipients are expected (not required) to contribute to the fund after the debt is repaid. Repayment begins one month after the student graduates or ceases to be at least a half-time student. Funds are limited.

## Emergency Loans

TCU has additional funds provided by friends and alumni to be used in emergency situations. These loans must be repaid within 30 days. A committee reviews each loan application.

## Other Financial Assistance Programs

## Tandy Grant

Charles Tandy established a trust fund in 1975 for the purpose of underwriting grants for employees of the Tandy Corporation and their lineal descendants (i.e., children and grandchildren.) The dollar amount of the grants varies from year to year, depending upon the number of applicants and the amount available from the fund. Students may apply for the minimum grant by completing the application form, which may be obtained at www.financialaid.tcu.edu/grants_special.asp. A FAFSA is required in order to be considered for more than the minimum grant. This award is subject to the General Policies of All Programs.

## Hope Pierce-Tartt Scholarship

Residents of Gregg, Harrison, Marion, Panola and Upshur counties in the state of Texas may apply. The FAFSA is required. Amount varies and is generally between $\$ 500$ and $\$ 4,000$.

## International Student Awards

A limited number of awards are available for international students based upon financial need and/or merit. The award amounts vary. Awards are subject to the General Policies of All Programs and the Undergraduate Student Financial Aid Statement of Satisfactory Academic Progress.

## Martin Luther King, Jr. Scholarship

Application process is open to students who indicate a career goal that demonstrates a service to humanity. Amount varies and is generally between \$500 and \$2,000.

## M.D. Anderson Pre-Med Scholarship

Applicants must have completed Chemistry 10113 or 10114 and Chemistry 10125 or 10123 and 20123 and Biology 10504, 10514 or equivalent, and have a cumulative TCU GPA of at least 3.0 overall and in the sciences. Applicants must demonstrate service to TCU, fellow students and the profession. Evidence of health-related experience and motivation toward a career as a doctor or dentist is also required. Amount varies and is generally from \$500 to \$5,000 per year.

## State Scholarship and Grant Programs

Rhode Island, Michigan, Pennsylvania and Vermont award state grants to their residents, which may be used for enrollment at TCU. Residents of these states should contact the Higher Education Assistance Agency at the appropriate state capitol.

## Summer International Study Grant

A limited number of grants are available for continuing TCU students in degree programs. The award amounts vary. Students must file a FAFSA for the academic year preceding the summer international study to be considered. Awards are subject to the General Policies of All Programs and the Undergraduate Student Financial Aid Statement of Satisfactory Academic Progress.

## ROTC Scholarship Programs

The U.S. Army and Air Force defray some or all expenses for tuition and fees, provide a textbook allowance and pay a monthly stipend to highly qualified young persons selected to participate in the ROTC College Scholarship Program. Successful completion of the ROTC course and all academic requirements for a bachelor's degree qualifies participants for an officer's commission in the Air Force or Army. A service obligation is incurred by those commissioned through this program. Awards are available to entering freshmen as well as current TCU students.

Four-year and Three-year Advance Designee ROTC Scholarship winners are eligible to compete for a limited number of TCU Room and Board Supplement grants and TCU ROTC Activity grants. To be considered, the student must meet the scholarship deadline (January 15) and the financial aid deadline (May 1). Inquiries should be made directly to the professor of military science (Army) or the professor of aerospace studies (Air Force) at TCU.

## Veterans Administration

The Office of the Registrar assists individuals eligible for veteran educational assistance benefits

## Vocational Rehabilitation

The Texas Rehabilitation Commission (TRC) offers assistance for tuition and nonrefundable fees to students who have certain disabling conditions. The vocational objectives of the applicant must be approved by a TRC counselor. Examples of such conditions include orthopedic deformities, emotional disorders, diabetes, epilepsy and heart conditions. Other services are also available to assist the handicapped student to become employable. Application for such services should be made at Texas Rehabilitation Commission, Fort Worth District Office.

## Undergraduate Satisfactory Academic Progress Policy

All students must maintain satisfactory academic progress (SAP) requirements to receive financial aid. This academic progression is measured by three components:

1. Qualitative progress - cumulative grade point average (GPA)
2. Quantitative progress - credit hours attempted versus credit hours successfully completed
3. Cumulative progress - the maximum time allowed for completing your program of study

## Qualitative Progress

The qualitative component is based on a student's GPA. Students must attain a minimum cumulative TCU GPA of 2.00 at the end of each spring term. With the exception of some study abroad courses, grades from classes taken at another school do not affect the TCU GPA.

## Quantitative Progress

The quantitative component considers the number of credit hours a student successfully completed in comparison to the number of credit hours attempted. The student must successfully complete at least 75 percent of all hours attempted at TCU during each academic year. The academic year begins with the summer term.

- Attempted hours are based on a student's enrollment status on the 12 th class day for fall and spring terms; summer attempted hours are based on the first day of each summer session. An exception to the 75 percent total is made for students who complete a minimum of 24 hours in the academic year.

| Term | Attempted | Completed |
| :--- | :---: | :---: |
| 2015 Summer | 6 | 3 |
| 2015 Fall | 15 | 12 |
| 2016 Spring | $\underline{12}$ | $\underline{6}$ |
|  | 33 | 21 |
|  | 64\% of Attempted Classes Completed |  |
|  | Satisfactory Progress Not Achieved |  |


| Term | Attempted | Completed |
| :--- | :---: | :---: |
| 2015 Summer | 0 | 3 |
| 2015 Fall | 15 | 9 |
| 2016 Spring | $\underline{12}$ | $\underline{12}$ |
|  | 27 | 21 |
|  | 77\% of Attempted Classes Completed |  |
|  | Satisfactory Progress Achieved |  |

- The following grades will be counted as credits completed: "A", "B", "C", "D", (+/-) and "P".
- Grades of "F", "W", "Q", "l" and "AU" are not counted as completed credits. In addition, credits earned from Advanced Placement (AP), College Level Examination Program (CLEP), International Baccalaureate and the College Board Achievement Tests in Foreign Languages (ACH) are not counted in the quantitative total
- If a student successfully converts an "I" grade to "A", "B", "C", "D", (+/-) or "P" by the deadline published by the Office of the Registrar's, he/she can submit a written request for reevaluation to the Office of Scholarships and Financial Aid.
- Repeated classes in the quantitative total - A student may retake a failed class until a passing grade is achieved. A student may retake a previously passed course only once for inclusion in attempted hours for financial aid. If a student repeats a course taken at TCU, the official grade is the last letter grade made, although all grades appear on the transcript. Only the last letter grade earned in the repeated course will be used in computing a student's GPA.


## Cumulative Progress

The cumulative component consists of two pieces that relate to the maximum length of time a student may receive Federal financial aid; generally defined as $150 \%$ of the time and hours needed for completion of a four-year degree.
The first cumulative piece requires a demonstrated minimal progression toward degree completion (PACE) that will ensure graduation within the timeframe allowed. PACE is calculated by dividing the cumulative hours a student successfully completed by cumulative hours attempted. Please note that PACE measures a "minimal" progression related to aid eligibility and not graduation requirements. The following chart illustrates the minimum hours needed to meet this requirement for a full-time student in a program requiring 124 hours to graduate:

|  | Percent of Total | Hours |
| :--- | :--- | :--- |
| Entering 3rd year | $40 \%$ | 50 |


| Entering 4th year | $60 \%$ | 74 |
| :--- | :--- | :--- |
| Entering 5th year | $80 \%$ | 99 |

The second cumulative piece tracks a student's completion of the total hours needed to complete the degree (maximum timeframe). Most TCU undergraduate degrees require completion of 124 credit hours in eight semesters. Therefore, 150 percent of the time required to complete most four-year degrees is 186 hours and 12 semesters.

- Attempted hours are counted for all terms, even those for which a student does not receive financial aid, as well as those where a student receives a "Q" grade.
- Transfer credit hours that are accepted toward a student's educational program are counted as both attempted and completed hours.
- Students who change majors may request a one-time recalculation for maximum timeframe.
- If a student is seeking a second degree, he/she may appeal the maximum hours limit by providing documentation of hours that apply to the current degree, in writing to the Office of Scholarships and Financial Aid.
- Please note: All TCU funded grants and scholarships are limited to eight semesters (six semesters total for transfer students). If a student is enrolled in a program of study requiring more than 124 hours for his/her primary major, the student may request one additional semester of funding.


## Failure to Maintain Satisfactory Academic Progress (SAP)

Quantitative, qualitative and cumulative progress is evaluated at the end of each spring term by the Office of Scholarships and Financial Aid. If a student is not meeting SAP requirements, he/she will be notified, in writing, with a letter sent to the student's permanent address on file.

## Appeals Procedure

If a student loses financial aid because of a failure to meet SAP, he/she may appeal this determination to the Academic Progress Appeals Committee (the committee). An appeal must be based on significant mitigating circumstances that seriously affected the student's academic performance. Examples of possible mitigating circumstances are serious illness, severe injury, death of a parent or sibling and other similar situations. A student may only file one appeal for each mitigating circumstance.

- If a student's appeal is approved, he/she will be eligible for financial aid on a probationary status for one term. The student must meet SAP standards by the end of the probationary period to continue receiving financial aid.
- Second appeals will only be reviewed for different extenuating circumstances from the first appeal approved.
- In some cases the committee may require the creation of an established academic plan that outlines what a student must do in order to reinstate eligibility for aid. The committee will notify the student during the appeal process if an academic plan is required.
- If a student has been readmitted to the university after an academic suspension, he/she must file an appeal for reinstatement of financial aid.
The Academic Progress Appeals Committee meets in June, August and January to review student appeals. The deadline for each appeal meeting is posted on the financial aid website. You will be notified of the committee's decision within one week of the scheduled appeals meeting.


## Re-establishing Eligibility

If you do not file and appeal or your appeal is denied, you may reestablish eligibility for financial aid by taking the following actions:

- Raise your cumulative GPA to meet the minimum standard (2.0)
- Successfully complete $75 \%$ of your attempted hours for the term

You may not regain financial aid eligibility by choosing not to attend TCU for a term(s), or by paying your own tuition and fees for a term(s) if the minimum requirements stated above are not met.

## Access to Satisfactory Academic Progress Policy

The policy for Satisfactory Academic Progress is revised and published each year by June 1. The current policy is available on the Financial Aid Home Page at my.tcu.edu and in the Undergraduate Student Catalog at www.catalog.tcu.edu/undergraduate.

## Academic Services and Support

## Academic Advising

Academic advising is an important process in which faculty and staff assist students in developing plans and in clarifying career and/or advanced study goals. All students should meet with an academic adviser at least once each semester to plan future coursework. In these meetings, students and advisers discuss academic records which may include grade reports, transcripts, evaluations of work transferred to TCU and degree plans.
Students new to the University are required to attend advising sessions for the first four semesters after entering TCU. They are likely to require assistance in the mechanics of first-time enrollment and in exploring choices related to selection of courses and degree programs. Students with more University experience often handle these tasks with little need for assistance, but may profit from direction in maximizing academic performance and setting career goals. Finally, students nearing completion of their academic program are likely to need specific help in ensuring that all degree requirements are met and assistance with the transition to a career or advanced study. In short, the specific activities required will depend on the adviser, the student and the student's progress in his/her academic career.

The student-adviser relationship is one of shared expectations and responsibilities. Consequently, advising activities will depend on the needs of the student and on his/her academic program. Further, the actual activities involved in advising will change as a student progresses through a degree program or subsequently changes degree programs.
Pre-majors (those who have not formally declared a major) are advised by professional staff associated with the Center for Academic Services. The Center provides resources and access to programs designed to help students identify career interests and possible majors.

Students who have declared majors are advised in the department of the major or by professional staff in the school/college of that major. When students declare a major, they are referred to the major department and school/college for future advising.
A quality advising relationship requires a dedicated adviser and a prepared student. The student must initiate advising activities, define the need of advising activity, and be prepared to take responsibility for his/her academic and career goals as well as his/her academic performance. Prior to seeing their advisers, students should become familiar with degree and major requirements for programs of interest and courses in which they wish to enroll. Advisers will answer questions and make suggestions, but the student must assume full responsibility for satisfying all program and degree requirements.

## Advising Process

At the beginning of the first semester, students are assigned an academic adviser in the department of their major. Students may be assigned to either faculty or professional advisers, depending on the department or school/college. Pre-majors are advised through the Center for Academic Services until a major is declared. Pre-major advisers are knowledgeable about a wide range of academic programs and can assist students in identifying an appropriate major/minor. All students who have 54 or more earned hours must have a declared major.
The actual number of times a student should meet with his/her adviser each semester depends on the adviser, the student, the student's program and the student's progress in his/her academic career. All students should confer with their advisers at least once each semester during schedule advising. Students may also want to meet with their advisers to discuss degree requirements, selection of a minor, internship opportunities, academic progress, etc.
Students meet with their advisers before registering for classes each semester, but are encouraged to confer with them anytime that academic concerns arise during the year.
In preparation for the Schedule Advising, students should:

- Give thoughtful consideration to their personal, educational and career goals, and reevaluate these goals as necessary.
- Acquire a basic familiarity with their own academic program, including all applicable requirements and policies.
- Give advance consideration to a tentative schedule of classes each semester prior to their advising conference. This should include reading a description of every course under consideration, including whether or not there are prerequisites or whether or not the course will count toward the TCU Core Curriculum.
- Ask questions if they feel they have received insufficient or confusing information.
- Provide timely notice and information concerning any academic problems encountered.
- Read carefully and make appropriate responses to all communications from their school/college office, the Center for Academic Services, their adviser, Office of Campus Life and Office of the Registrar.
- Provide timely notice of any change of address or telephone number to the Office of the Registrar and their academic adviser.
- Allot an adequate amount of time to meet with their adviser.
- Accept responsibility for their choices and decisions.

By following these guidelines, the student and adviser can successfully navigate the academic maze of career choices, major requirements and other expectations.

## The Center for Academic Services

The Center for Academic Services offers services and programs to enhance the academic experience of all students at TCU during all stages of their academic careers. The center:

- Coordinates academic advising for pre-majors (those who have not formally declared a major and have achieved fewer than 54 hours);
- Coordinates academic advising for first-year students with declared majors in AddRan College of Liberal Arts and the Department of Interior Design and Fashion Merchandising (College of Fine Arts);
- Coordinates academic advising for students during new student orientation;
- Offers study skills assistance;
- Provides academic resources related to study skills, time management and related concerns;
- Conducts workshops on study skills, test taking and time management;
- Offers a one-credit hour course (UNPR 10001) focused on self assessment, career exploration and choosing a major;
- Assists students who want to explore career paths and learn about majors;
- Refers students to appropriate services, departments and community agencies; and
- Facilitates disabilities services for students meeting policy and procedure requirements. (Refer to Disabilities Policy and Procedures (p. 19).)Students who do not meet academic standards or who want to improve academic skills and performance are encouraged to visit the center.


## Disabilities Policy and Procedures

Texas Christian University complies with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973 regarding students with disabilities. No otherwise qualified individual shall be denied access to or participation in the services, programs and activities of TCU solely on the basis of a disability. The University shall provide reasonable accommodations for each eligible student who has a physical or mental impairment that substantially limits a major life activity, a record or history of such an impairment, or is regarded as having such an impairment.
Each eligible student is responsible for presenting relevant, verifiable, professional documentation and/or assessment reports to the Coordinator of Student Disabilities Services. Information concerning a student's disability is treated in a confidential manner in accordance with University policies as well as applicable federal and state laws. Documentation presented to the coordinator shall be reviewed by the appropriate University professional(s)
to verify the existence of a disability. Further documentation may be required from the student to substantiate the claim of a disability or to assist the University in determining appropriate accommodations.
Eligible students seeking accommodations should contact the coordinator as soon as possible in the academic term for which they are seeking accommodations. The coordinator will prepare letters to appropriate faculty members concerning specific, reasonable academic adjustments for the student. The student is responsible for delivering accommodations letters, conferring with faculty members and returning validation of the receipt of information to the coordinator. The coordinator consults with the student and with University faculty and staff to ensure delivery of appropriate support services, and serves as liaison between the student and the faculty member as needed.

Students who wish to appeal a decision regarding appropriate accommodations may do so in writing to the affirmative action officer, who shall decide the appeal, at TCU Box 297090, Fort Worth, TX 76129. The affirmative action officer's decision may be appealed within seven calendar days in writing to the provost, whose decision may be appealed in writing to the chancellor within seven calendar days. At any step during such an appeal, the person requesting the appeal may confidentially consult with appropriate professionals/advisers within or outside the University.
The Coordinator, Student Disabilities Services, may be contacted in the Center for Academic Services, Sadler Hall Room 1010 or 817.257.6567.

## The William L. Adams Center for Writing

The Center for Writing offers assistance with writing projects and assignments to all TCU students. Staffed by professional writing instructors and peer consultants, the Center for Writing provides students with one-onone tutorials free of charge. Conferences usually focus on a particular project or assignment but may also include general writing instruction.
The 10 PCs in the center's computer lab are available for use by any TCU student during normal office hours.
Located in Suite 419 of Reed Hall, the Center for Writing is open Monday through Friday from 8 a.m. to 5 p.m. Students may make appointments by accessing an online scheduling service through the center's website (www.wrt.tcu.edu) or by calling 817.257.7221. Those who wish to submit a paper online may do so via the center's website. A consultant will read the paper and offer feedback within two working days.

## Mary Couts Burnett Library

The Mary Couts Burnett Library provides intellectual resources, innovative technology tools and an inspiring physical and virtual environment, all supported by approachable and resourceful staff, to serve TCU's diverse community of learners. Students and faculty have access to more than 108,000 unique journal titles and more than 1.9 million books, CDs, DVDs, videos and other items housed in the Library and the Library Annex off-site, in addition to a wealth of items available through http://library.tcu.edu.
Materials are arranged by the Library of Congress system in open stacks for convenient access. Librarians and staff select and maintain the collections, which include a music/media library located in the Mary Couts Burnett Library. Particular collections include U.S. documents; the Archives of the Van Cliburn International Piano Competition; the papers of former Speaker of the House J ames C. Wright, Jr.; the papers of Amon G. Carter, Sr.; the Luxembourg collection; the University's historical collection and digital archives; Ninnie L. Baird and Mrs Baird Bakeries materials; and special collections of rare books and manuscripts, such as the William Luther Lewis Collection of English and American Literature.
Research librarians may be contacted in person, by phone, by email or by live text messaging as described at https://library.tcu.edu/askalibrarian.asp. They regularly conduct instruction on the resources available and encourage scheduling individual consultations for more in-depth assistance.
A TCU student may borrow up to 50 books or government documents for 28 days and renew them for two additional 28-day periods. Up to 10 DVD and VHS items may be checked out for seven days. Up to 10 CDs may be checked out for 14 days. Audio and video listening and viewing stations are available, and a 12 -seat screening room may be reserved at http://library.tcu.edu.
Materials that show up in the Library's online catalog as held at the Library Annex may be requested for retrieval. Items requested Sunday through Thursday will be available within 24 hours; Friday and Saturday requests are made available Monday. Upon return, an email notification is sent indicating that the items will be held 10 days at Library Services for pick-up. After 10 days the items go back to the Library Annex.

Older periodicals have been moved to the Library Annex. A journal article can be scanned and picked up as an electronic file. An entire periodical issue may be requested for retrieval. Scholarly materials are supplemented by the popular reading and best-selling authors sections.
During spring and fall semesters, the Library is open around the clock five days a week and provides varied environments for studying, including quiet zones. Group study rooms in the Library and Rees-J ones Hall may be reserved for up to three hours through http://library.tcu.edu. The rooms have large wall monitors that can be controlled wirelessly from laptop computers and other portable devices.
Through membership in local, regional and national library consortia, the Library can secure for TCU faculty and students the advantages that come with resource sharing. Membership in TexShare includes borrowing privileges with more than 150 academic libraries throughout Texas.
A computer lab in the Library features Windows and Macintosh machines, a flatbed and sheet-feed scanning station, and black-and-white and color laser printers. Wireless laptops may be checked out for three hours. In addition the Library also houses a small high-performance computing lab, audio-video editing rooms, and a fabrication lab with a plotter and 3D printers.

## University Programs

## UNPR 10001 - Self Assessment and Career Exploration

This course provides opportunities for premajors to assess abilities, interests, values, and personality; meet with faculty from a variety of potential major and minor fields; learn about the decision-making process and factors related to choosing a major/career; (This course is only offered P/NC.)

## UNPR 10110 - Special Problems

Special Problems

## UNPR 20101 - Introduction to Global Citizenship

In this seminar, students will be introduced to the breadth and depth of knowledge and skills needed to become interculturally competent. The course is intended to help prepare students for a future intercultural interaction, particularly a future study abroad experience. The course will address both theoretical information and practical applications, such as learning to live with people from different cultures, understanding cultural and global issues, learning to communicate with people from various cultures, and viewing issues from varying cultural viewpoints. (This course is only offered P/NC.)

## UNPR 20201 - Engaged Global Citizenship

Prerequisites: Students must be concurrently studying abroad. Required of all students studying abroad for one semester or one year. This seminar will provide students the opportunity to interact with their study abroad community, and to reflect upon and process their experiences as they cross cultures. The student will be introduced to the knowledge, skills, and attitude needed to become global citizens. The course will address both theoretical information and practical applications.

## UNPR 20301 - Turning Study Abroad into Global Citizenship

Prerequisite: Student must have previously studied abroad. In this seminar, students will discuss, analyze, and process the cultural learning from their study abroad experiences and actively hone the knowledge and skills needed to become interculturally and globally competent. The course is intended to help students process the learning and growth from study abroad, as well as prepare for future intercultural interactions.

## UNPR 30002 - Professional Careers: Planning \& Decision-making

Prerequisites: Junior status, or permission of instructor. This team-taught course is to acquaint students with decision-making skills related to career development, with emphasis on those who will enter professional sports or the performing arts. It emphasizes financial negotiations; transactions and investments; career development; and life skills and problems.

## UNPR 30970 - Directed Study in Unversity <br> Programs <br> Directed Study in University Programs

## Center for Instructional Services (Instructional Technology)

The successful integration of instructional technology into the teaching and learning environment is essential in today's classroom. The mission of the Center for Instructional Services is to provide Texas Christian University with a variety of cost-effective solutions in the appropriate integration and utilization of instructional technologies in a diverse academic environment.

- Classroom Technology Services provides assistance to faculty in the operation of classroom technology. Our focus includes the design, installation and maintenance of classroom technology equipment as well as providing equipment for checkout. Training and orientation in the proper utilization of classroom technology systems is available.
- Media Production Services provides a diverse range of services in video audio, graphic, photographic and digital production formats to facilitate the effective use of multimedia. Assistance is provided in the planning, design and production of professional presentation materials for academic use.

The Center for Instructional Services is located between the Tucker Technology Center and Annie Richardson Bass Building on Bowie Street. For more information, refer to the center's website, www.cis.tcu.edu, or call 817.257.7121

## Information Technology

Information Technology provides computing support for all levels of the University. A complete range of services include network and wireless connectivity throughout the campus, access to the Internet, library and specialized databases, business application programming and academic computing services, hardware repair, and software support and training. To request assistance for any computer-related problems or questions, contact the Computer Help Desk at 817.257.6855 or help@tcu.edu. The Information Technology administrative office is located in the Sid W. Richardson Building Room 175, 817.257.7682

## William H. Koehler Center for Teaching Excellence

## Mission Statement

The Koehler Center is dedicated to facilitating ongoing, reflective discourse regarding teaching and learning, including working with faculty and teaching staff to help them design and implement meaningful learning opportunities for their students.

## Vision

The William H. Koehler Center for Teaching Excellence (CTE) supports teaching and learning at Texas Christian University. The resources and activities of the CTE are focused on responding to the present needs of instructors, as well as on keeping the TCU community informed of new educational possibilities created by the continuing development of pedagogical theories, teaching practices, and technologies.

## Confidentiality Statement

The Koehler Center maintains the confidentiality of the individual faculty or groups of faculty with whom we work, mindful that our faculty voluntarily engage our services in order to enhance and enrich teaching and learning at TCU.
The Koehler Center for Teaching Excellence is located in the Sid Richardson Building, Suite 501, located between Tucker Technology Center and Winton Scott Building on Bowie Street. For more information, refer to the center's website at www.cte.tcu.edu or call 817.257.7434.

## Student Affairs Services

## The Division of Student Affairs

The Division of Student Affairs at TCU provides student programs and services that support student success and enhance the collegiate experience. TCU offers a rich learning environment, and through a variety of experiences, students engage in an intensive process of intellectual, personal, moral and social development. The division holds a special, but not exclusive, responsibility to assure that the co-curricular learning experiences of students are of high quality, are directed to the development of students, and meet both institutional and individual student needs.
The division complements the academic mission of TCU. Through programs, activities and services, the division strives to assure that graduates are prepared to assume roles as productive citizens. Therefore, there is an emphasis on leadership and civic engagement, understanding our rich, diverse society, accepting responsibility and developing opportunities for critical thinking and application of classroom learning.
The Division of Student Affairs provides services central to a quality student career, including residential services, health services, leadership and recreation services, career services, dining services, parking services and public safety.
The following units and departments comprise the Division of Student Affairs, which is under the leadership of the vice chancellor for student affairs:
. Campus Life (Educational Discipline, Crisis Response, Sexual Harassment, Code of Student Conduct, Student Handbook);

- Campus Life (Educational Discipline, Crisis Response, Sexual Harassment, Code of Student Conduct, Student Handbook);
- Center for Community Involvement and Service-Learning (Community Partners, TCU Leaps, Volunteer Fairs, Involved Service Network, Alternative Spring Break);
- Health Services (Health Center, Counseling Center, Psychological Services, Health Education); Alcohol \& Drug Education;
- Inclusiveness and Intercultural Services (Inclusiveness Conference, Leadership Retreat for Students of Color, Mentoring for Students of Color Program, Intercultural Banquet);
- International Student Services (Pre-Arrival Services, Immigration, Orientation, Programming and Adjustment Issues, Working on Campus assistance);
- Residential Services (Housing and Residence Life, Dining Services);
- Student Affairs Information Services (Identification Card Center, Card Access);
- Religious and Spiritual Life (Religious Groups and Communities, Spiritual Health and Wellness, Religious Literacy and Education, Worship, Prayer and Pastoral Care and Advocacy, Activism and Relief Work);
- Student Development Services (Common Reading, One Book, Chancellor's Assembly, First Year, Transfers, (Academic Orientation, Frog Camp, Leadership Development, TCU Leadership Center, Men and Women's Programs and Student Organizations, Parent Program);
- University Career Services - Center for Career and Professional Development (J ob and Internship Search Assistance, Developmental Programs, Resume Preparation, Graduate School Application Process);
- University Recreation Center (Intramurals/Sports Clubs, Outdoor Programs, Fitness, Wellness, Aquatics);
- Student Veteran Services;
- Campus Police (Security, Crime Prevention and Parking).


## Brown-Lupton University Union

The Brown-Lupton University Union (BLUU) is at the heart of the Campus Commons. Entertainment, educational and conference events take place in the Union throughout the year. The BLUU is home to 14 meeting rooms, the Horned Frog Ballroom, a 300-seat auditorium, the TCU Post Office, the Spirit Store and food service venues-Market Square, Chick-fil-A @1873 and Union

Grounds Coffee Shop. The Union also houses the Heritage Center, a student activities area, and the Governance Chamber. The Information Desk, located within the Heritage Center, offers notary service, a lost and found and a variety of ticket discounts to many Fort Worth/Dallas-area attractions. For more information, call 817.257.7927.
The Multipurpose Building located near the Worth Hills residential area offers students and other University community members a place to relax, eat and study with inside and outside seating. The second floor conference rooms can be used by student groups for large meals. Four food venues plus the TCU's own food truck, the Big Purple Truck, provide a retail dining experience for all community members. The restaurants include: The Press, a coffee shop featuring Panini sandwiches; O'Brien's, a hamburger and grilled sandwich shop; Caliente, a fresh Mexican food stand; and Magnolia's a bistro featuring always-changing, chef inspired offerings. The multipurpose building also houses the office of Fraternity and Sorority Life. The information desk hosts a print station. For more information, call 817.257.4021.

## Fraternity and Sorority Life

Five governing councils represent 41 fraternities and sororities at TCU: 13 Panhellenic sororities, 12 IFC fraternities, five National Pan-Hellenic Council fraternities and sororities, six Multicultural Greek Council fraternities and sororities, and five fraternities and sororities in the Independent Greek Council, which comprise a one Christian fraternity and one Christian sorority, two music fraternities and a music sorority.
Each council has its own recruitment procedures. Further information may be found at www.greeks.tcu.edu or by calling 817.257.7281. In addition, Fraternity and Sorority Life hosts a session during Academic Orientation to provide information about joining the community and what to expect.

## Campus Life

The Campus Life staff meets with students to assist in resolving any issues that might impede success during the TCU experience. The Campus Life deans assist with emergencies by working with students and their families, and they also liaison with faculty to help students with academic concerns. A "dean on call" is available by calling Campus Police (817.257.7777) if an emergency occurs after business hours. The dean's office processes official University absences for faculty and verifies serious illnesses or family emergencies for students. Not all faculty require verification of illness; therefore, a student should always contact the faculty member involved when class is missed due to illness.
Members of the Campus Life Office promote a healthy campus using collaborative efforts to provide educational programming related to health and wellness of the TCU community. The Campus Life Office is located in Sadler Hall Suite 2006 and can be reached at 817.257.7926.

## Educational Discipline

TCU Students should conduct themselves in a manner compatible with the University's function as an educational institution and the TCU mission statement. Each student is expected to be acquainted with published policies, rules and regulations of the University and will be held responsible for compliance with them. Students are also expected to comply with all federal, state and local laws. This principle extends to conduct off campus that is likely to have an adverse effect on the University or on the educational process. Students may be held accountable by TCU and police agencies for the same instance of misconduct.
Reported violations of the Code of Student Conduct are investigated and resolved by staff members in the Division of Student Affairs under the general supervision and direction of the Campus Life Office. Violations of the code are subject to a range of disciplinary actions.
The Code of Student Conduct, including the educational discipline process, is at www.studenthandbook.tcu.edu.
Examples of misconduct for which students may be subject to disciplinary action include, but are not limited to:

1. Infliction of bodily or emotional harm.
2. Hazing.
3. Destruction of property.
4. Use, storage or possession of weapons or dangerous devices.
5. Tampering with safety equipment and arson.
6. Dishonest conduct.
7. Theft/unauthorized use of property.
8. Unauthorized or abusive use of computer equipment, programs or data.
9. Failure to comply with University authority.
10. The use, production, distribution, sale or possession of drugs in a manner contrary to University policy or prohibited under Texas law. (See www.studenthandbook.tcu.edu for details.)
11. The use, production, distribution, sale or possession of alcohol in a manner contrary to University policy or prohibited under Texas law. (See www.studenthandbook.tcu.edu for details.)
12. Unauthorized entrance to or presence in or on University premises.
13. Disorderly conduct that interferes with or obstructs Universityauthorized activities.
14. Commission of local, state or federal criminal offenses.
15. Violation of other published or announced University rules or regulations.
16. Activities that jeopardize building security for any or all residents/students.
17. Behaviors that endanger the well-being of any or all residents/students.
18. Causing excessive noise, having guests of the opposite sex in a student room during non-visitation hours, keeping or bringing pets or other animals inside a residence hall, and smoking in any residence hall other than in a student room.
19. Acts that harm or otherwise negatively affect the appearance of residence hall building exteriors, interiors or furnishings by failing to exercise reasonable care or in specific acts of vandalism.
20. Any act that violates the academic integrity of the institution (See www.studenthandbook.tcu.edu.)

## Alcohol and Drug Education

The TCU Alcohol and Drug Education (ADE) Program is based on a philosophy of student development and seeks to promote healthy lifestyle choices and responsible decision-making through programs, training and alternative activities. The National Institute of Alcohol Abuse and Alcoholism (NIAAA).

## The goals of ADE:

- Enhance the academic mission of the University by providing preventative programs to help ensure that the use and/or abuse of alcohol and other drugs does not interfere with academic goal attainment;
- Collaborate with other departments such as the TCU Wellness Center to provide opportunities for students to positively influence the campus community;
- Enhance student responsibility to self, others and the world by assisting individuals in making responsible and ethical decisions regarding alcohol and other drugs;
- Monitor the effectiveness of Alcohol and Drug Education programs on campus, and help establish University-wide educational initiatives.

The staff of ADE includes experts in educational programming and training who provide presentations upon the request of student organizations, residence halls, fraternity and sorority groups, student-athletes and academic classes.
Students should refer to the University's alcohol and drug policy in the Student Handbook regarding procedures and consequences of violation of policy.
Those interested in services available through the ADE Program are encouraged to visit the office or call 817.257.7100.

## Health Center

The Brown-Lupton Health Center is located just north of the University Union. This AAAHC accredited facility is staffed by board-certified physicians, a physician assistant, a nurse practitioner specializing in women's health and a professional nursing staff of LVNs and RNs. The Health Center provides
ambulatory medical care for the various needs of TCU students. During the academic year, hours are 9 a.m.-5 p.m. Monday through Friday.
The TCU Pharmacy, an independently owned pharmacy offering competitively priced prescriptions and over-the-counter medications, is conveniently located within the Health Center. The pharmacy accepts most insurance plans. Co-pays and medication costs can be billed to the student's University account or paid for by cash or check at the time the prescription is filled.

## Medical History/Immunizations

Texas law requires all entering (new and transfer) students under the age of 22 to submit evidence of having been vaccinated against bacterial meningitis within the last five years. The required TCU Bacterial Meningitis
Vaccination Form must be submitted to the TCU Health Center prior to class registration and before applying to TCU housing.
All new students must submit a completed Medical History Form and an official immunization record to the TCU Health Center. In addition to the Meningitis Requirements, immunization records must reflect immunizations for Measles, Mumps and Rubella (MMR).
Immunization records will be accepted from the following:

- Documentation bearing the signature of a licensed healthcare provider;
- Official immunization record generated from a state or local health authority;
- Official record received from school officials.

For more information, and to download all necessary medical forms, visit www.healthcenter.tcu.edu.

## Required Health Insurance

All undergraduate students carrying nine or more semester hours are required to have health insurance through either an individual/family plan or the University-offered Aetna Student Health Insurance plan. International students, regardless of classification, are required to carry the Universityoffered insurance as a minimum standard of coverage and are not eligible for a waiver of the insurance. Students majoring in nursing must have health and accident insurance coverage at any time they are enrolled in a clinical course regardless of the number of semester hours carried.
The plan offered by TCU is a major medical policy which provides benefits both on and off campus throughout the U.S. Detailed information about the University-offered plan can be found on the Health Center's website under insurance.
If coverage comparable to the TCU Plan is provided by a family/individual plan, the University-offered insurance may be waived online at www.healthcenter.tcu.edu once the student has registered for classes. A waiver entered by the fall semester's deadline will remain in effect for that academic year. Failure to enter a waiver online by the specified deadline will result in the student being automatically enrolled in and billed for the University-offered Aetna student health insurance. For students entering in the spring semester, a waiver must be entered online prior to the spring semester's deadline. Deadlines and other information to elect or waive are emailed.
Although not required for graduate students or undergraduates carrying less than nine semester hours, the TCU Student Health Insurance Plan is available for students attending credit courses by specifically enrolling in the plan. Internet and television (TV) courses do not fulfill the eligibility requirements that the covered student actively attends classes. The student plan is not available to TCU employees, even if they are taking classes. To specifically enroll in the University-offered plan, the "elect" choice must be entered online at www.healthcenter.tcu.edu prior to the semester's deadline for electing or waiving.

## Counseling and Mental Health Center

The mission of the Counseling and Mental Health Center is to promote and restore the psychological and emotional health and well-being of TCU students so they may realize their full potential at TCU. The center's staff of licensed mental health professionals provides respectful, confidential and effective services to students with any personal, psychological or academic concern. There is no charge for services. The Counseling and Mental Health Center provides:

- Short-term individual counseling for personal, emotional and psychological concerns
- Group counseling for personal growth and support
- Psychiatric assessment for medication and follow-up

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- Crisis intervention
- $24 / 7$ Counseling Help Line (817.257.7233)
- Assessment and off-campus referrals for students with longer-term or specialty care needs
- Consultation to any person who is concerned about the welfare of a student;
- Suicide prevention training
- Educational outreach programs to residence halls, classes, and campus organizations, and mental health workshops and awareness events
The Counseling and Mental Health Center is located in the basement of Samuelson Hall. Hours during the academic year are Monday, Tuesday and Wednesday 8 a.m.-8 .p.m. and Thursday and Friday 8 a.m.-5 p.m. Hours during summer months are 8 a.m. -5 p.m. To eliminate waiting for a first appointment, all first-time visits are through the walk-In clinic, every day from 10 a.m. to noon and 1-3 p.m. If your schedule does not allow these hours, stop by anytime! See counseling.tcu.edu for more information.
Note: Psychiatric services are available to students who are seeing the psychologists at the Counseling and Mental Health Center. Students wanting medication only may be referred to the Health Center physicians or to offcampus health providers.


## Campus Recreation

The Department of Campus Recreation promotes lifelong wellness through quality recreation programs, services and facilities that enhance the university experience through participation and leadership. It is the vision of the department to be a cornerstone of the University experience that positively engages every member of the TCU community in promoting healthy lifestyles.
The 232,000 square-foot facility provides for a variety of recreational opportunities, including swimming, basketball, volleyball, badminton, weightlifting, an indoor track for walking and jogging, cardiovascular training equipment, a games area, a climbing wall, computer access and food service.
The Aquatics Program offers instructional and fitness activities in the water, in addition to recreational swimming. Three pools grace the University Recreation Center: a 25-yard lap pool, a 22-foot-deep diving well and an outdoor leisure pool and patio.
Structured, competitive and recreational sporting events are scheduled throughout the academic year in the Intramural Sports Program. Activities involve team sports, individual or dual events and special events. Only currently enrolled TCU students and faculty/staff may participate in the Intramural Sports Program.
In addition to the Group Exercise Program, the Fitness Program offers personal training, massage therapy and fitness assessments. Group exercise classes are designed for beginner, intermediate and advanced levels.

The Climbing Wall is sure to provide an exciting outlet, whether you are entirely new to climbing, have been climbing for years, or are just looking for a challenging addition to your workout regime. We offer instruction and supervision on the 30 -foot wall, with more than 20 top rope routes and a variety of bouldering routes. All climbing equipment, including shoes, harnesses, ATCs and carabineers, are available at the wall for free.
The Sport Clubs Program is designed to serve individual interests in different sport and recreational activities. Membership is open to all students and the club must be a recognized student organization. These interests can be competitive, recreational or instructional in nature, as clubs may represent TCU in intercollegiate competition or conduct intra-club activities, such as practice, instruction, social activities and tournament play.

## Memberships

TCU faculty and staff must purchase membership to have access to the University Recreation Center. Cost is $\$ 120$ for an annual membership and may paid through payroll deduction. Memberships are also available for purchase for spouse/partners, dependents and children of Faculty/Staff. For more information about any of the programs offered by the Department of Campus Recreation call 817.257.PLAY.

## The Center for Career and Professional Development

## Career Exploration and J ob Search Advising

From exploring possible fields to preparing for interviews, landing internships or launching a career, the Center for Career and Professional Development is the TCU student's partner in today's competitive job market. The following are just a few of the services available at no charge to students and alumni.

- Career assessments
- Career advising
- Resume and cover letter assistance
- Digitally recorded mock interviews
- Job search assistance
- Job listings on FrogJobs
- On-campus interviewing
- Professional events and career fairs
- Resource Center located in J arvis Hall
- The website, www.careers.tcu.edu, featuring social media links to keep you up to date on important events, career resources, internships and job opportunities.
The center is in the BNSF Railway Career Center in Jarvis Hall and is open 8 a.m. - 5 p.m. Monday-Friday. The Alcon Career Center, for Neeley School of Business students, is in Dan Rogers Hall, room 140, same hours.
For additional information or to schedule an appointment to meet with an adviser, call 817.257.2222 or email careers@tcu.edu.


## Inclusiveness and Intercultural Services

The mission of the unit of Inclusiveness and Intercultural Services (IIS) is to promote diversity, inclusiveness and cultural awareness throughout the TCU community. IIS also provides students of diverse backgrounds with the necessary resources to transition into college life and succeed on campus and beyond. The department provides support, guidance and encouragement to TCU students, faculty and staff through a variety of services: personal and organization advising, cultural programming, mentoring, diversity training and academic/community involvement.
Faculty, staff and students are encouraged to participate with more than 17 student organizations housed within the department or to assist with planning major events, such as CommUNITY Week or the Minority High School Leadership Conference.
In addition to student services, IIS assists the University with institutional planning and policy formation regarding diversity and inclusiveness. For further information, call 817.257.5557.

## Office of Community Engagement (OCE)

TCU students, faculty and staff are involved in community service on an organizational and individual basis. The Office of Community Engagement (OCE) works to foster social responsibility and lifelong learning through community-based partnerships. OCE provides curricular and co-curricular opportunities that prepare students to be engaged citizens and global leaders working toward social justice.
Information and materials are available to guide groups and individuals in planning, implementing and reflecting upon service experiences. CISL also provides assistance in identifying appropriate community agencies for service-learning and volunteer opportunities. Students are invited to participate in structured community service programs, sign up for servicelearning courses or join student service organizations. These organizations include Alpha Phi Omega, Best Buddies, GO Center, Habitat for Humanity, Meals on Wheels, Student YMCA and TCU LEAPS. A Service Council, composed of leaders from the various organizations serves as an umbrella organization meeting monthly to share resources, collaborate among service organizations and educate student leaders on social justice themes. To get involved in service, call 817.257.5557 or visit www.involved.tcu.edu.

## International Student Services

International Services works within the area of Culture, Community and International Services by generating opportunities for engagement across the campus and community. As one of the primary offices tasked with internationalization, International Services provides programs focusing on geographical, political and cultural diversity. Our office has primary responsibility for immigration law and the integration of international students into the day-to-day experience at TCU.
Through programs like International Orientation, Questa Terra and F-1 Sharp, the office explores cultural transition, intercultural engagement and academic success. The office works directly with international alumni to keep them involved in the international programming and institutional direction of the University. By engaging TCU students, both U.S. and international, with international former students around the world, we also contribute to TCU's mission to create "ethical leaders in the global community." With more than 650 international students, a global international alumni network, partnerships and collaborations with communities, NGOs, intergovernmental organizations and people working for an educated, nourished and hopeful future, International Services is committed to an inclusive idea of access, education and opportunity for everyone.

## Community Scholars Program (CS)

The Community Scholars Program was established in 2000 to provide students from 11 area high schools the opportunity to compete for scholarships to attend TCU.
This program attracts diverse student populations to the campus. The students selected have achieved academic excellence and demonstrated leadership skills in their schools and communities. More than 150 students are in the program.
Through advising, educational activities, leadership programs, retreats, programming activities and student organizations, the program provides resources to help the scholars successfully transition into the university environment. This program has helped transform the University environment.

## Office of Religious and Spiritual Life

The Office of Religious and Spiritual Life (RSL) offers resources, programs and staff dedicated to supporting faith communities, religious expression and spiritual exploration throughout TCU. The University is affiliated with the Christian Church (Disciples of Christ), a denomination that values dialogue, freedom of thought and a concern for all people. To that end, RSL is committed to respecting the dignity and beliefs of every individual, celebrating diversity and welcoming all of God's people. RSL supports a vibrant religious life and serves students' spiritual needs while creating opportunities for reflection and learning.
Located on the first floor of J arvis Hall, RSL is home to staff offices, a multifaith prayer room and the RSL Library and Resource Center. Also, as a longstanding part of TCU, Robert Carr Chapel is open daily for prayer and personal reflection, and is available by reservation for worship, weddings and other sacred occasions. In addition to TCU's RSL staff, students will also find a variety of campus ministers and religious life partners who offer support, connection and pastoral care.

## Pastoral and Spiritual Care

The chaplaincy team provides for the spiritual needs of students, faculty and staff through compassionate spiritual care that respects the beliefs of each person. We meet individuals where they are, providing a welcoming and safe space to discuss any number of life's transitions, to offer a listening and empathetic ear, and to assist in working through challenges. Chaplains also assist with spiritual care in times of trauma, crisis grief and loss, working with individuals and groups around the spiritual questions that arise during these critical times. All chaplains officiate at official university functions and at key times in our individual and communal lives.

## Student Religious Organizations

RSL provides advising and other resources for 24 religious organizations on campus. The organizations provide opportunities for worship, study, service and learning in a variety of ways and open to all students. Campus ministers, advisers and student leaders grow and share experiences through the Religious Staff Council and the Council of Presidents.

## Religious Organizations Within RSL:

[^0]- Catholic Community
- Disciples on Campus
- TCU Wesley
- Reformed University Fellowship
- Better Together Interfaith Community
- Brothers Under Christ (BYX)
- Campus Crusade for Christ
- Calling in Action
- Chi Alpha (Assemblies of God)
- Delight
- Eta lota Sigma (HIS)
- TCU Exodus Retreat
- Fellowship of Christian Athletes
- Freethinking Frogs
- Hillel Jewish Student Foundation
- Interfaith Community
- International Christian Fellowship
- Ignite
- Latter Day Saints Student Association
- Muslim Student Association
- Student Mobilization
- Word of Truth Gospel Choir
- Young Life


## Interfaith Initiative and Better Together

The Interfaith Initiative gathers students across faith traditions who celebrate their individual beliefs, learn about one another and work together to change the world through leadership, learning, service and dialogue. Students get connected on campus through the TCU chapter of the National Better Together Program, explore interfaith movements off campus through the Spring Break Service and Study Trip, and gain leadership experience through the Interfaith Fellows and Internship Programs.

## This I Believe at TCU

Inspired by the national program, TIB@TCU encourages the campus community to explore, name and share its beliefs. It asks, "What do you believe?" in classrooms, organizations and at events encouraging individuals to submit short essays that together tell the stories of TCU. This celebrates the diverse beliefs that infuse the campus and encourages storytelling as a way to come together around shared values.

## Faith Acts

Faith Acts provides opportunities that empower students to put their beliefs into action through service and social justice. The Faith Acts Student Network offers regular opportunities for direct service, reflection, advocacy and education that give students the chance to practice how their faith calls them to make a difference in the world. Once a year, The Footsteps Lecture brings well-known national leaders to campus who are actively living their faith by serving others. Finally, the Faith Acts Fellowship engages a small cohort of students interested in faith and service in internships and leadership development that engage them in the community.

## Disciples on Campus

The Office of Church Relations, which is connected to RSL, supports the University's relationship with its partner denomination. Disciples on Campus is an inclusive faith family for Disciples undergraduates and others that invites students to continue their spiritual journey through worship, reflective studies, compassionate outreach and life-giving social opportunities.

## Robert Carr Chapel

Robert Carr Chapel has been a space for the student and campus community space for decades, whether for worship, concerts, honor inductions, prayer groups or other activities. The chapel is also open for personal prayer and reflection daily when not in use for events. To reserve the chapel, please contact robertcarrchapel@tcu.edu, or visit us in J arvis Hall on the first floor.

## Other opportunities:

- Worship at Robert Carr Chapel


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- Individual and Group Pastoral Care
- Feed Your Spirit Retreats and Studies
- Spiritual Wellness Resources and Programs
- Crossroads Lecture Series on Faith and Life
- Hunger Week and the Heal Hunger Campaign
- Advent and Lenten Devotional and Book Groups
- Multiple Spaces for Worship and Reflection


## Housing and Residence Life

Living in a TCU residence hall is an integral part of the TCU experience. Residence hall students make new friends, get involved in campus activities, and discover opportunities for personal and intellectual growth. Residence halls are conveniently located on the campus, and the halls provide a comfortable room that a student can call "home" while at TCU.
Almost one half of the undergraduate students at TCU live on campus. Through academic, cultural, intramural and social activities, students within each hall determine the hall's character. Participation in these activities assists in the student's adjustment and development within a residential setting.
Residence hall rooms are designed for student comfort and are used for study as well as sleeping and socializing. All accommodations are airconditioned, non-smoking facilities. Most rooms are designed for double occupancy. The standard student room contains a bed, a desk and chair, a chest and a closet for each student. Students are encouraged to add decorative items to personalize their surroundings.
The residence hall office is a primary resource on campus. The hall director, a live-in professional who administers the hall, serves as an adviser to students. Each hall has resident assistants (RAs) who are sensitive to student needs and alert to student concerns. The hall staff knows the many University resources and can help students find needed assistance.
Residence hall communities at TCU assume that the most productive learning environment extends into all areas of a student's life. All residence halls offer a broad range of programs, which may include social programs, physical activities, career information, study skills, personal management skills, spiritual involvement and self-help aids. Hall staff focus on creating a caring community designed to meet the distinctive needs and interests of the student population. Student involvement enhances the creation of a distinctive hall environment.

## Residence Requirement

All entering students are required to live on campus or in other TCU authorized housing for their first two years after high school graduation, subject to the following exceptions:

- Students who are 21 years or older as of the first day of classes for the fall semester;
- Students who are married and/or have dependent children living in their home.
- Students who will continue to live with their parents or legal guardian.
- Veterans.
- Part-Time (less than 9 hours).

Students enrolled for less than nine hours may live in a residence hall only with special permission from the Office of Housing and Residence Life. The Campus Housing License applies to the entire academic year. Students under 17 or over 25 are housed by special permission only on a space-available basis.

## Housing Preferences

The right to make re-assignments is reserved by the University. The University makes room assignments without regard to race, creed, religion or national origin. TCU does not make assignments based on any information that may be found on Facebook, Twitter or any other external source. Other housing information and current regulations are distributed to students at the beginning of each semester. Detailed housing information may be viewed at www.housing.tcu.edu and at my.tcu.edu under the Residential Life link.

## Dining Services

Eating out while staying on campus is easy with the TCU Frog Pass. TCU students will have many fresh choices at Market Square in the Brown-Lupton

University Union. The Frog Pass Dining Plan allows students unlimited access to Market Square when it is open. Choose from one of three Frog Pass plans Silver, Gold, Platinum - and receive Frog Bucks that can be used on campus at one of TCU's seven other campus dining locations or off campus at local participating restaurants. Frog Bucks must be purchased separately from the Silver meal plan.

## Market Square

Located on the second floor of the Brown-Lupton University Union, Market Square offers eight unique dining venues - Trinity Grill, Stacks Deli, Il Trattoria, Shuffles, Cookhouse, Expeditions, Green Cuisine and Market Place at the Oasis - with a variety of fresh foods prepared to order. Booths, hightop tables, patio and terrace seating for more than 800 give students a chance to truly sit down and relax. Five large-screen TVs allow students to see the news of the day while catching up with friends. Market Square is a kitchen, dining room and lounge, all in one.

## Chick-fil-A@ 1873 Grill and Café

TCU's own Chick-fil-A is located on the first floor of the Brown-Lupton University Union. It opens at 7:30 a.m. Monday-Friday, closes at 2 a.m. Monday-Friday, closes at 11 p.m. Saturday and is closed Sunday; students can pay with cash, credit, Campus Cash or Frog Bucks.

## Additional Campus Dining

- Union Grounds - located in the Brown-Lupton University Union
- Multi-Purpose Building - located at corner of Stadium Drive and Bellaire Drive
- NRG — located in the Campus Recreation Center
- Bistro Burnett - located in the library
- Sushi Mama — located in Smith Hall
- Big Purple Truck - is on the move! Follow the BPT on Twitter@bptTCU


## Frog Pass

Frog Pass is the TCU dining plan. It allows students to come and go to Market Square as often they like from 7 a.m. to 9 p.m., Monday-Friday and from 9 a.m. to 9 p.m. on the weekends. Six plans provide Frog Bucks that can be used off campus and Campus Cash that can be used on campus.

## Campus Cash

Campus Cash is designed to give students flexibility and can be used at one of TCU's many other campus dining locations.

## Frog Bucks

Designed to give students flexibility, Frog Bucks can also be used on or off campus. Unused Frog Bucks that come with the Frog Pass plans will roll over to the spring semester, but are NOT refundable at the end of the academic year. If students are running low, they can easily add more Frog Bucks online through my.tcu.edu. All Frog Bucks added on to the base meal plan are refundable.
All plans with Frog Bucks require acceptance of Off-Campus Advantage to use Frog Bucks at local participating restaurants.

## Simply-To-Go Option

Students may use a swipe to purchase a breakfast or lunch alternative offered at Sushi Mama in Smith Hall.

## Special Dietary Needs

Market Square offers a variety of vegan, vegetarian and gluten-free options at every meal. The nutrition counselor, a registered dietitian, with meet with students who have dietary concerns to discuss menu options.

## Connect with us:

- www.tcudiningservices.com - keeps you informed of special events and limited time offers; enables buying items online
- www.twitter.com/tcudining and www.facebook.com/tcu dining keep you in the know about dining events


## Campus ID Card

The TCUID card is a student's access key to many University resources. It is permanent and may be used as long as the student is enrolled at TCU. The card is the property of TCU and is non-transferable. If at any time students have questions or problems with their ID card, visit www.idcenter.tcu.edu, contact the ID Card Center in Brown-Lupton University Union at 817.257.7856 or email IDCenter@tcu.edu.

The TCU ID card is a computerized plastic card, bearing a student's photo and TCU ID number, with a magnetic stripe on the back. Each time the card is inserted in a card reader, the data encoded in the magnetic stripe is electronically scanned and sent back to a central computer for verification. The system then transmits whether the card is valid and the transaction accepted. Students use their ID cards to access dining funds, residence halls and athletic events. ID cards may also be used to charge concessions at athletic events, items from vending machines, purchases at the bookstore, photocopies in the library and Frog Prints Printing Services, computer printouts from the Information Commons and other public computers across campus. It is also used to verify identity if requested by a TCU official.
Card owners are responsible for reporting lost or stolen cards promptly to ensure that no one else uses your card. Card owners can deactivate a lost or stolen card online. Simply log into my.tcu.edu, click on "Helpful Links" click on "Frog Bucks" accept and submit and then "Report Card Lost." Students can reactivate a found card at the same location. Lost or stolen cards may also be reported to the ID Card Center in the Brown-Lupton University Union, Room 2033, 817.257.7856, or TCU Police 817.257.7777. Until a card is reported lost or stolen you are responsible for any card purchases. Cardholders may replace lost or damaged cards at the ID Center during normal business hours. TCU police can print a replacement ID after hours or on weekends. There is a replacement charge of $\$ 20$ for a lost or stolen card.
The ID card remains the property of TCU at all times, and any misuse of the card could result in loss of privileges or disciplinary action. ID cards should be in a student's possession at all times and must be shown upon request of any University official.

## Student Development Services

Student Development Services (SDS) maximizes students' potential through individual and community development. SDS houses the TCU Leadership Center, TCU Student Organizations, TCU Transitions, Leader for ILife, Transfer Center, Model United Nations, Women's and Men's Programs, and Parent and Family Programs. Visit www.sds.tcu.edu or BLUU 2003 for more information.

## TCU Leadership Center

The TCU Leadership Center offers a wide variety of leadership programs to meet the diverse needs of today's students while being comprehensive enough to ensure a thorough exposure to leadership development, concepts and experiences.

Students may take advantage of the following programs through the TCU Leadership Center; Connections, Chancellor's Leadership Program, Leadership Scholars Program, Lead NOW (Network of Women), Emerging Leaders, LeaderKids, Leadership Adventures, Global Leadership Experiences and Celebration of University Leadership. As TCU's premier resource for leadership development, the TCU Leadership Center seeks to connect with the learning as well as the opportunities to grow in their own leadership style and skill sets. Students may take advantage of a the following programs through the TCU Leadership Center; Connections, Chancellor's Leadership Program, Leadership Scholars Program, Lead NOW (Network of Women), Emerging Leaders, LeaderKids, Leadership Adventures, Global Leadership Experiences and Celebration of University Leadership.
The objectives of the programs and opportunities are to help students:

- identify and describe multiple leadership techniques, theories and models
- articulate a coherent leadership style and philosophy
- understand ethical decision making processes and effective ways of working within teams
- explore their competence with regards to the dimensions of difference and its impact on leadership processes
- demonstrate application of leadership knowledge, skills and talents in diverse settings
- describe strategies to apply personal leadership style to facilitate positive change


## TCU Student Organizations

The mission of the office of TCU Student Organizations is to promote involvement that offers leadership development, social, cultural and educational programming. With more than 200 student organizations,
including academic and honorary groups, religious and service organizations, and national fraternities and sororities, students are offered a wide range of opportunities to expand their interests, enhance their academic experience, develop leadership skills and meet new friends.

## TCU Transitions

TCU Transitions is an interdisciplinary and collaborative venture aimed at addressing dimensions and developmental growth of students throughout the college experience, from admission to graduation.

TCU Transitions identifies and coordinates activities, resources and programs that address one of three periods during the undergraduate experience: the first-year experience, the sophomore and junior year experience, the senior year experience and TCU Transitions aims to:

- Foster identity and vocational development
- Promote class year identity
- Cultivate autonomy and decision-making congruent with one's values
- Create the understanding that community is built and sustained through developing of a sense of personal and social responsibility.
In addition, each class designated by its graduation year is assigned a class dean who remains with the class through the four years of the traditional college experience. The class dean serves as a point of contact for all members of the class. When a student does not know where to go or who to contact about anything in the TCU experience, the class dean is ready to help. The class dean also posts on Facebook to update an entire class on services, programs and activities especially relevant to particular interests and transitional needs.


## First Year Experience Programs

The First Year Experience at TCU believes that every student comes to TCU with high potential. Who they meet, what they do and how they think determines what they become. The First Year Experience office connects students with the people, programs and resources they need to be successful at TCU and beyond. First Year Experience signature programs are Orientation and Frog Camp.

- Orientation is designed to assist new students and families with the transition to University life by providing essential information and helping students meet new and continuing students, faculty and staff. While at Orientation, students meet with an academic adviser and register for the first semester of classes.
- Frog Camp is a three-to eight-day experiential retreat that immerses new students in TCU history and traditions, helps them establish new friendships and guides them to acquiring the skills they need to be successful in college. Along with upper-division students and members of the faculty or staff, Frog Campers find out what it means to be Horned Frogs; along the way, they forge lasting bonds.
- Frogs First is a four-day event prior to the start of classes and serves as the official on-campus welcome for new students. Kicking off with Chancellor's Assembly, Frogs First is comprised of Common Reading, Need 2 Know, and a student activities fair where students can learn more about the 200+clubs and organizations on campus. Students will also have the opportunity to have dinner with a faculty/staff member over the weekend. New Horned Frogs are led through the weekend by Frogs First leaders and Resident Assistants (RAs). Frogs First welcomes students to their new home.
- Connections is a six-week leadership program in the fall designed to help new students transition successfully to college life while beginning to understand their leadership style.


## Sophomore and Junior Year Experience Programs

The sophomore and junior years of college mean profound change. While the freshman year is a time of newness, excitement and exploring all the college environment has to offer, years two and three brings a need to begin focusing on a smaller set of concerns:

- deepening relationships with selected peers, staff and faculty
- discovering and naming what's important and how that fits into one's emerging identity
- wrestling with questions of major and career
- developing personal competence, sense of autonomy, tools and strategies for resilience

It is important that choices are made thoughtfully, with knowledge of all the options and based on a sense of alignment with personal values, strengths and sources of meaning. Those who can make choices in this manner and begin living into the future with increased confidence are more likely to make meaningful commitments about their lives and take responsibility for their future (Schaller, 2005). The Sophomore and Junior Year Experience supports students during this time through a variety of programs and services, including the Annual Sophomore and Junior Week, the Annual Sophomore Pinning Ceremony, Mission Statement Scholarships, One Million Reasons financial literacy program, the Sophomore Getaway weekend retreat program, and Frog it Forward campaign.

## Senior Year Experience Programs

Seniors are learning to cope with personal adjustments associated with transition from college to post-college life. They are working toward achieving meaningful closure of their college experiences, recognizing their successes, celebrating accomplishments and preparing to enter their lives beyond TCU as ethical leaders and responsible citizens.
The Senior Year Experience (SYE) assists in this process by coordinating programs such as the fall semester welcome-back event Senior Splash, the post-college prepworkshops of Senior (Dis)Orientation, the Last Lecture Series that honors the class's favorite professions, and Senior Speak-Up in which five exceptional members of the class reflect o the most significant moments of their TCU experience. SYE also collaborates with key stakeholders for seniors as including TCU Career Services, Alumni Relations, and Advancement, to support programs such as the Senior Ring Ceremony in the fall, Senior Legacy and Senior Toast \& Fiesta.

## Leader for Life

Leader for Life (L4L) is a four-year program designed to provide students with the tools to be successful both in and out of the classroom. Leader for Life is comprises of several components, including mentorship from faculty, staff and current students, leadership programming, retreats, and the opportunity to chronicle the student experience through a FrogFolio.

## Transfer Student Programs

Upon admission to TCU, transfer students are invited to attend Frog Camp and Transfer Orientation. Located in BLUU 2003, the Transfer Center is a collection of resources available to help transfers make a smooth transition to TCU. This physical space provides resources, staff and a study space area. Student mentors provide these programs and resources. Included in the Sophomore and Junior Year Experience is the Transfer Center. Located in BLUU Suite 2003, the Transfer Center provides resources, staff a study space area and student mentors to help transfer students have a successful transition into TCU.

## Model United Nations

The award-winning Model United Nations program at TCU is a joint program of Student Development Services and the Department of Political Science. It provides students the opportunity to simulate the workings of the United Nations as representatives of the U.N. member-states. In their capacity as delegates to Model U.N. conferences, students research the policies of their designated country on a variety of topics, including international trade and development, terrorism, international conflict, weapons of mass destruction, human rights and the environment. Participation in conferences also helps students improve their negotiating, public speaking and writing skills.

## TCU Women's and Men's Programs

The mission of Women's and Men's Programs at TCU is to increase awareness and promote dialogue regarding the personal and collective impact of the way society deals with the issue of gender. The program offers engaging education programs on topics consistent with its mission and promotes a culture of justice, respect and non-violence among all members of the TCU community.

## TCU Parent and Family Programs

TCU Parent and Family Programs benefit parents and guardians in numerous ways:

- Assist parents in the transitional experiences related to beginning college
- Provide resource information to keep parents informed about and involved with the University
- Provide support for University programs and activities
- Create a partnership between families and the University

These goals are met through presentations to prospective parents, parents attending Orientation, e-magazine, a website, a Facebook page and personal contact through emails and phone calls.

## TCU Parent Council

Started in 1986, the TCU Parent Council, involves approximately 50 families that meet on campus to discuss issues surrounding the academic and cocurricular activities at TCU. In addition to receiving information, these parents provide feedback to university administrators, serve as ambassadors to parents within their own communities and assist with university initiatives.

## TCU Parents Association

The TCU Parents Association is open to parents and guardians of all TCU students. It acts as a resource to inform, connect, engage, and empower parents to support the successful development of all TCU students and to affirm the mission of the University. Parents are invited to join the parent-run Parents Association either through a donation or getting involved. Parents may al so "talk" with other TCU parents by joining the TCU Parents Association Facebook page. Information about these programs and other resources may be found at sds.tcu.edu/parent.family/.

## TCU Police

TCU police officers are commissioned by authority of the Board of Trustees of TCU and are certified as peace officers by the State of Texas to provide police services for the campus. The TCU Police are in service 24 hours a day, seven days a week, and the TCU Police dispatcher can be contacted at 817. 257.7777. The office is located at 3025 Lubbock Ave.

The TCU Police Department posts a daily crime log and produces an Annual Security and Fire Safety Report, both of which may be found on the TCU Police website (www.police.tcu.edu). These reports are also available at the TCU Police Department.
Texas Christian University is committed to providing a safe environment for employees, students and campus visitors. All guns and dangerous weapons are prohibited on the Texas Christian University campus. The only exceptions are that students, faculty and staff may bring unloaded hunting rifles, other weapons, and ammunition directly to the TCU Police Department to be checked in and stored in a locked gun vault or under Texas law, a person who holds a valid concealed handgun license may store a concealed firearm in a locked, privately owned or leased motor vehicle parked on a street or driveway or in a TCU parking lot or parking garage.

Texas Christian University has complied with the statutory requirements of Section 411.2031 of the Texas Government Code and the Texas Christian University Board of Trustees voted to prohibiting license holders from carrying concealed handguns on the campus of Texas Christian University, any grounds or building on which an activity sponsored by Texas Christian University is being conducted, and any passenger transportation vehicle owned by Texas Christian University.

## Police Programs

## Froggie Five-O Student Escort Program

The TCU Police Department administers a student escort program, Froggie Five-O. Froggie Five-O operates between the hours of 8 p.m. -1 a.m. during the fall and spring semesters. Froggie Five-O provides safety escorts and uses student employees who escort students on foot or by golf carts to all areas of the campus. After 1 a.m., TCU police officers or security guards are available to escort students. Students may request an escort by using any of the 118 emergency telephones located on campus or by calling the TCU Police at 817.257.7777.

## Crime Prevention

Crime prevention and other services are offered by the TCU Police Department and the Fort Worth Police Department's Community Service Office and include Sexual Assault/Acquaintance Rape Prevention, Personal Awareness/Campus Alcohol Police Information, Campus Crime Watch Meetings, Crime Prevention Surveys for Home and Business, Operation ID: Property Identification System, Auto Theft Prevention (Window Etching) and Vehicle Jump Starts. (Due to possible problems with electric locks, TCU Police Department is unable to provide vehicle unlocking services.) The crime prevention office is located in the Rickel Building Room 155B. The phone number is 817.257.7276.

## RAD Systems

Rape Aggression Defense (for women) and Resisting Aggression (for men) are offered on the TCU campus. RAD teaches women defensive concepts and
techniques against various types of assault by utilizing easy, effective and proven self-defense/martial arts tactics. RAD provides effective options by teaching women to take an active role in their own self-defense and psychological well-being.

## Lost and Found

The TCU Police Department is the official lost and found office. Articles lost or found should be reported as soon as possible to help the office in returning property to the rightful owner.

## Waiver of Responsibility

The University takes reasonable steps to protect people and property on the campus. However, it is impossible to provide protection that is 100 percent effective, and the University does not accept responsibility for bodily injury, theft or damage to personal property occurring on the campus. Students are encouraged to assure that their own insurance coverage is adequate.

## Automobile Regulations

All students, faculty and staff who operate a motor vehicle on University property must register that vehicle with the TCU Police Department and comply with the rules and regulations set forth. The annual registration fees and the TCU Campus Parking Rules and Regulations can be found at www.police.tcu.edu.
Purchasing a parking permit does not guarantee a parking place nor does the lack of a parking space justify violation of any parking regulation. The fact that a citation is not issued when a vehicle is illegally parked does not mean or imply that the regulation or rule is no longer in effect.
Illegally parked vehicles may be ticketed, immobilized or towed by the TCU Police Department. The payment of traffic fines, of immobilization or towing charges does not entitle the violator to accrue an indefinite number of citations. Continued parking offenses may lead to a suspension of campus driving and parking privileges, and may also result in disciplinary action by the University. Whenever it is necessary to move an illegally parked vehicle, an independent wrecker operator will tow the vehicle to the wrecker's storage area. The owner of the vehicle will be responsible for the wrecker fee and storage, plus the fine for the traffic violation.
Shuttle service is provided to the TCU community 24 hours a day/7 days a week during the fall and spring semesters. Shuttle information, including routes and shuttle stops, can be found on the TCU Police website (www.police.tcu.edu).
The University does not assume any liability concerning the protection of the motor vehicle or any responsibility for providing special parking places near a building in which an employee works or a student's residence hall or class.

## Bicycle Regulations

Bicycle registration forms are online at www.police.tcu.edu. Print the form and bring to the TCU Police Department to receive a bicycle permit. Forms may also be obtained at the TCU Police Department 3025 Lubbock Avenue.
Bicycle riders must adhere to all state and local laws. Pedestrians have the right of way.

## Yearbook

The TCU Horned Frog Yearbook received its name before the school mascot was dubbed "Horned Frogs." It has been in print since 1897-1898 when it was founded by Addison Clark, Jr. who played on the first football team and also produced the first yearbook.
The award-winning, 500 -page, full-color yearbook, published digitally, is photographed, written and designed in the student-run Horned Frog Yearbook offices. Since 2005 it has also included a two-hour movie style DVD, a depiction of the academic year.
The staff comprises of an editor-in-chief, an editorial board and approximately 20 contributing staff members. From majors such as communications/graphic design/journalism, or even engineering/business/nursing, the staff is academically, socially and culturally integrated, and dedicated to producing an outstanding yearbook. For more information, call 817.257.7606 or visit www.yearbook.tcu.edu.

## Student Policies

## Academic Conduct Policy Details

An academic community requires the highest standards of honor and integrity in all of its participants if it is to fulfill its mission. In such a community, faculty, students and staff are expected to maintain high standards of academic conduct. The purpose of this policy is to make all aware of these expectations. Additionally, the policy outlines some, but not all, of the situations that can arise that violate these standards. Further, the policy sets forth a set of procedures, characterized by a "sense of fair play," which is used when these standards are violated. In this spirit, definitions of academic misconduct are listed below. These are not meant to be exhaustive.

## I. Academic Misconduct

Any act that violates the spirit of the academic conduct policy is considered academic misconduct. Specific examples include, but are not limited to:

1. Cheating. Includes, but is not limited to:
a. Copying from another student's test paper, laboratory report, other report, or computer files and listings.
b. Using in any academic exercise or academic setting, material and/or devices not authorized by the person in charge of the test.
c. Collaborating with or seeking aid from another student during an academic exercise without the permission of the person in charge of the exercise.
d. Knowingly using, buying, selling, stealing, transporting or soliciting in its entirety or in part, the contents of a test or other assignment unauthorized for release.
e. Substituting for another student, or permitting another student to substitute for oneself, in a manner that leads to misrepresentation of either or both students' work.
2. Plagiarism. The appropriation, theft, purchase or obtaining by any means another's work, and the unacknowledged submission or incorporation of that work as one's own offered for credit. Appropriation includes the quoting or paraphrasing of another's work without giving credit therefore.
3. Collusion. The unauthorized collaboration with another in preparing work offered for credit.
4. Abuse of resource materials. Mutilating, destroying, concealing or stealing such materials.
5. Computer misuse. Unauthorized or illegal use of computer software or hardware through the TCU Computer Center or through any programs; terminals; or freestanding computers owned, leased or operated by TCU or any of its academic units for the purpose of affecting the academic standing of a student.
6. Fabrication and falsification. Unauthorized alteration or invention of any information or citation in an academic exercise. Falsification involves altering information for use in any academic exercise. Fabrication involves inventing or counterfeiting information for use in any academic exercise.
7. Multiple submission. The submission by the same individual of substantial portions of the same academic work (including oral reports) for credit more than once in the same or another class without authorization.
8. Complicity in academic misconduct. Helping another to commit an act of academic misconduct.
9. Bearing false witness. Knowingly and falsely accusing another student of academic misconduct.

## II. Procedures for Dealing with Academic Misconduct

1. Definitions
a. Day refers to a school day on which classes are meeting.
b. Academic dean refers to the dean of the college or school offering the course in which the academic misconduct is alleged to have taken place.
c. Department chair refers to the academic administrator responsible for the unit providing the instruction in which the alleged academic misconduct occurred.
d. Faculty refers to the instructor of the course in which the suspected academic misconduct occurred.
e. Adviser refers to any person selected by the student who accompanies the student during formal hearings. The adviser may speak with the student but may not actively participate in the hearings.
f. The Academic Appeals Committee is a standing University committee. The charge and membership of the committee may be found in the current Handbook for Faculty and University Staff.
2. Investigation and Initiation
a. Students who know of an act of academic misconduct should report the incident to the faculty member teaching the course. The faculty member will obtain the basic facts of the allegation and ask the student reporting the misconduct to write and sign a statement of facts. The name(s) of the student(s) reporting suspected academic misconduct will remain confidential during the informal faculty/student meeting, but must be revealed to the accused student if the resolution proceeds beyond the faculty member and the accused student.
b. Faculty who suspect academic misconduct or who have academic misconduct reported to them must initiate an investigation and meet with the accused student within five days of becoming aware of the incident. A faculty member who is made aware by another person of an act of academic misconduct has the responsibility to investigate the allegation, and, if warranted, pursue the issue as outlined below (C.1).
i. In instances where the suspected academic misconduct is discovered during an academic exercise, the faculty member has the right to suspend immediately the student involved in the alleged activity from further work on the academic exercise.
c. A student, once accused of academic misconduct, will proceed in the course without restriction until resolution of the issue or until the academic dean has taken an action (as specified in III.B) that removes the student from the course.
d. An "I" grade should be given by the instructor if the alleged misconduct occurs near the end of a semester (e.g., during finals), and a sanction outlined in Section III has not been applied by the instructor or the dean.
e. If more than one student is accused of the same act of misconduct (e.g., giving and receiving aid), each individual student is guaranteed the right to have the cases heard separately. With each student's permission, the cases can be combined. The faculty/student conference (C.1) is expected from this requirement.
3. Resolution
a. Meeting Between Faculty Member and Student. This is the first step to be taken in resolving an incident of suspected academic misconduct.
i. Within five days of suspecting misconduct, the faculty member will hold a meeting with the student. At this meeting, the faculty member will inform the student of all allegations against him or her and present any information supporting the allegations.
ii. The student will be given the opportunity to respond to the allegations. The student has the right not to respond.
iii. The faculty member will decide whether or not academic misconduct has occurred, and, if warranted, apply any combination of sanctions in III.A below, or refer the matter to the dean for more severe sanctions (probation, suspension or expulsion). Findings of academic misconduct are based on the preponderance of the evidence.
iiii. The faculty member will notify the student in writing of his or her decision and may send copies to the academic dean, the dean of the college in which the student is enrolled, the department chair and the dean of campus life. Any such copies of the findings will be kept on file in the college and department offices and in the student discipline files maintained by the dean of campus life.
b. Meeting with Department Chair. This meeting takes place when the student wishes to appeal either the findings of the faculty member of the severity of the sanction(s).
i. Within five days of being notified by the faculty member of the disposition of the incident of academic misconduct, the student may request a meeting with the department chair.
ii. The department chair will become acquainted with the facts and meet with the parties involved in the case. The student has the right to meet with the department chair without the faculty member being present.
iii. The department chair may either support or reverse the findings of the faculty member, and may lessen the sanctions) imposed by the faculty member even while supporting its findings. The chair may not increase the severity of the sanction(s).
iiii. The department chair will notify the student and faculty member of his or her decision in writing and may send copies to the faculty member, the academic dean and the dean of campus life. Any such copies of the findings will be kept on file in the college and department offices and in the student discipline files maintained by the dean of campus life.
c. Meeting with Academic Dean. This meeting takes place if the student wishes to appeal either the findings of the department chair or the severity of the sanction(s), if the faculty member recommends sanctions in addition to those listed in III.A. 3 and 4, or if the student has been found guilty of academic misconduct previously.
i. Within five days of being notified by the chair of the disposition of the incident of academic misconduct, the student may request a meeting with the academic dean.
ii. The academic dean will hear the facts of the case and make a decision about the alleged act of academic misconduct or the appropriateness of the sanctions administered by the faculty member. The academic dean can issue any combination of sanctions listed in Section III.
iii. The academic dean will notify the student of his or her decision in writing with copies to the department chair and the faculty member. Copies of the findings will be kept on file in the college office and may be sent to the dean of campus life.
d. Academic Appeals Committee. Should the student wish to appeal the decision of the academic dean, he or she has the right to request a hearing before the Academic Appeals Committee.
i. The student must request this hearing by submitting an appeal letter to the chair of the University Academic Appeals Committee no later than five days from the date of receiving written notification of the dean's findings.
ii. Upon receipt of the appeal letter, the chair of the Academic Appeals Committee may request materials from the student, the faculty member, the department chair and/or the dean.
iii. The appealing student has the right to appear before the Academic Appeals Committee. The student may bring one person with him or her as an adviser. The adviser may not speak for the student or to the committee. The adviser may only speak with the student. The student must inform the University five class days in advance if his or her adviser is an attorney in order for the University to also have an attorney present. Each party shall bear the expense of his/her legal counsel. Legal counsel is to provide counsel only and may not participate directly in the meeting. The meeting is an administrative hearing, not a court proceeding, and is not subject to the procedures or practices of a court of law.

## III. Sanctions

1. By the Faculty Member
a. Grant no credit for the examination or assignment in question (treat as a missed assignment).
b. Assign a grade of "F" (or a zero) for the examination or assignment in question.
c. Recommend to the academic dean that the student be dropped immediately from the course with a grade of "F."
d. Recommend to the academic dean that the student be places on probation, suspended or expelled from the University.
2. By the Academic Dean or Academic Appeals Committee
a. Apply sanctions in III.1.
b. Drop student from the course with a grade of "F". This grade cannot be changed by student-initiated withdrawal and the grade will be included in the computation of GPA even if the course is repeated.
c. Place the student on suspension from the University for a specified period of time.
d. Expel the student from the University.
e. In a case where the academic dean as defined above is not the dean of the college in which the student is enrolled, he or she shall recommend to the vice chancellor for academic affairs that the student be placed on probation, suspended or expelled.(Previous academic misconduct will be taken into account when either the academic dean or the Academic Appeals Committee considers sanctions for academic misconduct.)

## University Communication

TCU will make every attempt to communicate with all members of the academic community in a timely and effective manner. The University will utilize U.S. mail, campus mail, telephone calls, and/or TCU provided email to communicate official University business. Information communicated by TCU provided email (tcu.edu account) is considered an official communication from the University. In the event of an emergency, the University will most likely communicate with students via their tcu.edu email account, text message, local media and the TCU home page (www.tcu.edu.) Many offices will use tcu.edu email exclusively to communicate important information; therefore, it is important that TCU community members access their accounts regularly or forward their account to a different email account.
It is also imperative that students keep their addresses and telephone numbers current. Telephone numbers and addresses may be used to contact students in the event of an emergency or to conduct official University business. Students may update their information via my.tcu.edu.

## Student Grievance Procedure

The University has established both informal and formal procedures that a student may follow when presenting grievances. A grievance is defined as any dispute or difference concerning the interpretation or enforcement of any provision of University regulations, policies or procedures or state or federal laws applicable on the campus. Administrators, faculty and students are encouraged in all instances to resolve grievances informally and as promptly as possible. However, formal procedures may be followed when needed.
Detailed information about the University educational discipline system is provided in the Student Handbook and is available online at www.studenthandbook.tcu.edu. Individuals may contact the Office of Campus Life at 817.257.7926.

## Alcohol Use Policy

Texas Christian University has the responsibility of maintaining an educational environment conducive to academic achievement and, at the same time, helping young people grow into mature and responsible adults. Though each individual ultimately must decide whether or not to use alcoholic beverages, the University, through its Board of Trustees, has determined what practices are permitted on campus.
Students should be aware that the legal drinking age in the state of Texas is 21 years. Texas Christian University conforms to state law and also has further specific regulations to govern the use, sale and possession of alcoholic beverages on University property.
Students who choose to drink, either on or off the campus, are expected to handle alcohol responsibly and conform to the laws of this state. Violation of state law, city ordinance or University regulations is considered grounds for disciplinary action.

Except for certain specified areas in University residence halls approved by the vice chancellor for student affairs, and for specific events authorized by the chancellor or provost in the Dee J. Kelly Alumni and Visitors Center or other buildings, the consumption, sale or use of alcoholic beverages is prohibited on campus. The consumption of alcohol is permissible for persons of legal drinking age in parking lots used for patrons of TCU football games at Amon Carter Stadium from five hours before and two hours after a TCU home football game. Patrons may not bring alcohol into the stadium at any time.
Residents of legal age ( 21 years) and over may possess and consume alcoholic beverages in their rooms or in the rooms of other students 21 years of age or older. The consumption of alcoholic beverages is prohibited in hallways, stairways, elevators, lobbies, lounges, recreation areas, restrooms and all other areas of the residence hall. Students' rooms may not be used as an "open bar" but may be used for private gatherings with no more than six guests.
The purchase or sale of alcoholic beverages is prohibited everywhere on the campus. Furthermore, no person may provide any alcoholic beverages to any person under 21 years of age. The University also prohibits the use or possession of alcoholic beverages in all instructional settings, including those remote to the campus.
Information about specific penalties imposed for violation of alcohol use policies are available online at www.studenthandbook.tcu.edu or you may contact the Office of Campus Life at 817.257.7926.

## Drug Abuse Policy

Students enrolled in TCU are subject to disciplinary action for the possession, manufacture, use, sale or distribution (by either sale or gift) of any quantity of any prescription drug or controlled substance, or for being under the influence of any prescription drug or controlled substance, except an over-the-counter medication or for the prescribed use of medication in accordance with the instructions of a licensed physician. Controlled substances including but not limited to: marijuana, K2 and other synthetic cannabinoids, synthetic stimulants (such as bath salts), cocaine, cocaine derivatives, heroin, amphetamines, methamphetamines, barbiturates, steroids, LSD, GHB, Adderall, Rohypnol, and substances typically known as "designer drugs" such as "ecstasy." Possession of paraphernalia associated with the use, possession or manufacture of a prescription drug or controlled substance is also prohibited (see Code of Student Conduct section, Drugs). Students having prohibited substances in their residence and students in the presence of these substances or paraphernalia may be subject to the same penalties as those in possession.
The minimum penalty for a first-time violation of the Drug Abuse Policy for use or possession of a prescription drug or controlled substance may be disciplinary probation for a full year, a requirement for participation in a drug abuse education and/or treatment program, a fine, and/or community service and random drug screenings. Any student who violates the Drug Abuse Policy for use or possession of a prescription drug or controlled substance for a second time may be suspended from the University for at least one year. Possession of drug paraphernalia will subject a student to the same penalties as those imposed for use and possession of a prescription drug or controlled substance.
The penalty for a violation of the Drug Abuse Policy for sale, distribution or manufacture of a prescription drug or controlled substance may be permanent expulsion from the University. A student who voluntarily seeks help for drug or alcohol abuse is not subject to disciplinary action; in fact, University officials will do everything they can to assist the student in obtaining appropriate treatment. If the student continues to use drugs, then he/she does become subject to disciplinary action.

## Legal Sanctions for Illegal Use of Alcohol and Other Drugs

In accordance with federal regulations the following information is provided for all students. In addition to sanctions imposed by the University for a violation of the Alcohol Use Policy and the Drug Abuse Policy, a student may be subject to regulations of civil authorities. Various local, state and federal regulations prohibit the illegal use, possession and distribution of illicit drugs and alcohol. Penalties for violation of such statutes vary depending on the type of drug, the amount of the drug involved, the type of violation, and in the case of alcohol, the age of the persons involved. Detailed descriptions of legal penalties are available in the Office of Alcohol and Drug Education.

The University reserves the right to refer students to court authorities for any behavior that is in violation of the law regardless of any sanctions imposed by the University.

## University J udicial System

## Preamble

This Judicial system is intended to provide an orderly system for adjudication of disputes arising under the Bill of Rights and for the just resolution of grievances based on actions of University employees or groups recognized by the University. A grievance is defined as any dispute or difference concerning the interpretation or enforcement of any provision of University regulations, policy procedures, or state or federal law.

## I. Boards of Original J urisdiction

1. The University committees enumerated below shall serve as quasijudicial boards of original jurisdiction.
a. The Student Organizations Committee shall hear cases involving student organizations officially recognized or approved by the committee. It shall have the authority to delegate responsibility for judicial hearings to other student groups (such as the Panhellenic Council, the Interfraternity Council, etc.), but no dispute (case) handled by one of these groups can be appealed to the University Court until a ruling has been made by the Student Organizations Committee itself. Cases may be brought by University staff members, officers of student organizations under the jurisdiction of the committee or by individual students who charge that their rights have been violated by such organizations.
b. The Student Publications Committee shall hear cases involving University-sponsored student publications (e.g., The Daily Skiff and Image). Cases may be brought by University staff members, student editors or writers and individual students who think their rights have been violated by the press. The committee shall also hear cases involving controversy over such questions as compliance with the Canons of Responsible Journalism, FCC Regulations and the standards of taste in the University community.
c. The Public Presentations Committee shall hear cases regarding controversies in the areas of speakers, films, theatre, dance and art exhibitions to be presented by student organizations. Judgments concerning the appropriateness of a presentation (as defined in the Student Bill of Rights) will be made by this committee. Cases may be brought by University staff members, by student organizations that sponsor public presentations, or by individual students who charge their rights are violated by such presentations.
d. The Academic Appeals Committee shall hear cases brought to it by students who are appealing a specific grade or who have been accused of cheating on examinations, plagiarism or other academic dishonesty. Controversies in this area may only be brought to the committee after regular channels of department and school/college have been used.
e. The Traffic Appeals Committee shall hear cases involving disputes over the enforcement of University traffic regulations. Cases may be brought by students, faculty or administrators.
f. The Student Conduct Committee hears appeals from individual students who have been disciplined by the Office of Campus Life. It also may have discipline cases referred directly to it by the Office of Campus Life.
g. The Student Grievance Committee shall hear cases brought to it by students when such cases do not fall within the jurisdiction of the other quasi-judicial committees listed above. Individuals are expected to resolve grievances informally whenever possible, before appealing to this committee.
2. All quasi-judicial committees must have both student and faculty members.

## II. University Court

1. The University Court shall have the authority to hear appeals from the quasi-judicial committees listed herein, only under conditions when 1) the dispute involves an alleged violation of the Bill of Student Rights; and 2) the board of original jurisdiction made procedural errors. If new evidence has become available since the original hearing, the case shall be referred back to the board of original jurisdiction. The court itself will, by majority vote, determine which cases it will hear.
2. Under conditions when a case will be heard by the University Court, the court shall have injunctive power to stay, for a maximum of 10 school
days or until a University Court hearing can be held, whichever comes sooner, implementation of policies and decisions of University committees, administrative officers, faculty members and student organizations that may violate the Student Bill of Rights.
3. In cases of dispute over jurisdiction, the court will determine which quasi-judicial committee will have authority over a particular case.
4. The court shall be composed of four faculty members appointed by the Faculty Senate, four students appointed by the president of the House of Student Representatives with the approval of the House and three administrators appointed by the chancellor.
5. Members shall be appointed in April for terms beginning in June and ending in May. Temporary appointments may be made by the respective bodies for summer if regular appointees are not able to serve.
6. The court shall be free to select its own chairperson.
7. The University Court shall annually review and report to the ratifying bodies upon the quasi-judicial procedures and functions of the University committees.
8. Records of University Court proceedings shall be kept on file for at least five years as a guide for precedent; however, the confidentiality of participants must be protected by the administrator to whom the records are entrusted.

## III. The Chancellor

1. Because the ultimate institutional responsibility has been delegated to the chancellor by the Board of Trustees, he/she retains the right to reverse any decision of the University Judicial System. The chancellor may delegate this authority to an appropriate vice chancellor.

## IV. Educational Discipline Procedures

1. Each quasi-judicial committee and the University Court shall determine its own hearing procedures, provided these procedures meet accepted "fair play" standards.
2. Each quasi-judicial committee and the University Court must observe rules of procedure, which include the following "fair play" rights:
a. The right to be informed in writing of the charges and the possible punishment.
b. The right to have at least three school days in which to prepare a defense to refute the charges.
c. The right to a hearing, which should elicit information from both sides. If possible, the accused shall be able to face his/her accuser(s) and have the right to be advised by legal or other counsel.
d. The right to be furnished a list of names of accusers and witnesses and a statement of facts they testified to, if the accused does not face his/her accusers. However, because of the close proximity in which students live and interact on campus, it is sometimes necessary to protect the anonymity of a witness or accuser. In such cases the dean of campus life may verify the identity of a witness and accept a written statement from him/her without revealing the name of the witness or accuser to the accused.
e. The right to present oral or written testimony.
f. The right to remain silent about any incident in which he/she is a suspect. No form of harassment shall be used by an institutional representative to coerce admissions of guilt.
g. The right to be advised in writing of the results of the hearing.
h. The right to receive a transcript or tape recording of the proceedings, at the individual's own expense, provided this is requested 24 hours before the hearing.

## V. Student Affairs

## Campus Expression

1. Students shall be free to examine and discuss all questions of interest to them and to express opinions publicly and privately.
2. Students have the right to assemble freely and peaceably.
3. Students shall be free to support or protest causes by orderly means.
4. Students have the right to be interviewed on campus for any position for which they meet the qualifications specified by any prospective employer permitted to recruit on campus by the University.
5. Student organizations officially recognized by the University shall be allowed to invite and hear speakers of their choosing. Speaker presentations shall be conducted in a manner consistent with an
academic community and consistent with the philosophy and objectives of TCU. Student organizations have the right to present "entertainment" productions. (As used in this document, entertainment refers to films, theatre, dance, music and art exhibitions.) All productions shall be conducted in a manner consistent with an academic community and consistent with the philosophy and objectives of TCU.

## Campus Organizations

1. Organizations consistent with the philosophies and objectives of TCU shall be recognized by the University Committee on Student Organizations for any lawful purpose upon submission of a constitution and a list of current officers.
2. Membership lists are confidential and solely for the use of the organization, except that they may be solicited for internal use by the University Committee on Student Organizations.
3. Campus organizations, including those affiliated with an extramural organization, shall be open to qualified students without respect to race, creed or national origin. Religious qualifications may be required by organizations whose aims are primarily sectarian.
4. Campus organizations shall have use of appropriate University facilities for their group activities, subject to such regulations as are required for scheduling meeting times, places and payment of any required fees.
5. No individual, group or organization may use the University name without the expressed authorization of the University except to identify University affiliation. University approval or disapproval of any organization's policy may not be stated or implied by that organization.

## Student Communication Media

1. The student communication media shall be free of censorship. The editor and managers shall be free to develop their own editorial policies and methods of news coverage within the framework of the philosophies and objectives of the University. (The term "censorship" in reference to student communications media means any attempt to threaten or coerce any editor, manager or staff member of a student-run publication or broadcast station in order to prevent the dissemination of any factual account or the expression of any opinion, or generally, to hinder the free flow of ideas.)
2. The editorial freedom entails a responsibility to observe the Canons of Responsible Journalism and applicable regulations of the FCC to avoid the publication of libelous and other unlawful statements and to show regard for the standards of taste of the University.

## Student Governance

1. The role and responsibilities of recognized governing bodies composed primarily of students shall be delineated in the constitutions and bylaws of the respective organizations. Actions of student government within the areas of its jurisdiction shall be reviewed only through orderly and prescribed procedures.
2. In the formulation of University policy, students are entitled to a participatory function.

## Student Rooms and Property

1. Students have the right to be free from unreasonable search and seizure by University personnel, and during the process of search and/or seizure the safety of personal effects will be protected.
2. A student's room shall not be occupied during the term of a housing contract by anyone other than the student without written consent from the student.
3. The student, by moving into a University residence hall, acknowledges his/her responsibility to abide by the terms of the housing contract.

## VI. Disciplinary Sanctions

1. University disciplinary sanctions shall be imposed upon a student only in accordance with the provisions of a written, officially adopted and published Code of Student Conduct.
2. When charged with a violation of the Code of Student Conduct, students shall have procedural "fair play" rights.
3. Students formally charged with violating University regulations shall be informed of their "fair play" rights in writing.
4. Students shall have the right to appeal any disciplinary sanction within the provisions of the University judicial system.
5. Students are responsible for answering honestly any questions posed to them in disciplinary hearings unless the individual claims the right to remain silent on the basis of possible self-incrimination.

## VII. Equal Opportunity

Texas Christian University does not discriminate on the basis of personal status or individual characteristics of group affiliation, including, but not limited to, classes protected under federal and state law.

## VIII. Unenumerated Rights and Responsibilities

The preceding unenumerated of rights and responsibilities shall not be construed to be all-inclusive for students in their capacity as members of the student body or as citizens of the community at large.

## IX. Judicial System

Any controversies that may arise in connection with rights and responsibilities of students outlined in this document shall be adjudicated according to the University judicial system.

## X. Amendments

Amendment to the Bill of Rights and Responsibilities may be proposed only by the House of Student Representatives, the Faculty Senate or the TCU chancellor. When proposed, amendments shall be referred to a special committee by a majority vote of the House of Student Representatives or the Faculty Senate, or at the request of the chancellor. The committee shall consist of three members appointed by the president of the House of Student Representatives, three members appointed by the chair of the Faculty Senate and three members appointed by the chancellor. When the committee recommends an amendment to the Bill of Student Rights and Responsibilities, it will require an affirmative vote of a majority of the TCU students voting in a campus-wide election and a majority of the faculty voting in a faculty election, upon recommendations by a majority of the House of Student Representatives and the Faculty Senate, and by approval of the chancellor.

## XI. Ratification

Ratification of this statement shall be by affirmative vote of a majority of the TCU students voting in a campus-wide election and a majority of the faculty voting in a faculty election, upon recommendation by a majority of the Student House of Representatives and the Faculty Senate, and by approval of the chancellor.

## Bill of Student Rights and Responsibilities

## (Officially approved spring 1977)

The purpose of this document is to enumerate the essential provisions of the student's rights and freedoms, together with the corresponding responsibilities that the student assumes while enrolled at TCU. It is understood by all persons concerned that the rights and responsibilities enumerated herein are to be exercised within the framework of the philosophies and objectives of TCU. If need for clarification arises, the University Judicial System shall be used to interpret the philosophies and objectives of the University.

## Section I. Freedom of Access to Higher <br> Education

1. The University shall be open to all applicants regardless of race, religion, sex, age or national origin who are qualified according to its admission requirements.
2. The appropriate facilities and services of the University shall be available to its enrolled students.
3. Each student has the responsibility to meet all of his/her financial obligations to the University.
4. Each student has the responsibility to observe the regulations of the University.

## Section II. Classroom Expression

1. Any student who is in good standing with the University has the right to register for and attend any class (course) for which he/she has met the prerequisites as stated in the official University catalog and that is open to further enrollment.
2. Freedom of discussion and expression of views relevant to a course shall be protected.
3. Students are responsible for meeting the stated requirements of any class for which they are enrolled.
4. Students have the right to academic evaluations that are neither prejudiced nor capricious and that are based on stated class requirements.

## Section III. Student Records

1. The confidential status of student records, including information about student views, beliefs and political association shall be protected. The term "confidential" means the ethical, moral and legal responsibility not to divulge information of a personal nature that has been obtained in the course of a professional relationship except:

- When necessary to prevent an individual's serious injury to himself/herself and/or to another person;
- For use by members of the faculty and administration when necessary to carry on the internal operations of the University;
- When a parent or guardian has legal access to such records; and
- When ordered by a court of competent jurisdiction to release such information.

2. No entry may be made on a student's official transcript without notification to the student.
3. Access to the University record is guaranteed to each student, subject only to applicable state and federal laws and reasonable University regulations as to time, place and supervision.
4. Entries relating to a student's race and religion may be solicited, but shall not become part of the student's official transcript.
5. Within a maximum of five years from the date of an individual's termination from the University, a routine destruction of his/her disciplinary records shall be accomplished.
6. The student has the responsibility to give full, accurate and complete information for all official records required by the University.

## Special Academic Programs

## International Studies: TCU Abroad

The mission of the Center for International Studies: TCU Abroad is to support international academic programs that foster an understanding of the global community. TCU offers a wide range of academic programs abroad, including summer courses led by TCU faculty members, semester-long education abroad programs, and educational exchanges and partnerships abroad. For more information, visit www.studyabroad.tcu.edu.

## Semester and Year-Long Opportunities

The TCU in London Program provides a unique opportunity for TCU students to study in one of the major international capitals of the world, drawing upon the immense intellectual, cultural and human resources of London. TCU partners with the University of Westminster and the University of Roehampton to provide opportunities to take courses in a wide range of disciplines. Students also have the option of choosing an internship for academic credit.
The TCU in Seville Program, in cooperation with the Universidad Pablo de Olavide , offers Spanish language and area studies courses for students of all language levels. Students may take courses in literature, art, political science, economics, business and history in Spanish or English. All students live with Spanish host families for a rich cultural experience.
The TCU in Florence Program offers students of all majors the opportunity to take classes in English at Lorenzo de Medici Institute. Students take an Italian language course in order to fully appreciate life in Florence. Students live in fully furnished apartments in the center of town and have opportunities to meet Italians through activities organized by the local staff.
Other special study abroad opportunities include TCU Exchange Programs and TCU Partner Programs. Exchanges with international universities provide students the opportunity to directly enroll for a semester or year in these universities. TCU Partner Programs are select study abroad programs offering additional semester- and year-long experiences for students in locations throughout Australia, Asia, Europe, Latin America and Africa.

## TCU Summer Programs

TCU summer courses have featured study in various locations, including Argentina, Australia, China, Costa Rica, England, France, Germany, Hungary, Italy, Japan, Scotland and Spain. These intensive courses are developed and directed by TCU faculty members from such disciplines as art history, business, film-digital media-TV, geology, history, interior design, journalism, literature, modern languages, nursing, social work, political science, psychology and Spanish. Carrying TCU credit and the possibility of financial aid, study abroad courses fulfill many of TCU's graduation requirements, while providing opportunities to work closely with some of TCU's best faculty members. TCU students may also study abroad in the summer through TCU Partner Programs.

## Global Citizenship Credential

Global Citizenship Credential (GCC) consists of Global Realities that will affect the world in which we work and live. Students pursuing the credential will select one of six Global Realities for in depth study via course work and global engagement. For more information, visit www.studyabroad.tcu.edu.

## Washington Internships

[^1]internship the following fall. Participation in this non-credit course is required for future Washington interns.
Students who participate in the fall program in Washington receive 15 hours of upper-division credit in political science. Students should consult with their academic adviser to determine how these credits may satisfy departmental or University requirements. For example, up to nine of these 15 hours may be applied to a political science major and up to nine hours may be applied to a political science minor. For further information about the program, contact the Department of Political Science at TCU.

## Schieffer School in Washington

The Schieffer School in Washington was established in 2010 for exemplary seniors in both journalism and strategic communication. Students must have at least a 3.0 GPA to apply during the previous academic year. The program provides for full-time internships in Washington media organizations, such as CBS News, POLITICO, National Geographic and Center for Strategic and International Studies. Students earn additional academic credits in courses taught by TCU's academic partner, The Washington Center. Students become among the best prepared interns in Washington, D.C., by taking a special TCU course called Media in Washington on site.

## The Bachelor's Degree

## Student Responsibility

Faculty, academic advisers and deans are available to help students understand and meet academic requirements for a degree, but the students themselves are responsible for understanding and fulfilling them. If requirements are not satisfied, the degree will be withheld pending adequate fulfillment. Thus, it is essential that all students become familiar with all requirements and remain currently informed throughout their college career.

## Bachelor's Degree Definitions and Regulations

## Major

A major is a prescribed set of courses, number of credit hours or academic experiences in one or more academic disciplines. Completion of a major is designed to assure disciplined and cumulative study, carried on over an extended period of time in an important field of intellectual inquiry. No course may be applied to more than one set of major or minor requirements without the express approval of the dean(s) of the major.

## Minor

A minor is a prescribed set of courses, number of credit hours or academic experiences in one or more academic disciplines. Completion of the minor is designed to assure more than an introduction to an important intellectual field of study but less than a major in that field. A minor is traditionally outside the major field of study. The department offering the minor typically defines the requirements.

## Emphasis, Focus and/or Concentration

Unless otherwise defined specifically within the catalog, an emphasis, focus or concentration is a guided subset of courses or academic experiences defined by the major department and is typically, but not always, within the major area. Emphasis may be further defined as consistent with specific accrediting body requirements (e.g., journalism).

## Program

A program is a shared series of courses or experiences.

## Area of Study

While used generically throughout the catalog, area of study could be replaced by major, minor or emphasis/concentration in most cases.

## Career Track

This term has meaning within student records software and is used with reference to pre-professional program advising as a way to provide appropriate guidance on course selection and experiences, not necessarily tied to a major or minor.

## Semester Hour

The unit of measure for academic credit purposes is the semester hour. A semester hour is equivalent to one hour of recitation or a minimum of two hours of laboratory per week for a semester or an equivalent time for a shorter term. Two hours of preparation for each classroom hour, on the average, are expected.

## Grading

The faculty definition of grades, and the point system designed to indicate quality of work, is as follows:

| A | $4.00-$ Excellent |
| :--- | :--- |
| A- | 3.67 |
| B+ | 3.33 |
| B | $3.00-$ Good |
| B- | 2.67 |
| C+ | 2.33 |


| C | 2.00 - Satisfactory |
| :--- | :--- |
| C- | 1.67 |
| D+ | 1.33 |
| D | 1.00 - Poor |
| D- | 0.67 |
| F | 0.00 - Failing |
| P - Passed the course |  |
| NC - No credit awarded for the course |  |

In all cases where academic policy requires a grade of "C" or better, a "C-" does not meet that criteria. The same applies for " B " and " B -."

## Non-Grade Designators

I - Designates course has not been completed and a final grade has not been assigned. (The "I" must be removed within the first 60 days of the long semester immediately following, or it is changed to an "F." Any extension must have written approval of the instructor and dean. This policy does not apply to senior Honors research papers/theses, graduate thesis or dissertation hours.
Q - Removed from the course by an academic dean.

## AU - Officially audited

## Pass/No-Credit

Undergraduate students may elect a Pass/No-Credit (P/NC) grading option. They may do so by indicating their choice in writing to the Office of the Registrar or online using the student records course edit in my.tcu.edu no later than the date listed in the academic calendar for electing the P/NC grading option. Courses taken on a P/NC basis are graded "P" (pass) and "NC" (no credit). These P/NC courses are not counted in computing the student's GPA and cannot replace a prior grade in the GPA. A "P" course, however, will carry credit hours and be used toward a student's total hours required for graduation. A " P " indicates achievement equivalent to a " $\mathrm{C}-$ " or better. Achievement equivalent to a "D+" or below results in the grade of "NC." Students earn no credit hours in courses in which the grade of "NC" is received. After the last day to elect a Pass/No-Credit grading option, this decision is irrevocable.
Students may take up to two courses (eight hours maximum) on a P/NC basis. No cOurse applied to the student's major, minor or associated requirements may be taken on the P/NC basis. Students in the M.J. Neeley School of Business may not take any course in the lower-division business sequence or in the upper-division business core on the P/NC basis. Students in the College of Education may not take any education course required for teacher certification or in the student's teaching content area on the P/NC basis. Courses offered only with the P/NC grade will not be counted toward this limit on the number of P/NC hours. The P/NC option is not allowed in any English as a foreign language courses offered by the English Language Center.

## Student-Initiated Withdrawal

The purpose of student-initiated withdrawal from courses is to enhance the learning opportunity in a program of study. On recognition that a student may lack the background needed for the mastery of course content, the subject matter in a course does not match student need or interest as anticipated, or that course requirements will limit effective appropriation of learning in a semester's overall program of study, a student may officially withdraw from the course.
Mere absence from a class does not constitute withdrawal. To withdraw from a course, a student must follow official established procedure. By following established procedures, students may withdraw from any class until five academic days following the published date mid-semester reports of unsatisfactory work are due to the registrar. The date of withdrawal for all purposes, including tuition adjustment, shall be the date of official withdrawal. No withdrawals are allowed after this date during the fall and spring semesters or a comparable period during a shorter term.
Students may withdraw from classes with no academic penalty through 70 percent of class days. The last day to declare P/NC will be the day following
the last day to withdraw. (Exam days are considered class days. The last day to withdraw will be the last whole day not to exceed 70 percent.)
Any student experiencing unusual hardship may seek special consideration through a written petition to the dean of the college in which he or she is enrolled. Petitions should, where possible, be documented with supporting statements from a doctor, counselor or family member. Doing unsatisfactory work in a course is not sufficient reason for special consideration. If, in the opinion of the dean, the request is justified, a grade of " Q " (dropped by the dean's permission) may be assigned by the dean after consultation with the instructor of the course, the chair of the department and the dean of the school/college in which the course is offered. Any dean assigning a "Q" will notify the Office of the Registrar.

## Audit Enrollment (Course Visitor)

Occasional visitation of classes by students is allowed with the consent of the instructor. Any extended attendance requires enrollment as an audit. Auditors are admitted to classes on a space-available basis only. An audit fee is charged. TCU Scholars (See Recognitions (p. 42) section) are given the opportunity to audit one class (for which auditing is permitted) without fee within the enrollment semesters for the current degree. TCU Scholars are expected to follow the established regulations for auditors. The following regulations are applicable:

1. Certain classes-laboratory and clinical classes; ranch management day classes; laboratory sections of lecture classes; activity and performance classes, such as in studio art, music and ballet-may not be audited. (Evening ranch management classes may be audited at full tuition and fees.)
2. The only period during which students may register for an audit or change a credit class to audit is from the second day of late registration to the last day of late registration as published in the University calendar. It is recommended that prospective students consult the instructors of courses in which they are interested before they register. Students wishing to audit graduate courses must be admitted for graduate study and have written approval of either the instructor of the course for which they wish to register or the dean of the school/college in which the course is taught.
3. Classroom recitation and participation may be restricted at the discretion of the instructor; no grade is assigned and no credit is awarded.
4. If credit is desired, the student must register for and repeat the regular course after paying regular tuition.
5. The student's name will appear on the instructor's class roll. In order for "AU" to appear on the transcript, however, the instructor must certify at the end of the semester that the student has attended as an auditor. Audits not approved by the instructor as a final grade will be omitted from the student record.

## Grade Point Average

Two GPAs are maintained by Texas Christian University: 1) a semester average based on courses taken at TCU during a particular term, and 2) a cumulative average based on all work attempted at TCU.
A student's GPA is computed by dividing the number of grade points (grade points are earned per semester hour for the successful completion of academic work) by the number of hours (total credit hours attempted at TCU, excluding those attempted on a P/NC basis). Pass/No-Credit courses are disregarded in the calculation of the student's GPA.

## Repeating a Course

If a course taken at TCU is repeated at TCU, the official grade is the last letter grade made, although all grades appear on the transcript. Only the last letter grade earned in the repeated course will be used in computing the GPA.
If a course is taken at TCU and then repeated at another institution, or if a course is taken at another institution and then repeated at TCU, only the grade earned at TCU is used to compute the student's GPA. Credit for any given course, regardless of where it was taken, may be counted only once.
The student is responsible for notifying the Office of the Registrar when a course is repeated.

## Transfer Credit

Transfer credit is identified on the academic record as the total number of credit hours accepted from each institution attended and is added to the total number of cumulative earned hours. Transfer credit hours may satisfy degree requirements but are not used in the calculation of the cumulative GPA.

## Examination and Portfolio Assessment Credit

Credit earned by examination or portfolio assessment is not assigned a letter grade and is not included in the calculation of the cumulative GPA.

## Course Credit

## Transfer Credit Policy

Students transferring to TCU must present a record of all transfer work for evaluation to the Office of Admission for approval by the appropriate academic dean prior to their enrollment in the University. Transfer coursework not presented prior to enrollment may not be counted toward a degree.
After enrolling at TCU:

1. All students must receive prior approval by the appropriate academic dean if they wish to take courses at another institution and have those courses count toward a degree at TCU. Coursework taken without prior written approval may not be applied to a degree.
2. Once a student is enrolled at TCU, no more than 12 total semester hours, except those earned in an approved study abroad program, may be transferred from other schools.
3. No credit may be transferred from a community college once 54 cumulative semester hours have been earned.
Transcripts of coursework taken elsewhere must reach the Office of the Registrar within 30 days of completion of the coursework.

## Study Abroad Credit

TCU supports three types of study abroad programs: programs administered by the Center for International Studies, called "TCU in" programs; programs administered by select providers and universities with which the TCU has an agreement, called "Partner" programs; and "Petition" programs, special programs for which a student has submitted a petition and the Center for International Studies and the students' academic unit have approved. Petition programs must be accredited, non-U.S. institutions of higher education.
For TCU in programs, Partner programs and Petition programs not utilizing a U.S. transcript, courses count as residency credit, in which case the course grades are computed in the official TCU GPA and students can elect to take individual courses P/NC following TCU policy.
Study Abroad Petition programs utilizing U.S. transcripts will be brought in as transfer credit.
The Center for International Studies: TCU Abroad assists students in making arrangement for international study.

## Credit by Examination

Students may earn academic credit for university-level learning by taking an examination in the appropriate area. Credit granted usually can be used to satisfy specific and general degree requirements. Credit by examination will not be awarded after the student has completed 66 hours of college credit.
For the currently enrolled student, the following conditions apply:

1. The approval of the academic dean must be obtained before taking CLEP or other recognized examinations for credit.
2. Credit by examination will not be awarded for a prerequisite course if credit has been earned in an upper-division course.
3. Credit earned by examination is not assigned a letter grade and is not counted toward special recognition or honors.
4. Duplicate credit is not allowed by enrolling in and completing a course for which credit was earned by examination.
5. Credit may be earned through selected CLEP General and Subject examinations, College Board Achievement Test in Foreign Languages and through locally constructed examinations.
For the entering student, the following conditions apply:
6. TCU grants credit in some subject areas through the following standardized examination programs: College Board Advanced Placement (AP), College Level Examination Program (CLEP), College Board Achievement Tests in Foreign Languages (ACH) and International Baccalaureate (IB).
7. Credit may be obtained through the following institutional examinations: locally constructed examinations in nursing, conference
examinations in music, audition examination in ballet and/or modern dance, and certain non-U.S. advance-level national examinations.
8. Credit in English Composition earned by examination will be honored if it appears on an official college transcript.
9. Students may demonstrate competency in a language other than English by meeting the TCU non-English language undergraduate requirement (and earn credit for this requirement) in a variety of ways. First, the student may meet the requirement by successful completion of coursework at TCU, or by approved transfer credit from another institution, as specified in each academic major and receive the number of credit hours earned in those courses. Additionally, a student may provide evidence of competency in the non-English language by 1) scores on standardized tests approved by the University, for which the student will receive three to 12 hours of credit depending on the examination score, or 2) successful completion of one academic year in a secondary or post-secondary institution in which the language of instruction is other than English, for which the student will receive 12 hours of credit.
The credit by examination procedures are reviewed and updated annually. The current Credit by Exam information is available on the Office of Admission's website.

## Military Service Credit

The University follows, with limitations, the recommendations of the American Council on Education as published in the Guide to the Evaluation of Educational Experiences in the Armed Forces in granting credit for military service schools. See Military Service Credit (p. 9) in the Admissions section of this catalog for specific requirements.

## Nonresidential Coursework Credit

As a general rule, TCU does not accept nonresidential courses taken prior to enrollment at TCU. However, a student may petition the appropriate academic dean to grant credit. Nonresidential courses taken while a student is in residence at TCU require prior permission of the appropriate dean if the courses are to be applied toward a TCU degree.

## Independent Study Credit

Some departments at TCU offer an opportunity for independent study, usually pursued late in a student's major. It has a broad range of purposes. Perhaps most important is exposure of the undergraduate student to methods and techniques usually reserved for graduate students. Seminars, reading and reviews, and independent research characterize this phase of a student's work, which normally is optional. Independent study courses are also available to exceptional students with exceptional needs. A student, for example, may want a more intensive exposure to a specific subject than a standard course provides. With faculty approval, an independent study course can provide the opportunity to go as far as interest and capability allow.

## Academic Load

The student of average ability should be able to take successfully 15-18 semester hours in a long term. The student should regularly consult with his/her academic adviser, but the student must know the academic requirements of his/her degree program and plan accordingly for a timely graduation. After consultation with the academic adviser, the student will select the appropriate courses and number of credit hours to be taken each semester. Decisions regarding the number of hours to be taken and class scheduling will differ among students based upon many variables (e.g., academic preparedness and commitments to out-of-class activities). The University's Web-based registration allows a student to register for up to 18 semester hours once classes have begun (To assure equitable access to courses, students are limited to fewer than 18 hours prior to the first day of class.) Students seeking to register for more than 18 hours must take written approval from the academic dean to the Office of the Registrar. Students enrolled through the Office of Extended Education must obtain approval of the director to register for more than seven semester hours.
The amount of required classroom/laboratory time for students enrolled in a summer session course conforms to TCU standards. In summer sessions, the time frame in which this work must be accomplished is significantly compressed. Even superior students may find academic pursuits difficult under such conditions. While as many as 15-18 credit hours may be earned during the several summer sessions, a student may not be enrolled in more than seven credit hours at any one time and no more than four credit hours concurrently during the three-week mini-term. Study abroad programs are not affected by this policy. Any exception to this policy must have written approval of the dean of the major.

## Determining Full- and Part-time Enrollment

## Undergraduate Students

Full-time enrollment for undergraduate students is 12 hours. $9.00-11.99$ hours is $3 / 4$ time 6.00-8.99 hours is $1 / 2$ time $3.00-5.99$ hours is $1 / 4$ time Round down to nearest cutoff.
Exceptions for undergraduate students are made when:

- Their academic program restricts them from enrolling in 12 hours. For instance, students enrolled in student teaching may only enroll for six hours. Such students will be considered full time for that semester except for purposes of federal financial aid.
- Students enrolled in the last semester necessary for graduation may be considered full time if their enrollment is less than 12 hours except for purposes of federal financial aid.


## Student Classification

A student's classification is determined by the amount of credit earned or the degree for which the student is a candidate, as shown below:
Freshman: 0-23 semester hours
Sophomore: 24-53 semester hours
J unior: 54-83 semester hours
Senior: 84 and above semester hours
Graduate: Student enrolled for graduate study or in Brite Divinity School
Post-Graduate: Student who possesses a baccalaureate degree but is not pursuing an advanced degree program
Special: Unclassified

## Course Abbreviations

Each course is assigned a five-digit number. The first digit indicates the level (year) at which the course is offered; the second, third and fourth digits distinguish one course from another within the same department; the fifth digit reflects the amount of semester-hour credit assigned to the course. In indicating the level or year of the course, 0 is used for sub-freshman; 1 for freshman; 2 for sophomore; 3 for junior; 4 for senior; 5 for senior-graduate; and $6,7,8$ and 9 for graduate.
The fifth digit shows semester-hour credit with one exception - zero is assigned to those courses that include one or more of the following features: non-credit, credit value that includes a fraction, or the course has a variable credit value that is determined at the time of enrollment on an individual basis.
Thus the course English 10803 (or ENGL 10803) is freshman level (first digit) and carries three semester hours of credit (fifth digit). The three middle digits (second, third and fourth) identify it as a specific course in the Department of English.
When the term "advanced courses" is used, it refers to those of junior rank (30000 level) or higher.
In designating courses, departments use the four-letter subject code (such as ENGL for English) that has been devised for Web-based registration.
The codes are to be interpreted as follows:
AADM
Arts Administration
ACCT
Accounting
ADRN AddRan Interdisciplinary
AEST Aerospace Studies
ANTH Anthropology
ARED Art Education
ARGD Graphic Design
ARHI Art History

| ARST | Studio Art | JAPN | Japanese |
| :---: | :---: | :---: | :---: |
| ART | Art | JOUR | Journalism |
| BIOL | Biology | KINE | Kinesiology |
| BRST | British and Colonial/Post-Colonial Studies | LTNO | Latina/o Studies |
| BUSI | Business | MANA | Management |
| CHDV | Child Development | MARK | Marketing |
| CHEM | Chemistry | MATH | Mathematics |
| CHIN | Chinese | MILS | Military Science |
| CITE | Computer Information Technology | MOLA | Modern Languages |
| COMM | Communication Studies | MUSI | Music |
| cosc | Computer Science | MUSP | Music Performance |
| COSD | Communication Sciences and Disorders | NTDT | Nutritional Sciences |
| CRJU | Criminal Justice | NURS | Nursing |
| DANC | Dance | PEAC | Physical Education Activity Courses |
| ECON | Economics | PHIL | Philosophy |
| EDEC | Education: Early Childhood | PHYS | Physics and Astronomy |
| EDMS | Education - Middle School | PORT | Portuguese |
| EDRE | Education - Reading | POSC | Political Science |
| EDSE | Education - Secondary | PSYC | Psychology |
| EDSP | Education - Special | RAMA | Ranch Management |
| EDUC | Education - General | RELI | Religion |
| ENFL | English as a Foreign Language | SCIE | Science \& Engineering Interdisciplinary |
| ENGL | English |  |  |
| ENGR | Engineering | SOCl | Sociology |
| ENSC | Environmental Science | sowo | Social Work |
| ENTM | Energy Technology and Management | SPAN | Spanish |
| FINA | Finance | STCO | Strategic Communication |
| FNRT | Fine Arts Interdisciplinary | THEA | Theatre |
| FREN | French | UNPR | University Programs |
| FTDM | Film, Television, and Digital Media | WRIT | Writing |
| GEOG | Geography | WGST | Women and Gender Studies |
| GEOL | Geology | Grade Reports |  |
| GREE | Greek |  |  |
| GRMN | German | Grades are reported to students at the end of each semester and summer session. Reports are also made at mid-semester on undergraduate students who are doing unsatisfactory work in one or more subjects. Unsatisfactory shall be defined as "D" or "F" work. Mid-semester reports of unsatisfactory work are not made part of the official University transcript. |  |
| HARE HCOL | Human-Animal Relationships Honors Colloquia |  |  |
| HEBR | Hebrew | Academic Conduct Policy |  |
| HHIT | Honors Intellectual Traditions |  |  |
| HIST | History | To fulfill its missions, an academic community requires that all of its participants maintain the highest standards of honor and integrity. The purpose of the Academic Conduct Policy is to make all community members aware of these expectations. Additionally, the policy outlines some, but not all, of the situations that violate these standards. Further, the policy sets forth a set of procedures that will be used when these standards are violated. |  |
| HITP | Honors Intellectual Traditions, Purpose |  |  |
| HLTH | Health |  |  |
| HNRS | Honors - Origins and Images | Specific information pertaining to the Academic Conduct Policy may be found in the Student Policies section of this catalog. Students may also obtain a complete copy of the policy statement in the offices of all academic deans and from the dean of campus life, the vice chancellor for academic affairs and the vice chancellor for student affairs. |  |
| HSPR | Honors Special Problems |  |  |
| IDFM | Interior Design and Fashion Merchandising |  |  |
| INSC | Information Systems and Supply Chain Management |  |  |
| ITAL | Italian |  |  |

## Disruptive Classroom Behavior and Lack of Academic Progress Policy

Disruptive behavior is prohibited. Disruptive behavior includes, but is not limited to, conduct that substantially interferes with or obstructs the teaching or learning process. Civil expression of disagreement with the course instructor, during times when the instructor permits discussion, is not itself disruptive behavior and is not prohibited.
When any student, acting individually or in concert with others, obstructs or disrupts or attempts to obstruct or disrupt any teaching, research, administrative, disciplinary or public service activity, or any other activity authorized to be discharged on behalf of the University or held on the University's premises, the student may be asked to stop the disruptive behavior by an instructor or staff of the University. If the student continues, an instructor/staff member is authorized to tell the student to leave the area or classroom and, if the student will not leave, to call campus police.
The instructor/staff may immediately call campus police, without prior request to the student, if presented with an unsafe situation, threatening behavior, violence or in other inappropriate circumstances.

## Withdrawal of Student from Class or Other Educational Experience

When a student disrupts a class or other educational experience, acts in a threatening manner, is not making acceptable academic progress, or if the student's behavior or lack of preparation is detrimental to the educational experience of others or could create an unsafe condition, or if the student is compromising the learning environment, the instructor may take action to withdraw the student from the class or educational experience.
To do this, the instructor shall provide the student written notice of intent to withdraw the student from the class or educational experience, with an explanation of the instructor's reason(s), and with a copy to the instructor's department chair (or, when there is no department chair, to the associate dean of the instructor's college/school). The notice should schedule a meeting with the student and the department chair (or, when there is no department chair, with the associate dean or dean of the instructor's college/school) to occur within seven days of the notice. The instructor may bar the student from the class or educational experience pending the result of the meeting, and the written notice should advise the student if there is such a bar. At the meeting, the student may have one adviser. Following the meeting, the instructor shall decide whether to withdraw the student from the class or educational experience. If a student is withdrawn, his/her grade will be recommended by the instructor to the dean of the instructor's college/school as either a " Q " or an " F ." The student may appeal this decision within seven days in writing to the academic dean or designee. During the student's appeal, the student remains withdrawn from and is barred from attending the class. The academic dean or his/or her designee's decision on this appeal is final.

## Denying Enrollment, Suspension, Expulsion and Other Appropriate Action <br> When a student disrupts a class or other educational experience, acts in a

 threatening manner, is not making acceptable academic progress, or if the student's behavior or lack of preparation is detrimental to the educational experience of others or could create an unsafe condition, or if the student is compromising the learning environment, or if the student has acted contrary to the professional or ethical standards of the University, a department thereof, or a particular field, an academic dean, or the dean's designee, may additionally:- Deny class enrollment to the student; or
- Suspend or expel the student from the University or from one or more of its programs; or
- Take other appropriate action.
- The student affected by such a decision by an academic dean, or the dean's designee, may appeal in writing within seven days to the Academic Appeals Committee. The decision of the academic dean (or designee) remains in place during the pendency of the appeal. The Academic Appeals Committee's decision on the matter is final.
A student so suspended or expelled shall have a grade of " $Q$ " or " $F$ " recorded for each course in progress as determined appropriate by the academic dean. The transcript will not record suspension or expulsion.


## Non-Students and Non-Enrolled Students

Non-students and students not enrolled in class may be permanently removed by an instructor of the class, without formal review. Non-students who disrupt University activities may be removed from campus and banned from returning.

Although some disruptive behavior may be due to a mental or physical disorder, as it relates to violence, disruptive or threatening behavior, students with such disorders will be held to the same standards as others.
Nothing in this policy limits a person, including but not limited to, an instructor, academic dean, associate dean or department chair from referring a matter to the Office of Campus Life or pursuing disciplinary action against a student or person through a complaint filed in the Office of Campus Life.
This policy is not intended to limit any authorized University employee, staff member, official, vice chancellor, chancellor, members of the Board of Trustees or a member of the Office of Campus Life from appropriately addressing behaviors covered by the policy.

## Academic Standing and Satisfactory Academic Progress

A student is considered to be in "acceptable academic standing" if the student is eligible to continue his/her enrollment at TCU. Verification of this status is made by the Office of the Registrar.
A student is considered to be making "satisfactory academic progress" when the student has acceptable academic standing and coursework is being completed 1) that leads to the degree being sought, 2) in a timely manner and (3) that is consistent with reasonable expectations for individual circumstances. Satisfactory academic progress is determined by the academic dean of the major.

## Attendance Expectations and Official Absence Policy

Regular and punctual class attendance is essential, and no assigned work is summarily excused because of absence, no matter what the cause. Records of class attendance are the responsibility of the faculty, and every course syllabus should clearly state the instructor's policy on class attendance and how attendance affects a student's final evaluation in the course. Students who miss an instructional experience are expected to meet with faculty to discuss their absence as soon as possible.
When a student is absent to represent the University (as in athletics, chorus, band, national or state meetings or organizations represented at TCU), then an Official University Absence may be granted by the Office of Campus Life. Faculty/staff who wish to have an activity sanctioned for Official University Absence status must submit the names of all students, including date and hours absent from campus, to the Office of Campus Life no later than one week prior to the date of the activity.
Students are encouraged to use the resources of the Office of Campus Life if an emergency situation occurs or if assistance is needed to resolve individual concerns.

## Family Educational Rights and Privacy Act

This Federal law states that a written institutional policy must be established and that a statement of adopted procedures covering the privacy rights of students be made available. The law provides that the institution maintain the confidentiality of student education records.
The University accords all the rights under the law to its students. Students wishing access to a complete copy of the regulation and the University policy governing their educational records may do so at the offices of the Provost/Vice Chancellor for Academic Affairs, Sadler Hall Room 4022; Vice Chancellor for Student Affairs, Sadler Hall Room 4017; Dean of Campus Life, Sadler Hall Room 2006; Registrar, Sadler Hall Room 1006; or Scholarships and Financial Aid, Sadler Hall Room 2008.
There are six rights, which are summarized here:

1. The Right to be Informed. The University will give students an annual notice of their rights and where copies of the policy may be reviewed.
2. The Right to Inspect. Students may inspect information contained in their educational record provided they make a written request to the custodian of the records. The request must be granted no later than 45 days from the receipt of the request.
3. Right to Limited Control of Release. No one outside the institution shall have access to, nor will the University disclose identifiable information from the educational records without written consent of the students, except directory information or other exceptions permitted by the act, which the student has not refused to permit the University to disclose.
4. Right to Request a Change. Students may request that the record be amended if they feel the information is inaccurate, misleading or in

## Other

violation of the rights of privacy. The University will decide whether to change the record. The student may place a rebuttal in the record.
5. Right to a Hearing. If the University chooses not to amend the record, the student may request a hearing. The request must be in writing to the vice chancellor for student affairs or the vice chancellor for academic affairs. The student will be notified of the time, date and place of the hearing.
6. Right to Report Alleged Violations. Students who feel their rights have been abridged may file complaints with the Family Educational Rights and Privacy Act Office, Department of Education, Washington, D.C. 20201.

At its discretion, TCU may provide directory information in accordance with the provisions of the act to include student name, address, telephone number, email address, image, name of parents of dependent students, date and place of birth, major field of study, dates of attendance, degrees and awards received, the most recent previous educational agency or institution attended by the student, participation in officially recognized activities and sports, and weight and height of members of athletic teams. It is also permissible for the University to release information from a student's educational record to a parent, provided the student is a "dependent" as defined in Section 152 of the Internal Revenue Code of 1954. Students may withhold directory information by notifying the registrar in writing. Requests for nondisclosure will be honored for only one academic year; therefore, authorization to withhold directory information must be filed annually in the Office of the Registrar.

## Transcripts of Academic Records


#### Abstract

Students and former students may request official transcripts of their TCU academic record from the Office of the Registrar. Official copies of high school records and transfer credits from schools other than TCU must be requested from the institutions where the work was taken. All transcript requests must be made by the student. Adequate notice, normally one week, is required for transcript processing. Transcripts cost $\$ 10$ each. Transcripts will not be released unless the student has satisfied all financial obligations to the University. Disciplinary actions do not appear on the official transcript, but students who leave the university after disciplinary action or when disciplinary action is pending may at the discretion of the Dean of Campus Life have a letter attached to the official transcript describing their disciplinary problem or suggesting that the recipient contact an appropriate person in the Office of Campus Life.


## Affirmative Action

If there are matters having to do with discrimination or matters concerning access for the disabled, notify Darron Turner, affirmative action officer, Jarvis Hall Room 218, ext. 5557; or Kristin Taylor, deputy affirmative action officer, Office of Human Resources, 3100 West Berry Street, ext. 4161.

## Academic Probation and Suspension Policies

All undergraduate students are required to meet certain academic standards. Academic probation/suspension policies are designed to provide careful supervision of the program of study and progress of the student. Failure to meet standards will place students on academic probation or academic suspension. The minimum satisfactory record at TCU for normal progress and graduation is an overall "C" average on all work taken at TCU.
Each semester's grades are reviewed to determine attainment of academic standards. Students are required to maintain academic progress according to the standards set forth below. Failure to meet these expectations will result in academic warning, probation or suspension.

## Academic Warning

Students will be placed on academic warning if they have attempted (i.e., received a grade) at least nine semester hours but fewer than 18 total semester hours at any accredited institution and their cumulative TCU GPA falls below 2.00. Academic warning will not become a part of the official transcript. Students will be placed on academic warning only once during their matriculation at TCU.

## Academic Probation

Students who fail to achieve:

- A 2.00 cumulative TCU GPA in any semester of attendance following academic warning will be placed on academic probation, or,
- A 2.00 cumulative TCU GPA in any semester of attendance will be placed on academic probation if they have attempted 18 or more cumulative semester hours at any accredited institution.

Academic probation will become part of their official transcript.

## Academic Suspension

Students who have been placed on academic probation at any time during their matriculation at TCU will be subject to academic suspension if they fail to maintain a 2.00 cumulative GPA at TCU in any subsequent semester of attendance.
Students who are subject to academic suspension will have their academic progress reviewed by their academic dean and will be notified in writing as to the academic suspension decision and any special conditions for reenrollment. A student's suspension may be for a single semester or for a full calendar year and may or may not include summer terms, at the discretion of the dean of the student's major. A second suspension will be for a minimum of a full calendar year.
Following suspension the student must apply for re-enrollment to the University. Re-enrollment requires the approval of the academic dean of the student's intended major. Credit earned from another college or university during a period of academic-related suspension may not be transferred to TCU. A student re-enrolled in the University following a period of suspension is automatically on probation.
Academic suspension will become part of their official transcript.

## Graduation Requirements

The University requirements for graduation (e.g., TCU Core Curriculum or University Curriculum, total credits and residence requirements) specified in the Undergraduate Studies Catalog in effect at the time the student first enrolls at TCU as a degree-seeking student will be those required for graduation for a period of time not to exceed six years. A year is defined as the 12-month period following the date of initial enrollment.
The major, school/college and specific degree requirements for graduation in effect when the student formally declares a specific major (or his/her intent to pursue a specific major) will be those required for graduation for a period of time not to exceed six years from the time of declaration of major.
After six years, requirements for graduation will be those specified in the catalog in effect at that time. A student may graduate under the requirements of a subsequent catalog, but he/she must satisfy all the requirements of the catalog chosen. When a student pursues a degree on a part-time basis, his/her enrollment pattern at TCU is a factor the academic dean may consider to determine whether an exception will be made to the six-year rule.
The University faculty expects a bachelor's degree from TCU to indicate both a breadth of knowledge and comparative mastery of some field. Thus the curricula for all bachelor's degrees are built around:

- Study in specified subject areas as stated in the TCU Core Curriculum, or University Curriculum requirements, as appropriate; and
- Concentration upon a combination of related courses as outlined by the department, school or college in which study is emphasized; and
- In some cases, "free electives" or other courses through which educational goals can be reached.
Since an important goal of the University is to help its students learn the ways and habits of articulate thought, the rationale for the TCU Core Curriculum (or University Curriculum) is the belief that there exists an identifiable body of studies central to achieving that goal. All bachelor's degree plans include these requirements. Each school/college may require some variation, and students should refer to the specific degree requirements found in the school/college sections of this catalog.
Additional information may be obtained from the academic dean and/or academic adviser.


## TCU Core Curriculum Requirements

The TCU Core Curriculum requirements apply to freshman students matriculating at TCU in summer 2005 or later. Students who matriculated at TCU prior to Summer 2005 are subject to the University Curriculum Requirements (UCR). Transfer students matriculating at TCU prior to Summer 2007 are also subject to the UCR.
The educational experience offered by TCU reflects its membership in the worldwide academy of learning. The intellectual traditions of the University, honed by the scholarship and creativity of successive generations of faculty, are founded upon a rational and reflective examination of humanity and its
natural and social environments. The essential elements of these traditions are captured in the TCU Core Curriculum requirements.
The TCU Core Curriculum is designed to:

- Embody the liberal arts ethos of Texas Christian University;
- Facilitate a focus on educational competencies, learning outcomes and assessment;
- Show sensitivity to the special needs of students in different colleges and degree programs; and
- Provide intellectual challenges and opportunities for students and faculty.
The goals of the TCU Core Curriculum are described clearly in the Heritage, Philosophy and Goals section of the TCU Handbook for Faculty and Staff:

The University ... regards as essential the advancement and communication of general knowledge which enables students to understand the past, to comprehend the natural and social order, to search for the good and the beautiful, and to integrate knowledge into significant wholes.

## The TCU Core Curriculum has three components:

1. The Essential Competencies Curriculum ( 12 hours plus 6 hours Writing Emphasis);
2. The Human Experiences and Endeavors Curriculum ( 27 hours); and
3. The Heritage, Mission, Vision and Values Curriculum (18 hours).

Courses in the TCU Core Curriculum may overlay with other requirements of the student's degree program. The overlay feature provides the flexibility for core requirements to be satisfied in a range between 39 and 63 hours. See TCU Core Curriculum for specific information.

## Total Credits and Residence Requirements

Beyond the curricular requirements, each candidate for a bachelor's degree is required to:

1. Successfully complete at least 124 semester hours of credit.
2. Earn, under the point system of the University, a cumulative GPA of at least 2.0 in all work attempted at TCU (including courses attempted during international study that are designated by the student to fulfill residency requirements), earn a cumulative GPA of at least 2.0 in all courses attempted in the department of the major at TCU (including courses attempted during international study that are designated by the student to fulfill residency requirements), and earn a cumulative GPA of at least 2.0 in all courses applied to the minor (including courses attempted during international study that are designated by the student to fulfill residency requirements). Some major and minor programs may require a GPA greater than 2.0 for entry into and progression in the program and/or graduation.
3. Complete residence work at the University earning at least 58 semester hours applicable to the degree program in addition to any hours accepted from other schools. To be eligible for graduation with honors and to receive certain awards and recognitions, additional hours may be required (see Honors and Recognitions section (p. 42).). The last 30 semester hours for the degree must be taken at TCU except as provided for in certain degree programs.
4. Successfully complete at TCU at least 42 of the total hours required for graduation in advanced courses numbered 30000 or above.
5. Successfully complete at TCU at least 12 semester hours of advanced work in the field of the major and at least six semester hours of advanced work in the field of the minor.
6. No more than eight semester hours of physical education activity may be applied toward graduation requirements.

## Academic Major Declaration

The pre-major option is intended to provide students with more time to explore academic majors. Students may not remain or declare as pre-majors after they have earned 54 semester hours of credit. The pre-major student must formally declare a major by making a request to change the major online at my.tcu.edu.

## Multiple Majors

Although students are encouraged to seek a broad educational experience at TCU, the approval to earn multiple majors is not automatic. In some cases, receiving multiple majors may require actually earning multiple degrees. Because the requirements of multiple majors and multiple degrees are complex, students wishing to pursue more than one major should investigate major and degree requirements early in their career at TCU (i.e., refer to the appropriate school/college section of this catalog, which
delineates the requirements for multiple majors and degrees). To pursue multiple majors or degrees, written permission from the academic dean responsible for each major or degree is required and must be filed with the Office of the Registrar. No course may be applied to more than one set of major or minor requirements without the express approval of the academic dean.

## Double Degrees

A TCU student who wishes to pursue multiple bachelor's degrees concurrently must:

- Declare intent and file all degree plans prior to completing the last 15 hours of either degree.
- Fulfill all specific major, college/school and University degree requirements in force at the time of initial enrollment (subject to the sixyear limitation).
- Successfully complete 30 hours on each bachelor's degree that did not apply toward any of the other bachelor's degrees. (A second bachelor's degree will not be awarded until the student has completed at least 30 hours in addition to those counted toward the bachelor's degree that requires the higher number of credit hours.)
- No course may be applied to more than one set of major or minor requirements without the express approval of the appropriate dean.
To return to TCU to earn an additional bachelor's degree, an applicant holding a bachelor's degree from TCU must apply to pursue a specific degree and, if admitted, must successfully complete a minimum of 30 semester hours at TCU that did not apply to the first degree, plus fulfill all specific major, college/school and University degree requirements in force at the time of enrollment for the additional degree.
A second bachelor's degree will not be awarded until the student has completed at least 30 hours in addition to those counted toward the bachelor's degree that requires the higher number of credit hours.
An applicant holding a bachelor's degree from another accredited institution must:
- Be accepted to pursue a specific degree.
- Successfully complete a minimum of 58 semester hours in residence at TCU.
- Fulfill all specific major, college/school and University degree requirements in force at the time of enrollment at TCU for the additional degree.
Courses applied toward a previously earned bachelor's degree will be evaluated on an individual basis to determine their applicability to University degree requirements.


## Degree Plan

The undergraduate student should make a formal request for a degree plan from the office of the dean of the college/school in which the degree objective is offered. The request should be made when the student has completed 60 semester hours, unless the school/college specifies an earlier time in its section of the catalog. After a degree is awarded, no subsequent work may be applied to that degree.

## Honors and Recognitions

Texas Christian University honors high academic achievement. The most significant recognitions are conferred at graduation, but there are many interim awards as well. Some formal recognitions become a part of the student's permanent academic record; others may be in the form of a letter of commendation or list posted on the bulletin board. Each spring, Honors Week focuses attention on high academic achievement through special programs and publications. (Grade point average requirements discussed in the following sections refer exclusively to the TCU GPA.)

## TCU Scholars

Full-time, degree-seeking undergraduate students who achieve a 4.0 GPA (all "A" grades) in any spring or fall semester are recognized as TCU Scholars by the academic deans. In that semester, they must have earned credit for at least 12 hours; "I" and "P" grades are not counted. TCU Scholars may audit one course without fee any time within a year of their designation.

## Dean's Honor List

At the end of each fall and spring semester, deans of undergraduate schools/colleges announce the names of those who have done exceptionally well. To be eligible for the Dean's Honor List, freshmen must achieve at least a 3.6 GPA, sophomores at least 3.7, juniors at least 3.8 and seniors at least 3.8.

In that semester, they must have earned credit for at least 12 hours; "I" and "P" grades are not counted toward the 12 earned hours.

## Graduation Honors

Students with a GPA of 3.9 or above are graduated Summa Cum Laude, perhaps the highest academic distinction. Those with 3.7 or above are graduated Magna Cum Laude, an only marginally less prestigious honor. And for those with 3.5 or above, graduation is Cum Laude. Graduation honors are reserved for students who earn at least 58 semester hours at TCU exclusive of any credit by examination.

## Honor Societies

In almost all academic fields, national honor societies recognize students who show exceptional ability. Most departments at TCU have chapters of such societies to which high-achieving students are invited. In addition, some prestigious honor societies are open to students from throughout the University. The following are best-known at TCU and throughout the nation.

## Phi Beta Kappa

Phi Beta Kappa is the oldest such society in America and one of the most selective. It invites to membership students with high grades whose studies show a breadth of knowledge in the liberal arts. Most initiates are seniors though juniors, and graduate students are sometimes invited.

## Mortar Board

Mortar Board invites students to membership on the basis of their service and leadership as well as scholarship.

## TCU Core Curriculum

The TCU CoreCurriculum requirements apply to freshman students matriculating at TCU in summer 2005 or later. Students who matriculated at TCU prior to summer 2005 are subject to the University Curriculum Requirements (UCR). Transfer students matriculating at TCU prior summer 2007 are also subject to the UCR.
The educational experience offered by TCU reflects its membership in the worldwide academy of learning. The intellectual traditions of the University, honed by the scholarship and creativity of successive generations of faculty, are founded upon a rational and reflective examination of humanity and its natural and social environments. The essential elements of these traditions are captured in the TCU Core Curriculum requirements.
The TCU Core Curriculum is designed to:

- Embody the liberal arts ethos of TCU;
- Facilitate a focus on educational competencies, learning outcomes and assessment;
- Show sensitivity to the special needs of students in different schools/colleges and degree programs; and
- Provide intellectual challenges and opportunities for students and faculty.
The goals of the TCU Core Curriculum are described clearly in the Heritage, Philosophy and Goals section of the TCU Handbook for Faculty and Staff:
The University ... regards as essential the advancement and communication of general knowledge which enables students to understand the past, to comprehend the natural and social order, to search for the good and the beautiful, and to integrate knowledge into significant wholes.
The TCU Core Curriculum has three components:

1. The Essential Competencies Curriculum ( 12 hours plus 6 hours Writing Emphasis);
2. The Human Experiences and Endeavors Curriculum (27 hours); and
3. The Heritage, Mission, Vision and Values Curriculum ( 18 hours).

All courses in the TCU Core Curriculum may overlay with other requirements of the student's degree program. The overlay feature provides the flexibility for core requirements to be satisfied in a range between 39 and 63 hours.

## Essential Competencies

## 12 hours plus 6 hours Writing Emphasis

Courses in this curriculum are designed to provide a base of skills to ensure students' abilities to communicate clearly and think analytically. Their focus is effective writing, mathematical reasoning and oral communication. The requirements and competencies are:

| Requirements | Competencies: TCU graduates <br> will: |  |
| :--- | :--- | :--- |
| Mathematical <br> Reasoning | 3 hours | Be able to reason mathematically. |

in the Essential Competencies Curriculum may be taken from any one area as defined by course prefix.

## Human Experience and Endeavors

## 27 hours

Courses in this curriculum explore significant achievements and discoveries in the humanities, fine arts, social sciences and natural sciences. The aim is to develop students' knowledge of the human condition and its connections to the good and the beautiful, and to the natural and social orders. The requirements and competencies for this curriculum are:

| Requirements |  | Competencies: TCU graduates will: |
| :---: | :---: | :---: |
| Humanities | 9 hours | Apply methods of humanistic inquiry and construct relevant arguments. |
| Social Sciences | 9 hours | Understand social environments that arise from and influence human interaction. |
| Natural Sciences | 6 hours | Be literate in the natural sciences. |
| Fine Arts | 3 hours | Understand the significance of the fine arts and the importance of creativity through standard coursework and/or applied study. |
| Courses proposed may also meet the and Values Curricu or general curricu Endeavors Curricul prefix. In addition, natural sciences, re defined by course | for the H um or co <br> m. No m $m$ may be he require pectively, efix. | xperiences and Endeavors Curriculum tegory in the Heritage, Mission, Vision th courses required for the major, minor two courses in the Human Experiences and from any one area as defined by course in the humanities, social sciences and satisfied in at least two different areas as |

## Heritage, Mission, Vision and Values

## 18 hours

Courses in this curriculum cultivate the broader skills and awareness associated with TCU's distinctive heritage, mission, vision and values. TCU's heritage is explored via the study of religious traditions, historical traditions and literary traditions. Similarly, TCU's mission, vision and values are explored via courses that focus on cultural awareness, global awareness, and citizenship and social values.
By design, the Heritage, Mission, Vision and Values Curriculum are not bound to any particular discipline or department. Through a range of disciplinary perspectives, these courses encourage pedagogical innovation and conversation across traditional disciplinary boundaries. The requirements and competencies for this curriculum are:

| Requirements |  |
| :--- | :--- |
| Religious <br> Traditions | hours |
| Historical <br> Traditions | 3 hours |
| Literary <br> Traditions <br> Cultural <br> Awareness <br> Global <br> Awareness | 3 hours |

Competencies: TCU graduates will demonstrate:

A critical understanding of the role of religion in society, culture and individual life.
A critical understanding of the processes that create change over time in the human experience.

An understanding of, and sensitivity to, our shared literary heritage.
A critical understanding of cultural phenomena.

Knowledge of trends, issues and opportunities that impact the global
Community.

Citizenship and $\quad 3$ hours | An understanding of individual rights |
| :--- |
| and responsibilities and an ability to |
| assess critically the intentions and |
| consequences of personal, |
| professional or societal actions. |

Courses proposed for the Heritage, Mission, Vision and Values Curriculum
may also meet the outcomes of a category in the Human Experiences and
Endeavors Curriculum or couple with courses required for the major, minor
or general curriculum. No morethan two courses in the Heritage, Mission,
Vision and Values Curriculum may betaken from any one area as defined by
course prefix. No course may be counted for more than one HMWV requirement.

## TCU Core Curriculum Diagram

The overlay feature of the TCU Core Curriculum is best captured in a diagram.
Please go to
http://www.core.tcu.edu/documents/TCUCCWorksheet052809.pdf to view the TCU Core Curriculum diagram.
As can be seen from the diagram, it is possible for students to take courses that will fulfill more than one of the core categories. For example, a sociology course might simultaneously satisfy the outcomes of social sciences and cultural awareness. If so, the student taking such a course would receive three credit hours and would satisfy both a social sciences and cultural awareness requirement.
Notes:
Students must complete at TCU:

- The cultural awareness, global awareness, and citizenship and social values requirements of the Heritage, Mission, Vision and Values Curriculum; and
- Six hours in Writing Emphasis courses.


## Business Program of Study

The M.J. Neeley School of Business offers a program of study to prepare its students to contribute to the professional business world and the larger community. The Neeley School emphasizes a unified program of basic studies-humanities, social sciences, natural sciences, mathematics, economics and business. The concept of a balanced curriculum extends to the business studies. Although students may concentrate in a particular field of business, they all study the principles of accounting, business information systems, finance, entrepreneurial management, supply and value chain management, and marketing.
A quality curriculum in business fundamentals is of the utmost importance to the Neeley School. The curriculum is developed and implemented by a faculty recognized as scholars and leaders in their respective fields. Regular input is provided by Neeley School corporate partners through advisory groups and frequent classroom visits by executives.
Additionally, the Neeley School seeks to provide its students with the distinctive competencies needed to compete and lead in the business world: effective communication skills, the ability to utilize business technology, an understanding of the global nature of business and a sense of the value of making ethical business decisions.
The M.J. Neeley School of Business is fully accredited in business and accounting by the Association to Advance Collegiate Schools of Business (AACSB International) at both the undergraduate and graduate levels.

## Faculty

The men and women on the faculty represent an array of cultural backgrounds and bring to students a rich variety of academic training, teaching experience, research, consulting, scholarly publication, and business and community service. Several faculty members have authored widely used texts in the field of business.

Teaching is of primary importance; the most senior professors teach at both the undergraduate and graduate levels. Personal contact with students is encouraged through classes of moderate size. Through the use of audio and visual aids, conferences, business case analysis, software applications and organizational studies, instructional theory is merged with practical and relevant situations.
Research is an important faculty activity. It enables faculty to stay in the forefront of their respective fields. Research activities feed back into the classroom to ensure that today's students will be prepared for the world as it is when they graduate and as it changes over their careers. Faculty research results have been published in many of the leading academic journals.
One of the real strengths of the Neeley School is its relationship with the business community. Numerous local, regional, national and international organizations make up a vast network of corporate partners that are committed to accomplishing the goals of the Neeley School. The Neeley School enjoys many benefits as a result of its corporate relationships, including internship opportunities, part-time and permanent job opportunities, scholarship support, classroom speakers and mentors.
Perhaps the most visible members of this network are the Neeley School's International Board of Visitors. This distinguished group of executives from across the globe provides valuable feedback and program support, serving as a vital link between the Neeley School and other corporate constituents.

## International Initiatives

The globalization of today's business environment dictates that learning experiences can no longer be compartmentalized into "international" and "domestic" arenas. Consistent with this philosophy, the Neeley School incorporates a global perspective throughout the undergraduate curriculum. Whether the students are studying money and banking or sales management, they are challenged to consider the topic with an international perspective.
To achieve this goal, the Neeley School has developed relationships with universities in several countries. Through these relationships, faculty members from each institution are invited to participate in exchange opportunities, serving as guest lecturers in their area of expertise. New programs are in development that will offer students and faculty short-term reciprocal exchanges with partner institutions during the academic year.

The Neeley School believes that creating globally minded business leaders goes far beyond mastering the international perspective of business topics. True appreciation of the global environment requires cultural empathy, knowledge of a variety of languages, and political and geographical awareness. To this end, the Neeley School offers the international emphasis certification program. Through this program, dedicated students can earn the Bachelor of Business Administration (BBA) in the major of their choice with an additional "international emphasis" designation on their transcript.

In order for students to think globally, they must become physically global. There is no substitute for experience. The Neeley School supports the many study-abroad opportunities available to TCU students, yet goes one step further. Intensive field seminars such as Business-in-Europe (three weeks), Business-in-China and Business-in-London are coordinated by faculty and Neeley Student Success Services. The goal of these experiences is to expose Neeley School business students to the realities of the corporate environment in other countries. Onsite tours and one-on-one interaction with executives from companies are included in these programs. These tours and interactions enable the programs to move beyond traditional "classroom-based" exchanges. Students are required to use local transportation and tour historic sites. Hundreds of Neeley School students and dozens of Neeley School faculty have had the opportunity to experience these unique study abroad program.

## Neeley Student Success Services

Through Neeley Student Success Services, the Neeley School offers a comprehensive four-year model supporting undergraduate accomplishment. Professional staff members are committed partners with faculty, other staff and the TCU community to help students achieve in every aspect of the college experience. Neeley Student Success Services provides a range of resources from the time a student is a prospect through graduation. Our responsibility is to promote growth and development by helping students assess their interests and abilities, identify educational goals, and formulate short-term and long-term plans to meet those goals.
The mission of Neeley Student Success Services is to ensure that our students' academic plan is aligned with their career and professional development plans. It is through this alignment that Neeley students realize their full potential. Neeley Student Success Services integrates the core services of undergraduate student development, including the Neeley Academic Advising Center, the Alcon Career Center, the Neeley Professional Development Center and Neeley Premier Programs.

## Neeley School Special Awards

The Neeley Heritage Scholarship. The Neeley Heritage Scholarship was established to honor the many contributions of Neeley alumni, faculty and staff, who have worked together over the years to create a premier business education experience. The Neeley Heritage Scholarship is used to recruit and reward outstanding students to the Neeley School, based on academic excellence and leadership potential or accomplishments. Students receiving a Neeley Heritage Scholarship must continue as business majors and maintain and academic and/or leadership record worthy of meritorious recognition.
Accounting. For students in accounting, the Accounting Excellence Award and the Education Foundation Scholarship of the Texas Society of Certified Public Accountants are awarded to outstanding undergraduate or Master of Accounting students. The Henry Key Award for Distinguished Service is given to recognize outstanding service to the Accounting Department is granted each spring to outstanding graduating seniors. The Robin Elisa Boyer Memorial Scholarship and the Robert Schumacher Scholarship are awarded annually to seniors entering the Master of Accounting (MAc) Program. Seniors are also eligible for the Senior Accounting Scholar Award. Outstanding junior accounting majors may be granted the Junior Accounting Award or the Petroleum Accountants Society Award.
Entrepreneurial Management. The Department of Management, Entrepreneurship and Leadership presents several awards annually to outstanding entrepreneurial management majors. These include the Senior Scholar Award based on GPA; the Snell Leadership in Social Entrepreneurship Award; the Seth Hall Emerging Entrepreneur Award, for a student who has started a business while a student; the John Davis Entrepreneurial Vision Award, for a student who shows significant promise as a entrepreneur; the Entrepreneurial Leadership Award; and the Entrepreneurial Excellence in Management Award.

Information Systems and Supply Chain Management. The Department of Information Systems and Supply Chain Management presents awards to the senior scholars in business information systems and supply and value chain management. In addition, the Business Information Systems (BIS) Program grants additional awards to outstanding BIS majors. These awards include the Accenture Business Information Systems Professors' Award; Mary Kay, Inc. Technology Award; The InSource Group's Outstanding Student Award; and the Society for Information Management Scholarship Awards.
In the area of supply and value chain management, additional awards are presented to outstanding students. These awards include the Supply and Value Chain Professors' Award, Supply and Value Chain Center Outstanding Student Award, CSCMP Annual Conference Scholarship Award, and Fort Worth Institute for Supply Management Scholarship Award.
Marketing. The Department of Marketing grants eight awards annually to outstanding students: Marketing Senior Scholar Award (highest GPA), Outstanding Marketing Student Award (best overall marketing student), Sales Management Award, the Earl Dyess Award, the International Marketing Scholar Award, the DSS Research Marketing Research Award (to a student with a strong interest in marketing research) and the Department of Marketing Excellence Award (student contribution to the field of marketing). Additionally, the TCU chapter of the American Marketing Association sponsors an award for students who demonstrate marketing leadership skills.
Finance. The Department of Finance presents several awards annually to outstanding finance majors, including The Wall Street Journal Achievement Award to a senior who demonstrates an uncommon aptitude in investments. The Fort Worth Mortgage Bankers Association Award goes to a senior pursuing a career in real estate. The Outstanding Educational Investment Fund Student Award recognizes outstanding service and performance as a student member of the Educational Investment Fund during the past academic year. The Finance High Achievement Award is presented to a finance student, and the Senior Scholar Award is presented to a senior finance major for academic excellence. Other awards: the Meridian Bank of Texas Scholar Award, to a TCU Real Estate Club member who exemplifies scholarship, leadership and dedication to the organization; the David B. Hendricks II Memorial Scholarship, to an outstanding finance major with an emphasis in real estate; the Lockheed Martin TCU FMA Award, to an FMA member who exemplifies scholarship and commitment to the mission of the TCU Financial Management Association; Luther King Capital Management Center for Financial Studies scholarships, to junior finance majors for exemplary academic performance, community service and excellent character; the Meredith Fraker Thompson Memorial Scholarship in Finance, to two junior finance majors for academic excellence; and internship opportunities with LKCM and Simmons \& Company.
Awards given by student groups include the Delta Sigma Pi Scholarship Key.

## Neeley School Academic Policies

## Admission to Neeley School and Advancement to Upper-Division Courses

- Each year there are more qualified applicants to the Neeley School than can be instructed and accommodated by existing faculty and facilities. In order to provide a personal and quality educational experience the school must limit undergraduate admission. Admission is competitive. As a result, a student may be admitted to TCU but not to the Neeley School. There are three methods of admission into the Neeley School of Business:
- First-year Students. The TCU Office of Admission makes the decisions on all first-year applicants. To be considered for admission, students must indicate business as their primary area of interest on the admission application. Students who are granted regular admission to the University as pre-business must complete additional requirements to be considered for advancement to one of the six business majors and upper-division courses.
- External Transfers. The TCU Office of Admission makes the decisions on all transfer applicants. Students seeking to transfer to TCU from another institution should indicate business as their primary area of interest on the admission application. To be considered for admission as prebusiness transfer students from a four-year university, students should have at least a 3.0 transfer GPA. Community college transfer applicants should have a minimum 3.25 transfer GPA to be considered. Transfer students admitted as pre-business must meet additional requirements to advance to upper-division courses.
- Internal Transfers. An internal transfer student is one who is enrolled in another degree program at TCU. Students who wish to change their major to business must submit an application to the Neeley Academic Advising Center by April 15 to be considered for admission as pre-
business the following fall. Admission decisions are made by the Neeley School at the end of each academic year. Admission is highly competitive and space is limited. A student with a GPA of less than 3.25 is unlikely to be admitted. Internal transfer students who are accepted as pre-business must meet all additional Neeley School admission requirements to be considered for advancement to upper-division business courses.


## Additional Neeley School Requirements

Students entering TCU as pre-business majors must complete a minimum of 24 credit hours in the first year at TCU and have a minimum 2.5 GPA in order to continue as pre-business students beyond the first year. In addition, prebusiness students must complete four of the following courses in the first year: ECON 10223, ECON 10233; MATH 10283; ENGL 10283; one TCU Core Curriculum requirement; or others only as recommended by adviser. To declare a business major, all students must formally apply to the Neeley School. Students will typically apply in their sophomore year for admission to upper-level courses in their junior year. Admission is competitive and not guaranteed. Upon acceptance, students will select from one of the functional area majors.
To be considered for admission to the Neeley School students must:

- Maintain a minimum TCU cumulative GPA of 2.5 (must have at least a 3.0 to be competitive)
- Complete lower-division requirements with a minimum 2.5 GPA
- Demonstrate computer skills competency by achieving Microsoft Office Specialist certification in PowerPoint and Excel at the basic level
- Complete the core phase of the Neeley Premium Credentials
- Successfully complete a professional interview


## Academic Advising

All business students in the Neeley School are assigned an academic adviser by the Neeley Academic Advising Center. The center is open daily to answer the questions of all prospective and continuing students in the school. The Neeley Academic Advising Center coordinates advising, monitors academic progress of students, receives academic appeals, processes all transfer coursework, handles the changing of majors within the Neeley School, works with CLEP Test applications, directs study abroad procedures and Neeley School international programs, and audits intent to graduate forms for graduating business majors. In addition, the Neeley Academic Advising Center coordinates the admission process to the Neeley School.

## Pass/No-Credit Policy

Students in the M.J.Neeley School of Business may not take any course in the Neeley School on the P/NC basis.
Pre-business students or business majors may take up to six semester hours of courses on a Pass/No-Credit (P/NC) basis. However, no lower division business core course nor upper-division business courses (30000-40000 level) may be taken as $\mathrm{P} / \mathrm{NC}$, unless the course is taught only on a $\mathrm{P} / \mathrm{NC}$ basis.

## Course Prerequisites

Course prerequisites include admission to the Neeley School as a business major, class standing, previous coursework, demonstrated computer skills competency, grades in previous coursework, and/or permission of the instructor. All course prerequisites should be observed and followed when enrolling in a course. The ultimate responsibility for knowing the prerequisite for a course lies with the student and is noted in this catalog. Course prerequisites are noted in the Courses of business course descriptions section of this catalog and are listed at www.reg.tcu.edu.

## Transfer Policies

Continuing TCU students will sometimes take courses at other universities and then transfer those credits to TCU. TCU requires prior written approval of the Neeley Academic Advising Center to take courses at another school for application to a student's BBA degree. Course credit will not be transferred into the Neeley School if prior approval by the Neeley Academic Advising Center has not been obtained.

- No more than 12 semester hours (except those earned in an approved study abroad program) may be transferred from other institutions once a student enrolls at TCU.
- No credit may be transferred from a community college once 54 cumulative semester hours have been earned.
- For pre-business students and declared majors, all business lowerdivision sequence requirements courses, upper-division business core and major course requirements must be taken at TCU.


## Non-Availability of Evening Program

Although the Neeley School does offer some courses in the evening, an evening-only program is not available. Students wanting to take only evening courses should be aware that all required courses may not be offered during the evening.

## Certification for Business Teaching

The M.J. Neeley School of Business cooperates with the College of Education by offering business courses for the academic specialization requirements for certification of high school business teachers. More information is available through the College of Education.

## Academic Appeal Process

A student seeking an exception from any policy stated in the M.J. Neeley School of Business section of this catalog should submit a formal appeal to the assistant dean of undergraduate programs for consideration. The Neeley School regards the appeal to be a professional communication and will review it based on that expectation. Contact the Neeley Academic Advising Center for more information regarding the appeal process.

## Neeley School Student Organizations

## American Marketing Association

The TCU Collegiate Chapter of the American Marketing Association is open to all students. The club helps bridge the gap between marketing theory and practice. It meets every other week, bringing in top companies and recruiters as speakers.

## Beta Gamma Sigma

This national honor society for business students encourages and rewards scholarship and accomplishment among students, promotes education in business, and fosters integrity in the conduct of business operations. Only the top 7 percent of juniors and the top 10 percent of seniors based on academic performance are invited to join.

## Entrepreneurship Club at TCU

The Entrepreneurship Club at TCU empowers students through leadership training, professional development and commitment to the discipline of entrepreneurship. There are on-campus chapter meetings, interesting guest speakers, social gatherings and a monthly newsletter. Students may attend the national conference and participate in a new business idea competition.

## Delta Sigma Pi

TCU's chapter of this international fraternity strives to strengthen ties between the business world and the student. Its objectives are to promote a higher standard of business ethics and to further the civic and commercial welfare of the community. The chapter takes various field trips to industries and sponsors speakers and panels.

## Financial Management Association

For students with an interest in finance and related fields, the Financial Management Association provides a means of obtaining career information and access to business executives and faculty.

## Neeley Fellows Student Organization (NFSO)

This organization is designed to help Neeley Fellows achieve their full potential in the Neeley Fellows Program by creating a vibrant community of committed students, faculty members, alumni, parents, corporate partners and nonprofit organizations, while accelerating the Neeley School's connection with the greater business community.

## Neeley Women's Business Network

The Neeley Women's Business Network is a student-led organization that provides the skills necessary to succeed in today's rapidly changing business environment and develop the potential of young women through networking, mentorship and community service.

## TCU Real Estate Club

This organization is a primary source for networking education, and career advancement in the field of real estate.

## Business Administration Bachelor's Degree Program

To declare a business major, all pre-business students must formally apply for admission to upper-division business courses. Students typically apply in their sophomore year for admission to upper-level courses (most 30000-level or above) in their junior year. All TCU students (not previously admitted to TCU as pre-business) or students transferring to TCU who wish to become pre-business students or business majors must contact the Neeley Academic Advising Center regarding admission policies, procedures and deadlines. Admission is competitive, limited and not guaranteed.

1. Declaring Majors. All students wishing to become business majors should first be admitted to TCU and the Neeley School as pre-business students. Students remain pre-business students until being formally admitted to a specific business major and upper-division courses. Before taking upper-division (most 30000 level or above) business courses, all prebusiness students must complete the lower-division sequence requirements as outlined under Neeley School Requirements.
2. Majors Offered. After being admitted to upper-division courses, students may then select one or more of the functional area majors: accounting, business information systems, entrepreneurial management, finance (or finance with a real estate concentration), marketing, or supply and value chain management. Contact the Neeley Academic Advising Center for policies and procedures regarding declaration of major(s).
3. Declaring an Emphasis. Business students may complement their major in accounting, business information systems, entrepreneurial management, finance (finance with real estate emphasis), marketing or supply and value chain management by designating an international emphasis. Students must satisfy the goals and requirements of the emphasis. Select business students may also complement their major in any business discipline by completing the BNSF Neeley Leadership Program. Each program provides a structure to recognize students who have achieved a unique combination of experience and academic coursework. A special designation is placed on the transcript of those students successfully completing the requirements of the emphasis.
4. Major Change to Business. Current TCU students who wish to change their major to business (internal transfer students) must formally apply to the Neeley School to become a business major. Admission is limited, competitive and not guaranteed. Change of major requests are reviewed once per academic year, typically at the end of the spring semester with applications due April 15. A student with a GPA of less than 3.25 is unlikely to be admitted. Internal transfer students who are accepted as pre-business must meet all of the additional Neeley School admission requirements to be considered for advancement to upper-division business courses. Contact the Neeley Academic Advising Center regarding policies, procedures and deadlines.
5. Transfer Students. The TCU Office of Admission makes the decisions on all transfer applicants. Students seeking to transfer to TCU from another institution should indicate business as their primary area of interest on the admission application. To be considered for admission as a prebusiness transfer student from a four-year university, students should have at least a 3.0 transfer GPA. Community college transfer applicants should have a minimum 3.25 transfer GPA to be considered. Transfer students admitted as pre-business must meet additional requirements to advance to upper-division courses.
6. TCU Cumulative GPA of 2.50 Required for Graduation. A TCU cumulative GPA of at least 2.50 is required for graduation with a BBA degree. Any business major whose GPA falls below 2.50 must appeal to the associate dean of the Neeley School to graduate.

- Students will complete the Strength Deployment Indicator $\circledR($ SDI ) and attend a group debriefing session.
- Students will take CareerLeader ®a career assessment specifically designed for business majors, and attend a group debriefing.
- Students will begin creating a career portfolio that will include their resume, a sample cover letter, a sample thank you letter, and documentation of significant class projects and outside activities.
- Students will attend a leadership speaker series event.
- Students will attend one elective workshop from a rotating list of workshops.
- As a final step in the core phase, students will have their online portfolio reviewed for successful completion.


## Business/Pre-Business Students

## Entering First-Year

- Students begin taking lower-division sequence requirements.
- Students entering pre-business must complete a minimum of 24 credit hours in the first year at TCU and obtain a minimum 2.5 GPA in order to continue as pre-business beyond the first year.

Suggested sequence of courses: Applies to all pre-business majors. Students considering a special emphasis program should discuss course sequencing with an academic adviser.

## First Year Fall

| ENGL 10803 | Introductory Composition: Writing as Inquiry | 3 |
| :--- | :--- | :--- |
| MATH 10283 | Applied Calculus | 3 |
| MATH 10273 | OR | 3 |
| ECON 10223 | Applied Precalculus | 3 |
|  | Introductory Microeconomics <br> Core Curriculum Requirement 3 credits <br> Core Curriculum Requirement 3 credits | 3 |

Subtotal: 15

## First Year Spring

| MATH 10283 | Applied Calculus | 3 |
| :--- | :--- | :---: |
| INSC 20153 | OR | 3 |
| ECON 10233 | Introductory Macroeconomics Analysis <br> Core Curriculum Requirement 3 credits <br> Core Curriculum Requirement 3 credits <br> Core Curriculum Requirement 3 credits | 3 |

Subtotal: 15
MATH 10283 has a prerequisite of MATH 10273 or MATH 10053. Students who have high school credit for pre-calculus and at least a 600 SAT math score are exempt from MATH 10273 or MATH 10053.

## Sophomores

- Students continue taking lower-division sequence requirements.

Suggested sequences of courses:
Sophomore Year Fall

| ENGL 20803 | Intermediate Composition:Writing Argument | 3 |
| :--- | :--- | :--- |
| INSC 20263 | Business Information Systems | 3 |
| MANA 20153 | Legal and Social Environment of Business | 3 |
| BUSI 20173 | Foundations in Business | 3 |
|  |  |  |
|  | Core Curriculum Requirement 3 credits |  |
|  | OR |  |
| INSC 20153 | Statistical Analysis | 3 |

$\longrightarrow$ Subtotal: 15

## Sophomore Year Spring

ACCT 20353 Fundamentals of Accounting I 3
MARK 30153 Marketing Management 3
INSC $30313 \quad$ Supply Chain Management 3
Core Curriculum Requirement 3 credits
Core Curriculum Requirement 3 credits
Subtotal: 15
Students formally apply for admission to a specific major(s).

## Juniors/Formally Admitted to Upper-Division Courses

- Students declare one or more major(s) in accounting, business information systems, entrepreneurial management, finance (or finance with a real estate concentration), marketing or supply and value chain management.
- Students begin upper-division business core courses.

Contact the Neeley Academic Advising Center for suggested sequence of courses by major.

## Seniors

- Students complete upper-division business core.
- Students complete major course requirements.
- Strategic Management (MANA 40153) must be taken after completion of all the upper-division core requirements. (Students may enroll in MANA 40153 concurrently with only one other upper-division core course by permission of the Department of Management); recommended to be taken in the last two semesters.
Contact the Neeley Academic Advising Center for suggested sequence of courses by major.


## BBA Core Curriculum Requirements Components of the BBA degree

The BBA program in the Neeley School of Business comprises four blocks of coursework.

## TCU Requirements for Bachelor of Business Administration

CoreCurriculum
39-63 hours
Business CoreCurriculum
37 hours
Major Course Requirements
21-27 hours

## Free Elective Courses

Hours will vary depending on major(s).
Of the four blocks of coursework, the core curriculum and the business core are required of all business students regardless of their major. The major course requirements and the number of free electives vary, depending on choice of major(s).

## A. Core Curriculum Requirements

Students seeking the Bachelor of Business Administration degree must fulfill all of the core curriculum requirements listed below.

## 1. Essential Competencies: $\mathbf{1 8}$ semester hours

- Written Communication: 6 hours (ENGL 10803, ENGL 20803)
- Mathematical Reasoning: 3 hours (MATH 10283 or MATH 10524)*
- *Credit is not allowed for both MATH 10283 and MATH 10524
- Oral Communication: 3 hours
- Writing Emphasis: 6 hours (3 hours must be in the major)


## 2. Human Experiences and Endeavors

27 semester hours; courses in the humanities, social sciences and natural sciences must be satisfied in at least two different areas (as defined by course prefixes).

- Humanities: 9 hours
- Social Sciences: 9 hours to include macroeconomics and microeconomics
- Natural Sciences: 6 hours
- Fine Arts: 3 hours


## 3. Heritage, Mission Vision and Values

3 semester hours in each category. Approved courses from the experiences and endeavors core, the major and the minor may also satisfy requirements.

- Religious Traditions
- Historical Traditions
- Literary Traditions
- Cultural Awareness (must be taken at TCU)
- Global Awareness (must be taken at TCU)
- Citizenship and Social Values (must be taken at TCU)

With the exception of the lower-division sequence requirements, students are not expected to complete one entire group or block of courses prior to proceeding to the next block. Instead, the courses are woven into an integrated sequence of learning steps.

## B. Lower-Division Sequence Requirements

30 semester hours; these courses must be completed the semester in which the student submits his/her application for admission to the Neeley School and before beginning upper-division business core courses ( 30000 level or above, except MARK 30153 and INSC 30313).

## Lower-Division Sequence Requirements

1. Successful completion of the 10 required courses:

ENGL 10803 Introductory Composition: Writing as Inquiry 3
ENGL 20803 Intermediate Composition: Writing Argument 3

MATH 10283 Applied Calculus 3

MATH $10524 \quad$ Calculus I 4

ECON 10223 Introductory Microeconomics 3
ECON 10233 Introductory Macroeconomics 3
INSC 20263 Business Information Systems 3
MANA 20153 Legal and Social Environment of Business 3
ACCT 20353 Fundamentals of Accounting I 3
INSC 20153 Statistical Analysis 3
BUSI 20173 Foundations in Business 3
ENGL 10803, ENGL 20803, MATH 10283, MATH 10524, ECON 10223, ECON 10233: Core Requirement
INSC 20263, MANA 20153, ACCT 20353, INSC 20153, BUSI 20173: Business Requirement
Credit will not be awarded for both MATH 10283 and MATH 10524.
COSC 10203 is not a substitute for INSC 20263 and can only be used for free elective credit toward a BBA degree.
Students must complete Excel Expert Exams 1 and 2 before they are eligible to enroll in INSC 20153.
2. Attainment of a minimum GPA of 2.50 in the lower-division sequence requirements courses, with at least a "C" average in two English composition courses.
3. Attainment of a TCU cumulative GPA of at least 2.50 at the end of the sophomore year, defined by the University as the semester or term in which the 53 rd semester hour is completed.

## C. Upper-Division Business Core Courses

30000-level or above (except MARK 30153 and INSC 30313) courses are interwoven with the major courses throughout the student's junior and senior years. Business students complete MANA 40153 during the last two semesters.
Upper Division Business Sequence Requirements
BUSI $30153 \quad$ Ethical Decision Making
MANA $30153 \quad$ Organizational Management
MARK $30153 \quad$ Marketing Management
FINA 30153 Financial Management
INSC 30313 Supply Chain Management
INSC $30801 \quad$ Business Applications in Excel
ACCT 40163 Fundamentals of Accounting II
ACCT 30153 Financial Reporting I
MANA 40153 Strategic Management
Students may not receive credit for both INSC 30153 and INSC 30313
INSC 30801: offered in fall only
ACCT 40163: for BIS, SVCM, MARK and MANA majors

ACCT 30153 will satisfy core requirements for ACCT, FINA and Finance Real Estate Majors
MANA 40153 must be taken after completion of all other upper-division core courses. (Students may enroll in MANA 40153 concurrently with only one other upper-division core course by permission of the Department of Management.)
Students must complete a tentative plan for graduation to be filed with appropriate forms in the Neeley Academic Advising Center, preferably by the second semester junior year.

## D. Major Course Requirements: 21-27 semester hours

1. Each major in the Neeley School has a different set of major course requirements. These are described in detail in the Neeley School major programs section.
2. Students must take six hours of writing emphasis courses in their major, with the exception of finance majors, who require nine hours. Writing emphasis courses are designated in the Neeley School of Business major programs section.

## E. Free Electives

Credits hours will vary depending on choice of major(s). See an academic adviser in the Neeley Academic Advising Center for more information, particularly if selecting more than one major or a major and an emphasis or minor.

## Accounting

Accounting is the international language of business. In fact, it is much more. Managers of nearly all organizations, whether business, nonprofit or governmental, require accounting information to operate successfully. Financial statements prepared by accountants are used by individuals outside these organizations to evaluate the management performanceand to make investing, lending, regulatory and other decisions. Accounting majors are well versed in the preparation, use and limitations of accounting information, and they understand business at a fundamental level. Moreover, they offer knowledge and skills that most organizations require.
A major objective of the BBA program is to provide basic conceptual accounting and business knowledge as a foundation for accounting and business career development. Candidates for the Uniform CPA Examination in Texas must fulfill additional educational requirements.
Those students wishing to pursue a professional career in accounting are encouraged to apply to the Professional Program in Accounting (PPA) offered by the Department of Accounting. To be a candidate for the MAC degree, students must be accepted into the PPA. This program seamlessly integrates the BBA program with the Neeley School's Master of Accountancy (MAc) degree. The PPA program and the MAc degree complement the educational experience of the BBA accounting major by providing the additional accounting and business knowledge as well as professional development needed by successful public accounting professionals.
Students completing both the BBA and MAc degrees fulfill all the educational requirements to sit for the Uniform CPA Examination in Texas.

## Accounting, BBA <br> Requirements

## Specific Course Requirements (21 semester hours)

ACCT $30153 \quad$ Financial Reporting I
ACCT 30163 Cost Analysis and Control 3
ACCT 30253 Financial Reporting II 3
ACCT 30303 Principles of Taxation 3
ACCT 30273 Audit and Assurance 3
ACCT 40223 Risks and Controls 3
ACCT 40253 Financial Reporting III 3
In addition, students must complete $\mathbf{3}$ semester hours from the following:
ECON 30223 Intermediate Microeconomics 3
ECON 30233 Intermediate Macroeconomics 3
FINA 30213 Investments I

INSC 40303
Demand Planning and Management
MANA 40203 Strategic Human Resource Management
MANA 40223 International Management3

MANA 40233
MARK 40213
Family Business
International Marketing 3

## MARK 40263

Personal Selling
These electives tie to the competency objectives of the Neeley School and/or the undergraduate accounting program, including: critical reasoning and analytical skills, ethical awareness, global awareness, oral and written communication, technology and leadership. Students may take other courses with department approval, but such courses must be 30000 level or above and must satisfy one or more of the objectives.
Free electives: Students should consult their academic adviser in the Neeley Academic Advising Center to determine the number of elective hours needed to reach 124 total hours.

## Business Information Systems

The effective, efficient and innovative use of business information systems is an important element in achieving competitive advantages for businesses and excellence in services for government and nonprofit organizations. In particular, the globalization of trade, the emergence of information economies, and the growth of the Internet and other global communications networks have recast the role of information systems in business and management. In today's business world, companies increasingly rely on high caliber professionals who understand how to use information technology to design global business organizations linking factories, offices and mobile sales forces around the world and around the clock.
A business information system (BIS) major provides a challenging but rewarding opportunity for business students to prepare themselves to become a competent business information systems professional. Students will develop the ability to design, implement and manage an infrastructure of information technology, data and enterprise-wide systems, all of which are fundamental to improve and optimize the business activities across the organization. They will have the skills to manage, analyze and develop various business applications dealing with systems in corporations. They will also be able to assist in incorporating information systems into the strategy, planning and practices of organizations.

## Business Information Systems BBA

## The BIS major requires 21 semester hours

## Specific Course Requirements

INSC 30723
Systems Planning and Process Analysis
INSC 30823 Data Management for Business Information Systems
INSC 30833
Business Information Systems Development
INSC 30843
Business Integration through Enterprise-Wide
Information Systems

INSC 40010
Business Information Systems Internship I

## AND

INSC 40020
Business Information Systems Internship II

INSC 40813
Business Information Systems Consulting
INSC 40843
Business Intelligence and Analytics
Free Electives: Students should consult their academic adviser in the Neeley Academic Advising Center to determine the number of elective hours needed to reach 124 total hours.

## Finance, BBA

## At least 24 semester hours are required for the finance major

Specific Course Requirements (18 semester hours)

| FINA 30203 | Money and Banking |
| :--- | :--- |
| FINA 30213 | Investments I |
| FINA 30233 | Investments II |
| FINA 40153 | Advanced Financial Management |
| ACCT 30153 | Financial Reporting I |
| ACCT 30253 | Financial Reporting II |
| FINA 30203 and FINA 30213 have a Writing Emphasis. |  |
| In addition, the student must complete $\mathbf{6}$ semester hours from the |  |
| following: |  |

FINA 30303
Insurance
FINA 30213 Investments I 3
FINA 30233 Investments II 3
FINA 40153 Advanced Financial Management 3
ACCT 30153 Financial Reporting I 3
ACCT 30253 Financial Reporting II 3
FINA 30203 and FINA 30213 have a Writing Emphasis.

## following:

FINA 30313
Real Estate Principles
FINA 30623
Real Estate Valuation
FINA 40183 Educational Investment Fund
FINA 40193
Educational Investment Fund
FINA 40313
Management of Financial Institutions
FINA 40533
Topics in Applied Financial Analysis
FINA 40603
Real Estate Law
FINA 40613
Real Estate Finance and Investment Analysis
FINA 40623
International Finance
FINA 40703
International Finance Study Abroad
ACCT 30303
Principles of Taxation
Free electives: Students should consult their academic adviser in the Neeley Academic Advising Center to determine the number of elective hours needed to reach 124 total hours.

## Finance BBA with Real Estate Concentration

Students may also major in finance with a real estate concentration. Career opportunities exist in banking, mortgage lending, real estate development, asset management, appraisal, real estate management and brokerage.

## The finance major with a real estate concentration requires 27 semester hours

| Specific Course |  | Requirements |
| :--- | :--- | :--- |
| FINA 30203 | Money and Banking | 3 |
| FINA 30213 | Investments I | 3 |
| FINA 30233 | Investments II | 3 |
| FINA 40153 | Advanced Financial Management | 3 |
| FINA 30313 | Real Estate Principles | 3 |
| FINA 30623 | Real Estate Valuation | 3 |
| FINA 40613 | Real Estate Finance and Investment Analysis | 3 |
| ACCT 30153 | Financial Reporting I | 3 |
| FINA 30203 and FINA |  |  |
| In addition, the student mast complete 3 semester hours from the |  |  |
| following: |  |  |
| FINA 30303 | Insurance | 3 |
| FINA 40183 | Educational Investment Fund | 3 |

FINA 40193
FINA 40313
FINA 40533
FINA 40603
FINA 40623
FINA 40703
ACCT 30303

Educational Investment Fund

Management of Financial Institutions 3
Topics in Applied Financial Analysis 3
Real Estate Law 3
International Finance 3
International Finance Study Abroad 3
Principles of Taxation 3

Free electives: Students should consult their academic adviser in the Neeley Academic Advising Center to determine the number of elective hours needed to reach 124 total hours.

## Finance/Accounting Double Major

Finance majors may double major in accounting by taking the following additional courses:
ACCT 30163
Cost Analysis and Control

ACCT 30273 Audit and Assurance 3
ACCT 40223
Risks and Controls
ACCT 40253 Financial Reporting III 3
ACCT $30303 \quad$ Principles of Taxation 3

## Marketing

Diverse corporations in the telecommunications, financial, food service and manufacturing industries all have at least one thing in common. These sellers want to exchange their goods, services or ideas for something of value from buyers. Marketing begins at the moment an organization perceives an unmet need and progresses through productive development, promotion, distribution and pricing. Marketing research suggests that half the cost of most products and services can be attributed to marketing.

## Marketing, BBA

## The major in marketing requires 21 semester hours

## Specific Course Requirements (9 semester hours)

MARK 30113 Marketing Research 3
MARK 30243 Customer Insights 3
MARK 40203 Marketing Strategy 3
MARK 30243 and MARK 40203 have a Writing Emphasis.
In addition, the student must complete 12 semester hours from the following electives. Upon request, course recommendations will be provided for specific career paths.
MARK 30233 Marketing Tools and Applications 3

MARK 30253 Sports and Entertainment Marketing 3
MARK 40030 Senior Honors Research Paper 1.00-
MARK 40103 Digital Marketing 3
MARK 40213 International Marketing 3
MARK 40223 Services Marketing 3
MARK 40233 Marketing Communications and Social Media 3
MARK 40243 Product Innovation and Brand Management 3
MARK 40253
MARK 40263
Sales Management

Advanced Personal Selling
MARK 40700 Marketing Study Abroad 3
MARK 40713 Ad Competition 3
MARK 40970 Special Problems in Marketing 1.00-

INSC 40323
Procurement/Supply Management
Free electives: Students should consult their academic adviser in the Neeley Academic Advising Center to determine the number of elective hours needed to reach 124 total hours.

## Supply and Value Chain Management

Supply and value chain management is cross-disciplinary and encompasses interrelated elements of marketing, logistics, purchasing, operations management and information technology. In today's highly competitive environment, the multiple firms in a supply chain must be able to collectively respond to rapidly changing customer requirements. To do this efficiently and effectively requires working together across functions within the firm and beyond the boundaries of the firm to understand and respond to changing customer requirements and to match supply to customer demand. This program is designed to give students the skills and capabilities needed for supply chain positions in companies facing such challenges.

## Supply and Value Chain Management, BBA

## The major in supply and value chain management requires 21 semester hours

## Specific Course Requirements

| INSC 30723 | Systems Planning and Process Analysis | 3 |
| :--- | :--- | :--- |
| INSC 30843 | Business Integration through Enterprise-Wide <br> Information Systems | 3 |
| INSC 40303 | Demand Planning and Management | 3 |
| INSC 40313 | Logistics and Transportation | 3 |
| INSC 40323 | Procurement/Supply Management | 3 |
| INSC 40343 | Supply Chain Strategy | 3 |

In addition, supply and value chain management majors must
complete one of the following 3 credit hour courses:
ACCT 30163 Cost Analysis and Control 3
CRJU 30233 Sustainability: Environmental, Social \& Economic 3

INSC $40353 \quad$ Global Supply Chain Management 3
FINA 40623 International Finance 3
MANA 40223 International Management 3
MANA 40633 Principles of Negotiation 3
MARK 40223 Services Marketing 3
MARK 40243 Product Innovation and Brand Management 3
MARK 40213 International Marketing 3
As part of the upper-level business core requirements, SVCM majors must take INSC 30313 Supply Chain Management rather than INSC 30153.

Free electives: Students should consult their academic adviser in the Neeley Academic Advising Center to determine the number of elective hours needed to reach 124 total hours.

## Bachelor of Business Administration with Special Emphasis <br> International Emphasis

Business students may complement their major in accounting, business information systems, entrepreneurial management, finance, (finance with real estate emphasis), marketing, and supply and value chain management by designating an international emphasis and satisfying the goals and requirements of the International Emphasis Program. The program provides a structure to recognize students who have achieved a unique combination of experience, academic coursework and international skills resulting in a cross-cultural competency. A special designation is placed on the transcript
of those students successfully completing the program requirements. The international emphasis may not be added to majors outside the Neeley School.

## Part I: Neeley School Courses (at least 9 semester hours)

Required: Successful completion of:
BUSI 20383 Global Business Mindset

Required: 6 hours from the following courses:
FINA 40623 International Finance 3
MANA 40223 International Management 3
MARK 40213 International Marketing 3
INSC 40353 Global Supply Chain Management 3

## Part II: International Awareness Courses (at least 6 semester hours)

Students must complete a minimum of 6 semester hours of non-business, non-foreign language courses with an international focus. The courses must have a "Global Awareness" designation if taken on campus and be in addition to their TCU core requirements.

## Part III: Language Familiarity

The student must be familiar with at least one language other than English. For students whose primary language is English, proficiency in a second language must be demonstrated through completion of a second-semester foreign language class (or its equivalent) taught at TCU.
Students whose second language is other than those taught at TCU work with their department chair to determine a method of demonstrating proficiency.
For students whose primary language is not English, proficiency in both their primary and secondary languages must be demonstrated. Students should work with their department chair to determine a method of demonstrating proficiency in their primary language. Completion of the English courses required in the TCU Core Curriculum or their equivalents are sufficient to demonstrate proficiency in their secondary language of English.

## Part IV: Experiential Component

The student must complete at least 3 additional credit hours in a Study Abroad course approved by the Neeley School.

## Neeley School of Business Special Programs

## Educational Investment Fund

The Educational Investment Fund is a once-in-a-lifetime opportunity for students to invest real money while still in college. Approximately 18 students manage more than $\$ 1$ million in assets of the William C. Conner Foundation. The participants in the Educational Investment Fund do intensive analysis of stocks and bonds and make buy-and-sell decisions.
The experience gained in the program is comparable to a year's work experience in the eyes of many potential employers and places the TCU graduate in an extremely advantageous job-search position. Hundreds of TCU students have participated in this program over the last 25 years, and these former members represent a worldwide network of potential contacts for current members.

## Neeley Fellows Program

The Neeley Fellows Program is an undergraduate program that aims to educate and develop individuals of extraordinary potential with curricular and co-curricular experiential learning opportunities to affect change in the global business community.
Neeley Fellows who are in the TCU Honors College can satisfy sophomoresenior requirements of the Honors College through the Fellows curriculum and graduate with Departmental Honors in their respective academic department.
Neeley Fellows complete experientially enhanced courses that are taught by exceptional faculty in a smaller class format. Most courses carry Honors designation.

## BNSF Neeley Leadership Program

The BNSF Neeley Leadership Program is a three-year leadership development experience for Neeley School undergraduates. Its focus is on leadership development specifically within the business school major.
Innovative courses, coaching, community service projects and co-curricular activities provide students a range of opportunities to learn about themselves and develop their leadership skills. The mission of the program is to prepare Neeley students to become tomorrow's leaders in the business world.
The BNSF Neeley Leadership Program consists of five leadership courses (15 credit hours) that help students learn more about leadership and themselves as leaders. The first class, Foundations of Leadership, focuses on leading oneself. It is grounded in a principlecentered model of leadership and underscores the impact that character has on the ability to earn followers. The second course, Interpersonal Leadership Skills, focuses on critical leadership capabilities and teaches skills that are foundational for success in formal and informal leadership positions. The third course, Team Leadership Skills, focuses on specific skill sets that help increase effectiveness when working collaboratively. The fourth course, The Leadership Challenge, focuses on the application of leadership knowledge and competencies in leading change. The fifth course, Leading in a Complex World, prepares students to transition from school to the workplace by developing an understanding of the complexity of business and societal contexts in which leadership occurs. In the final semester of the program, students refine and hone their skills through weekly developmental labs.

## Supply Chain Student Executive Program

The Supply Chain Student Executive Program is an excellent opportunity for selected supply chain seniors to work closely with a company during their last two semesters. Students in the program interact with company executives, analyze their supply chain and work on an improvement project. This program not only gives students a competitive advantage when interviewing for full-time positions, it is also a valuable complement to their classroom knowledge. The two courses are INSC 40363 (Supply Chain CrossFunctional Experience) and INSC 40373 (Supply Chain Capstone Project Course). Selected students will take this program for six credits, and it will take the place of the Supply and Value Chain Strategies (INSC 40343) and one general business elective.
Selection for this program is based on a minimum 3.2 GPA, demonstrated leadership skills and excellent verbal and written communication skills. Approximately 10 percent of supply chain seniors are selected to participate.

## Neeley Premium Credentials ${ }^{\text {TM }}$

This is a three-tiered credentialing program available only to undergraduate students at the Neeley School of Business. The program's goal is to provide Neeley students with the critical skills identified by employers as necessary to succeed in today's business environment. Neeley Premium Credentials ${ }^{\text {TM }}$ provides student $s$ with targeted development designed to add extensive value in their personal and professional pursuits both before and after graduation. The tiered approach guides students throughout their three years in the Neeley School and facilitates a successful transition from college to career.

## Professional Program in Accounting

The Professional Program in Accounting (PPA) is an integrated program designed to prepare a select group of talented individuals academically and professionally for careers as accounting/financial professionals. The program is intended to be a three-year program, with students entering early in their junior year and continuing through the completion of both a Bachelors in Business Administration (BBA) and a Master of Accounting (MAc). However, application and entry to the PPA is possible at any point an individual is committed to earning a MAc. To be a candidate for the MAc degree, students must be accepted into the PPA.
The PPA program has several components:

- Personal assessment, branding and development of career goals;
- Development of an academic plan, including MAc areas of concentration, study abroad, internship and CPA exam considerations;
- Development of a recruiting and placement plan; and
- Development of a professional development plan to identify the activities, events and professional contacts necessary to launch and manage a successful professional career. In consultation with faculty
mentors, students develop, discuss and document each of these components in their Personal Success Plans (PSP).
To be considered for admission, students must:

1. Be a declared accounting major in good standing with both the Neeley Business School and the University.
2. Maintain a cumulative GPA and a GPA in all classes designated ACCT of at least 3.0.
Upon admission to the PPA, students must meet all requirements of the program as detailed in the PPA Handbook and continue to meet those requirements to remain in the program. See
http://www.neeley.tcu.edu/Academics/Master_of_Accounting/MAc.aspx for details.

## Business Minor and Double Majors

## Business Minors Outside of the Neeley School

Business students are not required to have a minor but may obtain one outside the M.J. Neeley School of Business by completing the requirements outlined by the department in which the minor is offered. Students should check with the Neeley Academic Advising Center to see if any additional paperwork is required.

## Accounting Minor

Students majoring in business may pursue an accounting minor. The goal of the minor is to provide a secondary area of expertise for students majoring in business information systems, entrepreneurial management, finance, (finance with real estate emphasis), marketing or supply and value chain management. By combining one of these majors with a minor in accounting, the student is prepared for a greater number of career opportunities and gains more flexibility. In addition, students majoring in other areas of business sometimes take electives in accounting. The designation of an accounting minor provides such students with additional evidence of subject matter expertise. The minor in accounting requires 18 semester hours of coursework. Once a student matriculates at TCU, all coursework in the accounting minor must be completed at TCU.

## Required Courses (18 semester hours)

ACCT 20353 Fundamentals of Accounting I 3
ACCT 30153 Financial Reporting I 3
ACCT $30163 \quad$ Cost Analysis and Control 3
ACCT 30253 Financial Reporting II 3
ACCT $30303 \quad$ Principles of Taxation 3
FINA $30153 \quad$ Financial Management 3
To graduate with a minor in accounting, students must obtain a minimum GPA of 2.50 in courses making up the minor.

## Finance Minor

Students majoring in business may pursue a finance minor. The goal of the minor is to provide a secondary area of expertise for students majoring in accounting, business information systems, entrepreneurial management, marketing, or supply and value chain management. By combining one of these majors with a minor in finance, the student is prepared for a greater number of career opportunities and gains more flexibility. In addition, students majoring in other area of business sometimes take electives in finance. The designation of a finance minor provides such students with additional evidence of subject matter expertise. The minor in finance requires 18 semester hours of coursework. Once a student matriculates at TCU, all coursework in the finance minor must be completed at TCU

Required Courses (12 semester hours)
ACCT 30153 Financial Reporting I 3
FINA $30153 \quad$ Financial Management 3
FINA 30203
Money and Banking Investments I

## In addition, the student must complete 6 semester hours of finance

 electives from the following:| FINA 30233 | Investments II | 3 |
| :--- | :--- | :--- |
| FINA 40183 | Educational Investment Fund | 3 |
| FINA 40193 | Educational Investment Fund | 3 |
| FINA 40613 | Real Estate Finance and Investment Analysis | 3 |
| To graduate with a minor in finance, students must obtain a minimum GPA |  |  |
| of 2.50 in courses making up the minor. |  |  |

## Business Double Majors

## Accounting Major Requirements

## Accounting majors may double major in finance by taking 12 additional hours.

## 9 hours of the following required courses:

FINA 30203 Money and Banking 3

FINA 30233 Investments II
FINA 40153 Advanced Financial Management

## And 3 additional hours from the following electives:

FINA 30303
Insurance
FINA 40183 Educational Investment Fund
FINA 40193 Educational Investment Fund
FINA $40313 \quad$ Management of Financial Institutions 3
FINA 40533 Topics in Applied Financial Analysis 3
FINA 40603 Real Estate Law 3
FINA 40623 International Finance 3
Students must elect FINA 30213 to fulfill an elective requirement imposed by accounting. ACCT 30303 must also be taken to fulfill one of the two course elective requirements for finance.

## Finance Major Requirements

Finance majors may double major in accounting by taking four additional courses.
ACCT 30163 Cost Analysis and Control 3
ACCT 30273 Audit and Assurance 3
ACCT 40223 Risks and Controls 3
ACCT 40253 Financial Reporting III
They must take ACCT 30303 to fulfill one course elective requirement for finance.

## Business Information Systems

## Business Informations Systems majors may double major with

 Supply Chain Management by taking five additional courses.INSC 40303 Demand Planning and Management
INSC 40323 Procurement/Supply Management
INSC 40313
Logistics and Transportation
INSC $40353 \quad$ Global Supply Chain Management
INSC 40343 Supply Chain Strategy
INSC 40343: Student Executive Program may be substituted.

## Supply Chain Management

Supply Chain Management majors may double major in Business Informations Systems by taking five additional courses (two courses are 1.5 hrs each):

| INSC 30823 | Data Management for Business Information <br>  <br> Systems | 3 |
| :--- | :--- | ---: |
| INSC 30833 | Business Information Systems Development | 3 |
| INSC 40010 | Business Information Systems Internship I | 1.5 |
| INSC 40020 | Business Information Systems Internship II | 1.5 |
| INSC 40813 | Business Information Systems Consulting | 3 |
| INSC 40843 | Business Intelligence and Analytics | 3 |

Business students may earn an additional bachelor's degree in a field outside of the Neeley School by completing the requirements outlined by the University under Additional Bachelor's Degree in the Bachelor's Degree section of this catalog.

## General Business Minor for Non-Business Majors

Students completing majors outside of the Neeley School may pursue a general business minor. The goal of the general business minor is to provide students in other disciplines with a broad base of knowledge about the business world by giving them an understanding and appreciation of business and its social and ethical environment. In addition, through introductory courses in the functional areas of business, students are introduced to the rudimentary tools used in business settings to analyze problems and make decisions.
The general business minor requires 18 semester hours of coursework. Once a student matriculates at TCU, all coursework in the general business minor must be completed at TCU.

## Required Courses (12 semester hours)

ACCT 20653 Introduction to Accounting 3
MARK 30653 Principles of Marketing 3
FINA 30653 Financial Planning 3
MANA 30653 Survey of Management 3

## Electives

Choose 6 semester hours from:
MANA 20653 Business Law for Minors 3
MARK $40663 \quad$ Principles of Personal Selling 3
MANA 40653 Survey of Entrepreneurship 3
MARK 40653 Principles of Marketing Communications 3
MARK 30703 Consumption and Culture:Marketing Study Abroad 3
MANA 30703 Business in Emerging Economies 3
INSC $30653 \quad$ Supply Chain Management 3

ACCT 20653 with a grade of C or better is a prerequisite to MANA 20653; FINA 30653; MANA 40653; MARK 40653, MARK 40663
Minimum GPA: To declare a general business minor, students must have: a minimum TCU cumulative GPA of 2.5 , and sophomore standing, and have completed at least one full semester at TCU. To graduate with a general business minor, students must obtain a minimum GPA of 2.5 in courses making up the minor.
Students who earned credit for ACCT 20353 prior to declaring the general business minor may substitute that course for ACCT 20653 in the minor requirements.

## Bob Schieffer College of Communication

The role of communication in the 21st century is an integral part of TCU's educational mission. More than 1,000 students in the Bob Schieffer College of Communication are pursuing degrees in journalism, strategic communication, communication studies, sports broadcasting, and film, television and digital media. The academic programs of the college exact an appropriate balance between professional training and liberal arts studies. Relatively small classes enable the faculty to give attention to the work of each student.

The college comprises four departments - the departments of Communication Studies, Film, Television and Digital Media, Journalism and Strategic Communication - and offers a range of study.
Department of Film, Television and Digital Media
Production
Industry
Critical Studies
Sports Broadcasting

## Department of Communication Studies

Organizational Communication
Interpersonal Communication
Public Speaking
Communication Theory and Research
Department of Journalism
Journalism

## Department of Strategic Communication

Strategic Communication

## Advertising

Integrated Communications
Public Relations

## Bob Schieffer College of Communication Student Organizations <br> Fraternities and Sororities

Kappa Tau Alpha (J ournalism Honor Society)
Lambda Pi Eta (Communication Studies National Honor Society)

## Clubs

Student Film Association

## Professional Organizations

Society of Professional Journalists
American Advertising Federation
Public Relations Student Society of America

## Bob Schieffer College of Communication Degrees

[^2]
## Foreign Language Requirement:

## Complete one of the following

CHIN 20063 Intermediate Chinese II 3

FREN 20063 Fourth Semester College French 3
GRMN 20063 Intermediate German 3
GREE 20063 Fourth Semester College Greek (Hellenistic) 3
ITAL 20063 Fourth Semester College Italian 3
JAPN 20063 Fourth Semester College Japanese 3
SPAN 20203 Intermediate Spanish 2
SPAN 20213 Intensive Intermediate Spanish 2 3
This requirement can be met either by satisfactory completion of coursework taken at or transferred to TCU or by presenting satisfactory scores on recognized standardized tests (AP, CLEP or SAT III). Required scores on standardized tests are in the Credit by Exam booklet available from the Office of Admission. For languages not currently taught at TCU, 6 semester hours at the sophomore level, transferred from another accredited institution, may be used to satisfy this requirement. Students may also provide evidence of competency in the non-English language by successfully completing one academic year in a secondary or post-secondary institution in which the language of instruction is other than English, for which the student will receive 12 credit hours.

## Multiple Majors

Students may concurrently pursue more than one of the majors or minors offers by the Bob Schieffer College of Communication. However, students must complete all required courses and overall hours for each of those majors and minors, and no course from one major or minor can be counted toward the other major or minor including, courses specified in the core curriculum as particular to that degree and major.
Students who pursue an additional degree in another college, if additional majors are permitted in that college, must complete all degree requirements for each major, including courses specified in the core curriculum as particular to each degree and major.
Students outside the College of Communication whose home college permits an additional major in the College must complete all degree requirements for the additional major, including courses specified in the core curriculum for that particular degree and major.

## Transfer Credit

Students wishing to take courses at another institution, following their admission to TCU, must secure approval through the Office of the Dean of the College of Communication before enrolling. The College of Communication adheres to University policy regarding transfer credit.

## Pass/No-Credit Policy

Students may take up to two courses ( 8 hours maximum) on a pass/no-credit basis (P/NC). No course applied to the student's major, minor or associated requirements may be taken P/NC. Courses offered only with the P/NC grade will not be counted toward this limit on the number of P/NC hours. Prior work will count.

## Requirements for Graduation

Students will receive a degree plan from the Office of the Dean after completing 54 hours. The Intent to Graduate form, available from the Office of the Dean, should be filed when 84 hours of course credit have been completed. The form can also be found at http://www.schieffercollege.tcu.edu/students/undergraduate-studies/resources/undergraduate-forms/.
Approval of the department chair and dean is required in contract form for all non-traditional courses (special problems, independent study, research problems, etc.). Per University policy, students wishing to pursue independent study must receive all approvals at least one semester in advance of the semester in which the independent study will occur.
Beyond the studies specified for each major, the bachelor's degree is built on the TCU Core Curriculum that applies to all University graduates.

## Communication Studies

A degree in communication studies will serve the academic and career objectives of a variety of students. As a vital component of a liberal arts education, competence in oral communication is a requirement for most positions in business and industry. A major in communication studies provides an understanding of the interpersonal and public communication processes needed for careers in teaching, research, or business organizations as well as a foundation for further professional or academic study. Students also develop competencies in public speaking, listening, interviewing and group communication as well as everyday human relations.

Students may declare a major in communication as an incoming freshman, transfer student, or by requesting a change of major through the TCU Registrar's office. In order to declare the major, current TCU students must be in good standing with the University, including an overall GPA of at least a 2.0.

Majors taking classes counting toward departmental degree requirements must take them for graded credit. Any courses completed in the department receiving a pass under the Pass/No-Credit Policy before the student declares communication studies as a major will count as University electives but will not count toward the hour requirement to satisfy the major. Students may not receive credit toward the communication studies major for both COMM 10123 and COMM 10133.
All courses counted toward a major or minor in communication studies must have a grade of "C" (2.0 GPA) or better. Please note: "C-" does not meet this requirement.

## Honors College

Communication studies majors who plan to pursue departmental honors must be members of the Honors College and should take COMM 30003 their junior year and COMM 40003 their senior year. Honors students should consult with the department chair concerning additional guidelines.

## Communication Studies Degrees

The Department of Communication Studies offers both the Bachelor of Science (BS) and Bachelor of Arts (BA) degrees.

## Communication Studies, BS/BA

## Requirements

The BS with a major in communication studies consists of 124 semester hours with $\mathbf{3 6}$ hours in communication studies, including the four required courses:
COMM 10123
Communicating Effectively
COMM 20113
Interpersonal Communication
COMM 20223
Communication Theory
COMM 30163 Organizational Communication
Students pursuing the BS degree must also complete 9 hours of 40000 level COMM electives as well as MATH 10043 or INSC 20153 with a grade of "C" (2.0 GPA) or higher.

Note: Students must complete COMM 20113 and COMM 20223 with a combined GPA of 2.5 to take COMM 30163. Students must complete COMM 30163 with a grade of "C" ( 2.0 GPA ) or higher prior to taking any 40000 level courses.
Additional requirements include a minor of 18 semester hours or a second major, plus core curriculum requirements.
The BA with a major in communication studies consists of 124 semester hours with 27 hours in communication studies, including the four required courses:

COMM 1012
Communicating Effectively
COMM 20113 Interpersonal Communication
COMM 20223 Communication Theory
COMM 30163 Organizational Communication

Additional requirements include the BA language requirement, a minor of 18 semester hours or a second major, plus core curriculum requirements.

## Communication Studies Minor

A minor requires 18 semester hours, including<br>COMM 10123 Communicating Effectively<br>COMM 20113 Interpersonal Communication

Approved Courses: a minimum of 6 hours of approved courses must be at the 30000 level or above.
Students may not receive credit toward the communication studies minor for both COMM 10123 and COMM 10133.

Students pursuing a minor in communication studies who are taking classes counting toward departmental requirements must take them for graded credit. Any courses completed in the department under the Pass/No-Credit Policy before the student declares communication studies as a minor will count as University electives but not toward the hour requirement to satisfy the minor.

## Film, Television and Digital Media

The Department of Film, Television and Digital Media (FTDM) encourages students to see the media from multiple perspectives. Courses in a variety of areas such as critical studies, industry studies and production prepare graduates for success in careers throughout the industry. FTDM students may major in film, television and digital media or in sports broadcasting.

State-of-the-art department resources include HD studios, soundstages, Avid and Final Cut Pro editing suites, a Pro Tools audio suite and Foley stage, a campus radio station and a full complement of HD field production and grip equipment. The Gwendolyn P. Tandy Memorial Film Library houses more than 15,000 titles.

## John V. Roach Honors College

FTDM majors or sports broadcasting majors who plan to pursue departmental honors must be members of the Honors College and should enroll in FTDM 30003 their junior year and FTDM 40003 during the fall semester of their senior year.

## Transfer Students

Transfer students are not guaranteed admission to the majors offered by the department. All potential film, television and digital media majors, including transfer students, must successfully complete the FTDM introductory courses and fulfill all remaining requirements in order to graduate. Potential sports broadcasting majors, including transfer students, must apply for, and be granted, acceptance into the major (see sports broadcasting program requirements (p.58)). Transfer students must submit a written request if they wish the department to consider accepting any substitutes for FTDM 10113, FTDM 10123 or FTDM 10143. Request will be considered on an individual basis.

## Internships

An active, supervised internship program places students in television studios, film production companies, audience research companies and corporate/industrial media centers. Interns may be placed in major media markets such as Los Angeles, New York, London or Fort Worth-Dallas or in their hometowns. FTDM internships are available only to film, television and digital media majors and sports broadcasting majors, and prerequisites apply. Contact the department for policies and procedures.

## Study Abroad

Contact the FTDM department for details and schedules for study abroad opportunities.

## Film, Television and Digital Media Program, BS/BA

## Requirements

[^3]- A minimum of 124 semester hours overall, including at least 42 hours earned at the 30000 level or above


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- TCU Core Curriculum requirements
- A minimum of 37 semester hours in the FTDM major courses, including at least 12 hours at the 30000 level or above
- A minor of at least 18 hours; all requirements of the minor department must be followed
- A grade of "C" or better in all courses taken in the FTDM department
- FTDM 10113 History of Broadcasting; FTDM 10123 History of Film; FTDM 10143 Introduction to Film and Television Aesthetics; FTDM 20213 Basic Video Production; FTDM 20523 Business of Media; FTDM 30103 Media Analysis; FTDM 40901 Senior Seminar.
Students pursuing the BA degree must demonstrate competency in a foreign language equivalent to completion of one of the following:
CHIN 20063
Intermediate Chinese II
FREN 20063
Fourth Semester College French
GRMN 20063
Intermediate German
GREE 20063
Fourth Semester College Greek (Hellenistic)
ITAL 20063
JAPN 20063
Fourth Semester College Italian
Fourth Semester College J apanese
SPAN 20203
Intermediate Spanish 2
SPAN 20213
Intensive Intermediate Spanish 2

This requirement can be met either by satisfactory completion of coursework taken at or transferred to TCU or by presenting satisfactory scores on recognized standardized tests (AP, CLEP or SAT II). Required scores on standardized tests are in the Credit by Exam booklet available from the Office of Admission. For languages not taught at TCU, 6 semester hours at the sophomore level, transferred to TCU from another accredited institution, will satisfy this requirement. Students may also provide evidence of competency in the nonEnglish language by succesffully completing one academic year in a secondary or post-secondary institution in which the language of instruction is other than English, for which the student will receive 12 credit hours.

## It is strongly recommended that FTDM majors complete FTDM major courses in this order:

| Step One: Departmental Core Requirements |  |  |
| :--- | :--- | :--- |
| FTDM 10113 | History of Broadcasting | 3 |
| FTDM 10123 | History of Film | 3 |
| FTDM 10143 | Introduction to Film and Television Aesthetics | 3 |
| Step Two: Take two courses in each of three areas: |  |  |
| Production |  | 3 |
| FTDM 20213 | Basic Video Production |  |
| FTDM | any other FTDM production course |  |
| Industry |  | 3 |
| FTDM 20523 | Business of Media |  |
| FTDM | any other FTDM industry course |  |
| Critical Studies |  | 3 |
| FTDM 30103 | Media Analysis |  |
| FTDM | any other FTDM critical studies course |  |

Step Three:
Complete any combination of three additional FTDM production, industry or critical studies courses.
Note: FTDM open electives may not be used to fulfill FTDM major requirements.

## Step Four:

Complete FTDM 40901 Senior Seminar (1 semester hour) in the last semester of the senior year.

Responsibility for knowing course prerequisites lies with the student. Students who wish to apply for "permission of instructor" or "permission of department" to take a class must submit a written request prior to registration. The department does not guarantee that all who wish to enroll in these classes will be accepted.

## Sports Broadcasting Program, BS/BA

The Department of Film, Television and Digital Media offers a major in sports broadcasting. Admission to the major is by competitive application and is not guaranteed.
Each year more students apply to the sports broadcasting program than can be accommodated by existing faculty and facilities. In order to provide a personal and quality educational experience, the department must limit undergraduate admission through competitive application.
Applications are accepted each spring (only) for admission to the major the following fall. Students interested in applying for admission into the sports broadcasting major should contact the Department of Film, Television and Digital Media for additional information and to obtain application instructions. Admission to the major is separate from admission to the University; admission to the University does not guarantee admission to the major.

## All sports broadcasting majors must <br> complete for graduation:

- A minimum of 124 semester hours overall, including at least 42 hours at the 30000 level or above
- TCU Core Curriculum requirements
- A minimum of 37 semester hours in sports broadcasting, including at least 12 hours at the 30000 level or above
- A grade of "C" or better in all courses taken in the department
- FTDM 10113 - History of Broadcasting; FTDM 20523 Business of Media; FTDM 21113 Sports Broadcasting; FTDM 21713 Introduction to Remote Sports Production; FTDM 40901 Senior Seminar
- A minor of at least 18 hours; all requirements of the minor department must be followed


## Students pursuing the BA degree also must demonstrate competency in a foreign language equivalent to completion of one of the following:

| CHIN 20063 | Intermediate Chinese II | 3 |
| :--- | :--- | :--- |
| FREN 20063 | Fourth Semester College French | 3 |
| GRMN 20063 | Intermediate German | 3 |
| GREE 20063 | Fourth Semester College Greek (Hellenistic) | 3 |
| ITAL 20063 | Fourth Semester College Italian | 3 |
| JAPN 20063 | Fourth Semester College Japanese | 3 |
| SPAN 20203 | Intermediate Spanish 2 | 3 |
| SPAN 20213 | Intensive Intermediate Spanish 2 | 3 |

This requirement can be met either by satisfactory completion of coursework taken at or transferred to TCU or by presenting satisfactory scores on recognized standardized tests (AP, CLEP or SAT II). Required scores on standardized tests are in the Credit by Exam booklet available from the Office of Admission. For languages not taught at TCU, 6 semester hours at the sophomore level, transferred from another accredited institution, will satisfy this requirement. Students also may prove evidence of competency in the non-English language by successfully completing one academic year in a secondary or post-secondary institution in which the language of instruction is other than English, for which the student will receive 12 credit hours.

## It is strongly recommended that sports broadcasting majors complete their course requirements in the following order:

Step One: Sports Broadcasting PrerequisitesFTDM 10113 History of Broadcasting3

Sports Broadcasting

Step Two: Sports Broadcasting Core Requirements
FTDM 21713 Introduction to Remote Sports Production
FTDM $20523 \quad$ Business of Media

## Step Three: Sports Broadcasting Production Courses

Complete four of the following:
FTDM 21513 Sports Radio 3
FTDM 31713 Remote Sports Production 3
FTDM $31723 \quad 3$
FTDM 31733 Audio Production for Sports: Television and Radio 3
FTDM 41113 Sports Play-by-Play 3
FTDM $41333 \quad$ Post-Production for Sports 3
FTDM 41383 Sports Documentary Production 3
Step Four: Sports Broadcasting Industry and Analysis Courses
Complete three of the following:
FTDM 30513 Audience Research
FTDM 30523 Media Marketing and Promotions 3
FTDM 30573 Broadcast and Cable Programming 3
FTDM 40523 Management for Broadcast, Cable, and Film 3
FTDM $41580 \quad$ Topics in Sports Media 3
FTDM 41713 Global Sports Media 3
KINE 30713 Psychology of Sport 3
KINE 30723 Sociology of Sport 3
Step Five: Additional Requirements
Students must complete both of the following courses:
FTDM 30860 Internship in Film, Television, and Digital Media $1.00-$
FTDM $40901 \quad$ Senior Seminar in Film, Television, and Digital 1

FTDM 30860 requires a minimum of 3 hours
FTDM 40901 to be taken during last semester
Responsibility for knowing course prerequisites lies with the student. Students who wish to apply for "permission of instructor" or "permission of department" to take a class must submit a written request prior to registration. The department does not guarantee that all who wish to enroll in these classes will be accepted.

## Film and Media Studies Minor

## Requirements

| The minor in film and media studies requires $\mathbf{1 8}$ hours, including |  |  |
| :--- | :--- | :--- |
| FTDM 10143 | Introduction to Film and Television Aesthetics | 3 |
| FTDM 30103 | Media Analysis | 3 |

The remaining 12 hours must be taken from the following list. At least 6 hours must be upper level ( 30000 or above).
Students are responsible for meeting all prerequisites.
FTDM 10053
Survey of Film
FTDM 10073 Media Adaptations
FTDM $30410 \quad$ Film and Television Genres
FTDM 30433 American Cinema
FTDM 30453
FTDM 30463
FTDM 30473
Media Decades
FTDM 30103 Media Analysis 3

FTDM 30483
History in the Movies
ETDM 3059
Media Authorship
FTDM 30593
Television, Culture and Society

FTDM 30643 British Cinema and European Culture 3
FTDM 30663 Film in a Global Society 3
FTDM 30983
FTDM 40440
Women in Television and Film

FTDM 40570

FTDM 40623
World Cinema
FTDM 40643 Media and Popular Culture 3
FTDM 40653 Popular Music and the Recording Industry 3
FTDM 40663
Contemporary Media
FTDM $40683 \quad$ Film Theory and Criticism
Minors in film and media studies must achieve the following minimum academic requirements as a prerequisite to enroll in FTDM courses:

- A grade of "C" or better in all courses taken in the department


## Film, Television and Digital Media Course Subcategories

## Critical Studies Courses

FTDM 30103 Media Analysis 3
FTDM 30410 Film and Television Genres 3
FTDM 30463 Media Decades 3
FTDM 30483 Media Authorship 3
FTDM 30593 Television, Culture and Society 3
FTDM 30643 British Cinema and European Culture 3
FTDM 40003 Senior Honors Research Paper 3
FTDM 40440 Topics in Film 3
FTDM 40570 Topics in Television 1.00-
FTDM 40623 World Cinema 3
FTDM 40643 Media and Popular Culture 3
FTDM 40663 Contemporary Media 3
FTDM 40683 Film Theory and Criticism 3
FTDM 50400 Advanced Studies in Radio, Television, and Film 3.00-

## Industry Courses

FTDM 20523
Business of Media 3
FTDM 30513 Audience Research 3
FTDM 30523 Media Marketing and Promotions 3
FTDM 30573 Broadcast and Cable Programming 3
FTDM 30663 Film in a Global Society 3
FTDM 30813 TV Number Ones 3
FTDM 40223 Entertainment Law and Finance 3
FTDM 40503 Media Industry Law and Regulation 3
FTDM $40513 \quad$ Topics in Media Industry Studies 3
FTDM 40523 Management for Broadcast, Cable, and Film
FTDM 40773 Media in Britain
FTDM 40813 The Business and Regulation of Media Sex and Violence
FTDM $45113 \quad$ Producing

## Production Courses

FTDM 20213 Basic Video Production 3

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FTDM 20510 Radio Broadcasting on KTCU 1.00-

FTDM 30153
Dramatic Style and Structure
FTDM 30203
Audio Theory and Practice
FTDM 30213
Advanced Video Production
FTDM 30223
Cinematography
FTDM 30243
Directing
FTDM 30353
Theory and Practice of Film Acting
FTDM 30393
Motion Graphics: Special Effects
FTDM 30510 Radio Programming, Promotions, and Advanced 100 $\begin{array}{ll}\text { Operations on KTCU } & 3.00\end{array}$
FTDM 40153
FTDM 40210
Dramatic Writing

FTDM 4033
Topics in Production

FTDM 40383
Post-Production
tary Production

## Sports Broadcasting Courses

FTDM 21513 Sports Radio
FTDM 21113 Sports Broadcasting 3
FTDM 21713 Introduction to Remote Sports Production 3
FTDM 30860 Internship in Film, Television, and Digital Media 1.00-
FTDM 31713 Remote Sports Production 3
FTDM $31723 \quad$ Producing the Live Sports Event 3
FTDM 31733 Audio Production for Sports: Television and 3

FTDM 41113 Sports Play-by-Play 3
FTDM 41333 Post-Production for Sports 3
FTDM 41383 Sports Documentary Production 3
FTDM 41580 Topics in Sports Media 3
FTDM 41713 Global Sports Media 3

## Open Electives

These courses have no prerequisites and are open to all students. Several of these courses fulfill core curriculum requirements. FTDM majors/minors and sports broadcasting majors may take them as general electives.
FTDM 10013 TV Studies for Non-Majors 3
FTDM 10053 Survey of Film 3
FTDM 10073 Media Adaptations 3
FTDM 10433 Freshman Seminar in Film, Television, and Digital 3

FTDM 30433 American Cinema 3
FTDM 30453 Crime Films and Society 3
FTDM 30473 History in the Movies 3
FTDM $30983 \quad$ Women in Television and Film 3
FTDM 40653 Popular Music and the Recording Industry 3

## Department of Journalism

The mission of the Department of Journalism is to educate journalism students to think and act as responsible professionals and ethical citizens in a global community. The Department of Journalism helps students develop competencies that prepare them for employment and advanced studies. It seeks to create skilled professional communicators who understand their social, legal and ethical responsibilities in a rapidly changing media landscape that connects societies around the world.
The degree program in the school prepares students to communicate to diverse audiences in a free society through critical thinking, analytical writing, real-time reporting and compelling multi-media presentations.

Founded in 1927, the Department of Journalism requires versatility and performance. The Department of Journalism is one of 18 programs at private universities in the nation accredited by the Accrediting Council on Education in Journalism and Mass Communication (ACEJMC). About 10 percent of the journalism programs at U.S. public and private universities are accredited by the council. The school fully subscribes to ACEJ MC guidelines that at least 72 semester hours be taken outside journalism classes. The department strongly recommends that students use these hours to ensure a broad liberal arts education.
Experiential learning is emphasized through a vibrant student media, hosted internships and coursework that include real-life assignments with commercial media. An internship at the Washington Center is offered to a select group of students in the fall semester of their senior year.
Students majoring in journalism should master the elements of written, oral and visual presentation of the news, as well as understand the First Amendment in a democracy and the ethical standards that accompany the gathering and distribution of news. This includes theory, history and concepts of journalism, as well as practical skills.
Classes in which journalism skills are taught and practiced are limited to 15 students. Classes that address reporting specialties such as public affairs,
business, visual and sports journalism often have fewer students and are platform-agnostic. Through other courses, students are encouraged to use their enthusiasm for a subject, such as politics or the arts, in their assignments.
Through the skills classes emerges a portfolio, or body of work, that becomes the basis for graduates entering the job market. As part of their coursework, students produce professional-quality newscasts in the school's highdefinition broadcast journalism studio and practice real-time journalism in the Department of J ournalism Convergence Center. First-year students are encouraged to volunteer for student media.
Journalism professors and instructors have both academic credentials and professional experience. The faculty include an Emmy Award winner, authors of books and other scholarly research, a lawyer specializing in freedom of information and issues an editor of an award-winning hyperlocal news website. Full professors teach entry-level courses in the journalism major.
Specialization in storytelling techniques is supported by faculty, but not before the future journalist is exposed to newsgathering skills across online, print and video platforms. This focus on cross-training is a distinction of the school.
Students must develop the ability to write clearly, distinctively and correctly. The first writing course, JOUR 10113, has a grammar/spelling/punctuation module that must be passed with a "C" or better before students can take any course for which JOUR 10113 is a prerequisite. Journalism majors and minors must make a C or better in any course that is a prerequisite for another journalism course before enrolling in the course for which the prerequisite is required. Skills courses must be taken sequentially.
No course applied to the student's major, minor or associated requirement may be taken on a pass/no-credit basis. Journalism courses taken in those sequences must be passed with "C" (2.0) or better to fulfill prerequisite requirements for any journalism course and for graduation requirements for the majors or minors. Note: A "C-" (1.67) does not meet that requirement.
Professional organizations that have chapters affiliated with the Department of Journalism include the Society of Professional Journalists. The school also has a chapter of Kappa Tau Alpha, the national honor society for journalism students.
Journalism majors are eligible for the endowed Jay Milner Distinguished Student Journalism Award for work in TCU student media, with amounts of up to $\$ 1,000$.

## Declaring J ournalism as a Major

Incoming first-year and transfer students may declare journalism as a major upon entering the University. Students of sophomore standing or above who wish to declare a major offered by the Department of Journalism must have achieved a TCU cumulative GPA of 2.5 before they can declare a major inside the school. A journalism minor is offered through the school.

## Honors College

Candidates for Departmental Honors should take JOUR 30003 their junior year and JOUR 40003 during the fall semester of their senior year.

## Journalism Degrees

The Department of Journalism offers a Bachelor of Arts in journalism and a Bachelor Science in news and media studies.

## Journalism, BA

The BA with a major in journalism requires 124 hours with 33 hours of journalism, including JOUR 10113, J OUR 10203, J OUR 20003, J OUR 20203, JOUR 30204, JOUR 30543 and JOUR 40523. Students must take at least one class from the following: J OUR 40003, JOUR 40203, JOUR 40213, JOUR 40453, JOUR 40463, JOUR 40643, JOUR 40820 or JOUR 40983, meaning all journalism majors must have a minimum of one Capstone course. Also, students must take at least one class from the following: JOUR 10103, JOUR 30853, JOUR 40443, J OUR 40553, J OUR 40563, JOUR 40573, J OUR 40613, JOUR 40813, JOUR 40993, JOUR 50143, J OUR 50183, JOUR 50193 or JOUR 50523, meaning all journalism majors must have a minimum of one seminar course. Five hours of journalism electives complete the degree requirements. By combining electives and required courses, a student may earn certificates that accompany the BA degree and demonstrate advanced proficiency in a specific area of news media.
The BA degree in journalism requires proven competency at the fourth semester of college-level foreign language (the equivalent of 12 hours, which can be accomplished either through taking courses or testing out through examinations as required by the foreign language programs on campus). This requirement is consistent with international opportunities in emerging media.
A minor is required. Additionally, students may pursue a specialty by fulfilling requirements for a certificate in broadcast journalism, sports journalism or business journalism.
Students must declare their intent to earn specific certificates in the semester in which they intend to graduate and prior to the beginning of academic advising in that semester. Declaration is made in writing to the chair or the chair's designee.

## Certificate requirements

Broadcast certificate - JOUR 40203 and JOUR 40553
Sports journalism certificate - 6 hours from among JOUR 40483, JOUR 40573 or JOUR 40213 plus 6 hours outside the unit from the following sportsrelated courses: ENGL 20523, HIST 40863, FTDM 21113, FTDM 41580, KINE 30713 and KINE 30723; 3 hours of J OUR 40213 may be substituted for 3 hours of related courses outside the unit
Business journalism certificate - JOUR 40453, J OUR 40443 and ECON 10223, plus 3 hours from among ECON 10233, ECON 30253, BUSI 10013 or POSC 31413; a student can also fulfill the requirement of courses outside the Department of Journalism by being a business or economics major or minor.

## Requirements

## Required Courses for All Journalism Majors

| JOUR 10113 | Media Writing and Editing | 3 |
| :--- | :--- | :--- |
| JOUR 10203 | Introduction to Journalism | 3 |
| JOUR 20003 | Diversity and the Media | 3 |
| JOUR 20203 | Radio/TV Newswriting | 3 |
| JOUR 30204 | Reporting | 4 |
| JOUR 30543 | Multimedia Reporting | 3 |
| JOUR 40523 | Law and Ethics of Mass Communication | 3 |
| JOUR 10113, J OUR 10203, JOUR 20003, JOUR 20203 must be passed with a |  |  |
| "C' or better before enrolling in Reporting, a required course. See |  |  |
| prerequisites for other required 30000- and 40000- level courses. |  |  |
| In addition, all journalism majors must complete at least one of the |  |  |
| following Capstone classes: |  |  |

JOUR 40003 Senior Honors in Journalism 3
JOUR 40203 Newscast 3
JOUR 40213 Television Sportscast 3
JOUR 40453 BusinessJournalism 3
JOUR 40463 Public Affairs Reporting 3
JOUR 40643 Long-Form Journalism 3
JOUR 40820 Washington Internship 1.00-
JOUR 40983
Multi-Platform Capstone

## Other journalism courses required for certificates:

All journalism majors must complete at least one of the following seminar classes

| JOUR 10103 | Media Literacy | 3 |
| :--- | :--- | :--- |
| JOUR 30853 | Historical Development of Mass Media | 3 |
| JOUR 40443 | Issues in Coverage of Business and the Economy | 3 |
| JOUR 40493 | Opinion and Commentary | 3 |
| JOUR 40553 | Issues in News | 3 |
| JOUR 40563 | Media Management | 3 |
| JOUR 40573 | Contemporary Issues in Sports Journalism | 3 |
| JOUR 40613 | Media Ethics | 3 |
| JOUR 40813 | Media in Washington | 3 |
| JOUR 40993 | Mass Media and Society | 3 |
| JOUR 50143 | Social and Cultural History of the Media | 3 |
| JOUR 50183 | Management and Leadership | 3 |
| JOUR 50193 | Economics and Finance of the Media | 3 |
| JOUR 50523 | Information Law and Policy | 3 |
| Broadcast journalism |  |  |
| JOUR 40203 | Newscast | 3 |
| JOUR 40213 | Television Sportscast | 3 |

Choose 6 credit hours from these two 3-hour courses (JOUR 40203 may be taken twice)

## Sports journalism

Choose 6 credit hours among these 3 credit-hour courses
JOUR 40213 Television Sportscast 3

JOUR 40483 SportsJournalism 3
JOUR 40573 Contemporary Issues in Sports Journalism 3

## Plus 6 hours from the following

ENGL 20523 Sports in Modern American Literature 3

HIST 40863 American Sport History 3
FTDM 21113 Sports Broadcasting 3
FTDM $41580 \quad$ Topics in Sports Media 3
KINE $30713 \quad$ Psychology of Sport 3
KINE $30723 \quad$ Sociology of Sport 3
Business journalism
JOUR 40453 Business Journalism 3
JOUR 40443 Issues in Coverage of Business and the Economy 3
ECON 10223 Introductory Microeconomics 3
Plus 3 hours from the following
ECON 10233 Introductory Macroeconomics 3
ECON 30253 History of Economic Thought 3
BUSI 10013 Contemporary Perspectives in Business 3
POSC $31413 \quad$ Public Policy 3

## News and Media Studies, BS

The Bachelor of Science in News and Media Studies is an interdisciplinary major focusing on the study of media in society. The major requires 33 hours, including J OUR 10103 or J OUR 10203, J OUR 10113, JOUR 20003, J OUR 30853, JOUR 40523, JOUR 40553 or J OUR 40613, and 15 hours of electives, six of which must be at the 30000-level or higher, from any area in the Bob Schieffer College of Communication (COMM, FTDM, JOUR, STCO) and/or from the list of approved courses outside the college.

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## Requirements

## Required Courses for All News and Media Studies Majors

| JOUR 10103 | Media Literacy | 3 |
| :---: | :---: | :---: |
|  | OR |  |
| JOUR 10203 | Introduction to Journalism | 3 |
| JOUR 10113 | Media Writing and Editing | 3 |
| JOUR 20003 | Diversity and the Media | 3 |
| JOUR 30853 | Historical Development of Mass Media | 3 |
| JOUR 40523 | Law and Ethics of Mass Communication |  |
| JOUR 40553 | Issues in News |  |
|  | OR |  |
| JOUR 40613 | Media Ethics |  |
| Electives |  |  |
| 15 hours, six of the Bob Schie not including and/or from | must be at the 30000-level or higher, from any Ilege of Communication (COMM, FTDM, JOUR, ST 11103 (Writing and Editing) or STCO 16103 (Diversit below: |  |
| ANTH 40523 | Mass Media and Culture |  |
| CITE 30023 | The Digital Explosion: A Cultural Transformation | 3 |
| CRJU 30933 | Crime and the Media | 3 |
| ENGL 10303 | Approaches to Film | 3 |
| ENGL 20223 | Gender, Culture and Representation | 3 |
| ENGL 30753 | Literature and Film | 3 |
| ENGL 30813 | Books and the History of Print Culture | 3 |
| ENGL 30833 | Serials, Franchises, and Fan Culture | 3 |
| POSC 31123 | Public Opinion | 3 |
| POSC 31323 | Media and Politics | 3 |
| POSC 33523 | U.S. Foreign Policy in Film | 3 |
| POSC 34033 | Constitutional Law: Amendment One | 3 |
| RELI 30163 | The Bible at the Movies |  |
| RELI 30743 | Religion, Art and Visual Culture | 3 |
| RELI 30803 | Religion and News Media | 3 |
| RELI 30823 | Jesus in Fiction and Film | 3 |
| SOCI 30423 | Media, Self and Society | 3 |
| SOCI 30463 | Popular Culture | 3 |
| SOCI 30523 | Self and Society Through Film | 3 |
| SOCI 30583 | Technology, Social Media and Society | 3 |
| SOCI 40443 | Media Images of Drug and Alcohol Abuse | 3 |
| SOWO 30563 | Social Work and the Media | 3 |

## Journalism Minor

Takes a minimum of four semesters to complete.

## 22 hours in journalism, including

JOUR 10113 Media Writing and Editing 3
JOUR 10203 Introduction to Journalism 3
JOUR 20003 Diversity and the Media 3
JOUR 20203 Radio/TV Newswriting 3
JOUR 30204 Reporting 4
JOUR 40523 Law and Ethics of Mass Communication
One upper-level reporting course from this list:
JOUR 30543 Multimedia Reporting 3
JOUR 40453 Business Journalism 3
JOUR 40463 Public Affairs Reporting 3
JOUR 40473 Specialized Reporting 3
JOUR 40483 SportsJournalism 3
JOUR 40493 Opinion and Commentary 3
JOUR 40643 Long-Form Journalism 3
meaning all journalism minors must have at least one specialized reporting course
Minors must complete the four core courses
JOUR 10113 Media Writing and Editing 3
JOUR 10203 Introduction to Journalism 3
JOUR 20003 Diversity and the Media 3
JOUR 20203 Radio/TV Newswriting 3
And be enrolled in JOUR 30204 before enrolling in any elective course in the Department of Journalism.
The Department of Journalism welcomes minors in journalism who are committed to significant journalism instruction while they specialize in majors that educate them in broad subject areas that may relate to news coverage. Students should recognize that it usually takes four regular semesters to complete the journalism minor. Students are strongly encouraged to become active in TCU student media.

## Journalism Residence Requirement

Once a student is enrolled at TCU, he or she must take courses required for the journalism major and the journalism minor at TCU.

## Journalism Teaching Certification Requirements

## 31 hours in journalism:

JOUR 10103 Media Literacy 3
JOUR 10113 Media Writing and Editing 3
JOUR 20003 Diversity and the Media 3
JOUR 20203 Radio/TV Newswriting 3
JOUR 20313
JOUR 30204 Reporting 4
JOUR 30233 Visual Journalism - Advanced 3
JOUR 30453
JOUR 30853
Historical Development of Mass Media
3
JOUR 40523 Law and Ethics of Mass Communication 3

## School of Journalism Graduate Programs

The Department of J ournalism offers the Master of Science in journalism. Graduate courses at the 50000 level are listed in the undergraduate catalog; for courses at the 60000 and 70000 level are in the graduate catalog.

## Journalism Internships

Students are strongly encouraged to pursue internships with newspapers, online news outlets, radio or television stations, magazines, public relations or advertising agencies, and corporate departments dedicated to external and internal communications. An intern director assists students in locating and qualifying for internships. Academic credit is available for successfully completed internships with prior approval. Intern credit is available only to journalism and strategic communication majors. The Department of Journalism cooperates on intern placement with corporations, media organizations, lobbying firms, government entities and professional societies in journalism, advertising and public relations. The school also offers an internship in its Schieffer School in Washington.

## Schieffer School in Washington

The Schieffer School in Washington was established in 2010 for exemplary seniors in journalism and strategic communication. Students must have at least a 3.0 GPA and apply during the previous academic year. The program provides for full-time internships in Washington media organizations such as CBS News, POLITICO, National Geographic and the Center for Strategic and International Studies. Students earn additional academic credits in courses taught by TCU's academic partner, The Washington Center. Students become among the best prepared interns in Washington, D.C., by taking a special TCU course called Media in Washington on-site.

## Student Media

The all-digital, real-time multimedia news organization TCU 360 operates via traditional internet, tablet, smartphone and social media. Complementing TCU 360 are the TCU Skiff, the weekly campus newspaper;TCU News Now , providing weekly television newscasts and daily updates; TCU Sports Now , a long-form weekly television sportscast; and Image magazine, an awardwinning long-form journalism publication. Students also deliver news content for KTCU-FM.
In addition to creating content for the online, print and broadcast operations, students also create and sell advertising to support student media.

## Department of Strategic Communication

The strategic communication major uses advertising and public relations tools to achieve strategic goals for brands and organizations.

## Overview

The strategic communication major prepares students to think and act as professionals and ethical citizens in a global community. A rigorous curriculum challenges students to communicate with diverse audiences through critical thinking, analytical writing and compelling presentation, and to evaluate the effectiveness of the communication.
Students participate annually in national advertising and public relations campaign competitions. In recent years, TCU students have placed among the top 10 nationally ranked teams in the American Advertising Federation National Student Advertising Competition and the Public Relations Student Society of America Bateman Competition. Individual students, teams and Roxo, the student-operated public relations and ad agency, regularly earn recognition in national, regional and local competitions, including Greater Fort Worth PRSA's Worthy Awards.
Most strategic communication graduates pursue careers in advertising or with public relations agencies, corporations, government agencies, nonprofit groups, health care groups, sports teams or consulting firms. Others enter graduate school or specialized, pre-professional programs.
Experiential learning is emphasized through the vibrant student-run advertising and public relations agency, Roxo, and also through hosted internships and coursework that include real-life assignments with corporate and nonprofit clients. Professional organizations with chapters affiliated with the school are the American Advertising Federation and the Public Relations Student Society of America.

## Admission to the major

Admission to the strategic communication major requires multiple steps. Entering first-year students who declare strategic communication as their major prior to J une 1, before orientation sessions begin, are automatically admitted to the major. They must complete the application process during summer orientation sessions (step 4 in the process). Once orientation session begins, all students, including first-year students, must apply to the major.

Admission to the strategic communication major is competitive, and as a result, students may be admitted to TCU but not to the major if they apply for strategic communication on the first day of class of their first year at TCU or thereafter. Students with more than 80 college credits will not be admitted to the major, whether internal or external transfers, because course sequencing in the major requires at least four long semesters to complete.
To be considered for admission to the Department of Strategic Communication, students must complete all of the following:

1. Based on type of student
a. INCOMING FIRST-YEAR STUDENTS: Entering first-year students, once admitted to TCU, may declare the major prior to June 1, before orientation sessions begin, and be directly admitted to the major in only the fall semester if they meet the following requirements: They must have completed no hours at TCU (except for hours awarded for AP or IB courses, or dual-credit hours awarded in high school through another university or college), and they must complete step 4 of the application process. Once TCU orientation sessions begin, first-year students must wait to apply to the major until the spring semester.
b. INTERNAL TRANSFER STUDENTS: An internal transfer student is one who is currently enrolled in another degree program at TCU. These students must have a 2.5 minimum overall TCU GPA (and should have a 3.0 GPA to be competitive).
c. EXTERNAL TRANSFER STUDENTS: The TCU Office of Admissions makes the decision on all transfer applicants. To be considered for provisional admission to the strategic communication major during the first semester after admission to TCU, students should have at least a 3.0 transfer GPA from a four-year institution and a 3.25 GPA from a two-year institution. If this GPA is in place and spaces are open in the gateway courses (STCO 11103, STCO 16103, STCO 23113 and STCO 23123) in the first semester, students may enroll in these courses after they have met with an academic adviser in the department and have completed step 4 of the process.
2. Attend one of the several monitored in-person essay-writing sessions held no later than the first six weeks of each long semester (contact the department's main office at stratcomm@tcu.edu or visit its website at www.stco.tcu.edu to determine dates and locations for these sessions for upcoming semesters.)
3. Complete a Personal Creative Narrative about reasons for selecting the strategic communication major and another creative assignment, written on-site.
4. Read and sign the Ethics and Professionalism Statement for the Department of Strategic Communication, and complete a basic information form for the advising folder.
5. Turn in an application packet at the end of the essay-writing session that includes a resume and transcripts verifying the GPA (for internal and external transfer students only); the Personal Creative Narrative and creative assignment; and the Ethics and Professionalism Statement for the Department of Strategic Communication.
After admittance to the strategic communication major, students must earn a C or higher in each required course and have a combined 2.5 GPA in the four gateway courses before they may enroll in any advanced required courses.
In the event of a formal appeal concerning the application process, the chair of the Department of Strategic Communication will appoint three faculty members in the department to review the appeal and report to the chair.

## Strategic Communication Degrees

The Department of Strategic Communication offers the Bachelor of Science (BS) degree and the Master of Science (MS) degree.

## Strategic Communication, BS

[^4]concentration areas: integrated, advertising or public relations. Students may earn a concentration in only one area.
A minor or second major in a discipline selected by the student and approved by a strategic communication adviser must be completed. Students must fulfill the requirements as prescribed by the department in which the minor or second major is taken. As an alternative, an area of emphasis consisting of 18 hours in a discipline selected by the student and approved by a strategic communication adviser may be completed.

Required Courses for Strategic Communication Majors

| STCO 11103 | Writing and Editing | 3 |
| :--- | :--- | :--- |
| STCO 16103 | Diversity | 3 |
| STCO 23113 | Advertising | 3 |
| STCO 23123 | Public Relations | 3 |
| STCO 32403 | Design | 3 |
| STCO 35503 | Research | 3 |
| STCO 46403 | Law | 3 |
|  |  | 3 |
| STCO 48813 | Ad Competition | 3 |
|  | OR | 3 |
| STCO 48823 | PR Competition | 3 |
| STCO 48833 | OR | Campaigns |

A grade of "C" or higher in each and a combined GPA of 2.5 must be earned in these four gateway courses STCO 11103, STCO 16103, STCO 23133 and STCO 23123 before enrolling in any advanced required courses for the strategic communication major.
Strategic communication majors must also complete the coursework for ONE of the concentrations below:

## Integrated Concentration

| STCO 31423 | Strategic Writing | 3 |
| :--- | :--- | :--- |
| STCO 35413 | Creative Strategy | 3 |
| STCO 45413 | Channel Planning | 3 |
| Plus 6 hours of strategic communication electives. |  |  |

## Advertising Concentration

| STCO 35413 | Creative Strategy | 3 |
| :--- | :--- | :--- |
| STCO 45413 | Channel Planning | 3 |

Plus 9 hours of strategic communication electives, 6 of which must includeSTCO 22403, STCO 36433, STCO 44433, STCO 47403, STCO 48813, STCO 43803, STCO 41413 or STCO 43113.

## Public Relations Concentration

STCO $31423 \quad$ Strategic Writing
Plus 12 hours of strategic communication electives, 6 of which must include
STCO 32603, STCO 43333, STCO 47533, STCO 47433, STCO 47403, STCO 48823, STCO 46723 or STCO 47523.

## Honors College

Candidates for departmental honors should take STCO 30003 their junior year and STCO 40003 their senior year.

## School of Strategic Communication Internships

Students are strongly encouraged to arrange internships with public relations or ad agencies or departments in corporations dedicated to external and internal communications. An intern director assists students in locating and qualifying for internships. Academic credit is available for successfully completed internships with prior approval.
Additional information on internship policies and procedures is at www.stco.tcu.edu.

## Roxo, Student-run Strategic Communication Agency

In Roxo, students gain hands-on work experience and apply their classroom learning to real-life, urgent communication challenges. Inside an agency space in Moudy South, students work as account planners, account executives, writers, digital/social media strategists and public relations specialists.
Roxo's clients have included start-ups, US-based and international nonprofits, companies, small businesses and public-sector agencies. A weekly Agency Operations class rounds out the experience by helping students understand the industry, hear from working professionals, and learn business practices such as writing estimates, running client meetings, and identifying new opportunities.
Roxo is a three-credit, upper-level elective in the strategic communication major. Students must apply for admission. To be eligible, a student must be a junior or senior who has completed the four gateway courses plus two upper-level courses in the major.

## Five-year Combined Bachelor's/Master's Program

The five-year combined bachelor's/master's program enables outstanding strategic communication students to combine a bachelor's degree in strategic communication with the Master's of Strategic Communication in five years. Students may apply for admission to the strategic communication program during the semester they complete 75 hours of undergraduate coursework.
To be considered for admission, students must submit a graduate application. If admitted, students complete up to 12 semester hours in the Strategic Communication graduate program during their fourth year of undergraduate study. Those 12 hours of graduate courses may fulfill elective requirements for the strategic communication major. At the end of the fourth year, assuming that all other graduation requirements are met, the student earns his/her baccalaureate degree.
During the summer before her or his fifth year, the student will complete 6 hours of the STCO graduate courses. During her or his fifth year, the student then completes the remaining 18 semester hours toward the STCO master's degree. Students intending to pursue the five-year combined
bachelor's/master's program should make their plans known as early as possible to faculty members in the Department of Strategic Communication to ensure proper advising.

## College of Education

The mission of the College of Education at TCU is to prepare exemplary leaders for diverse educational settings and related fields who are reflective, ethical, innovative and committed to all learners. As professionals and active citizens in the community, the college strives to create a humane and just society in which all individuals can develop their full potential. The College of Education is governed by an ethical code that documents its obligations to students, colleagues and the community. This code includes rationality and objectivity in professional judgments and actions, civility and caring in interactions with others, and encouragement of diverse views on issues of significance to society.
Consistent with the above values, the college's core beliefs incorporate a connection between a strong foundational knowledge base with professional practice. Professionals in education study and expand the knowledge base of effective practice and ground their practice in theory and research acquiring expertise through activities in diverse, field-based settings, which are exemplars of practice. They also promote high student achievement and a passion for learning by:

- Mastering content knowledge and effective pedagogical skills;
- Using multiple strategies, resources and technologies to plan, implement and assess instruction and document effectiveness with students; and
- Synthesizing knowledge from relevant, academically diverse perspectives and a variety of theoretical orientations and approaches.
In addition, educational professionals provide service and leadership in diverse settings, ranging from local to global communities; seek to improve professional settings and society; and collaborate with representatives from various groups within and outside the educational community.


## Education Centers, Institutes and Laboratory Schools

## Center for Public Education

The Center for Education considers education a civil and human right, a public good, and both a process and a goal. Through education young people develop opportunities and civic competence. Many of society's problems (proverty, disenfranchisement, discrimination) manifest themselves in public schools. In the past these issues were most present in urban school settings, but they are now also found in suburban and rural areas. TCU's Center for Public Education seeks to understand the complexity of public education at the system level and build connections with individual schools. Initiatives include:

- Aspiring Teacher's Program. Recruits high school students from underrepresented groups into the teaching profession.
- Anti-bullying and anti-bias workshop for TCU student teachers.
- College Advising Corps. Seeks to increase the number of low-income, first-generation and underrepresented Texas high school students earning a degree in the TCU College of Education.


## Andrews Institute of Mathematics \& Science Education

The mission of the Andrews Institute is to provide an environment for innovation and change in mathematics and science education through creative research and teaching by faculty and students. Vital to the mission is cutting-edge research focused on the teaching and learning of mathematics and science education. Also of great importance is the outreach to the community as seen in events and joint ventures with community partners.

## Goals:

- Enhance the educational experience of TCU students who will become effective and ethical educators in the field of mathematics and/or science education;
- Conduct research that addresses issues of teaching and learning mathematics or science and contribute to development of evidencebased practices in mathematics and science education;
- Sponsor and participate in community outreach to enhance the experience of students and their families in school and communitybased activities in mathematics and science;
- Engage in advocacy to promote the development and delivery of exceptional programs in mathematics and science education.


## Alice Neeley Special Education Research and Service Institute

The Alice Neeley Special Education Research and Service (ANSERS) Institute provides an environment for innovation and change in special education through exemplary teaching, creative research, and community outreach. The ANSERS Institute works in conjunction with the TCU laboratory schools Starpoint and KinderFrogs - to create and coordinate activities, programs and research in special education.
The mission of the ANSERS Institute is to transform the quality of life and learning for students with disabilities and their families through evidencebased research and practice.
The ANSERS Institute's mission is carried out through the following four goals:

- Enhance the educational experience of TCU students who will become effective and ethical educators in the field of special education.
- Conduct research that will better meet the needs of children with disabilities and contribute to development of evidence-based practices in special education.
- Sponsor and participate in community outreach to enhance the inclusion of children and youth with disabilities and their families in school and community-based activities.
- Engage in advocacy activities to support and promote the development and delivery of exceptional services to children with disabilities.


## Starpoint and KinderFrogs Schools

The Laboratory Schools, Starpoint and KinderFrogs, in the College of Education at Texas Christian University provide opportunities for TCU students in the fields of education, kinesiology, nursing, speech and language, and child development to engage in teaching, research and applied practice. The overarching goal of the Laboratory Schools is to provide an innovative learning environment for children with learning challenges and to inform the field of special education through research and innovative practices.
Starpoint School is an individualized academic program for children ages 6 to 12 with learning differences, which is committed to the ideal that all children can learn. Through innovative programming, children learn to compensate for their learning difficulties, build on their own strengths, develop a positive attitude about school and learning, and perform to the best of their capabilities as life-long learners.
KinderFrogs is a family-focused, early-intervention program that provides a developmentally appropriate educational environment for children with Down syndrome and other developmental delays. Through innovative programming, KinderFrogs School prepares children for success and independence in inclusive school and community settings.

## College of Education Degrees

The College of Education offers the Bachelor of Science (BS) in Education degree with majors in:
Early Childhood Education (Grades EC-6)
Generalist EC-6 with ESL Option
Generalist EC-6 with Special Education Option
Generalist EC-6 with Bilingual Option
Middle School Education (Grades 4-8)
Middle School Language and Literacy
Middle School Mathematics
Middle School Science
Middle School Social Studies
Secondary Education (Grades 7-12)
Secondary School Language and Literacy
Secondary School Life Science
Secondary School Physical Science (Grades 6-12)
Secondary School Social Studies

Courses are also offered for those students wishing to prepare for teaching English as a Second Language (ESL). See English as a Second Language Supplemental Certificate.

## Program Changes

Programs listed in this catalog reflect current State Board of Educator Certification (SBEC) and Texas Education Agency (TEA) standards. Minor changes may be made in these programs to meet additional certification standards adopted by SBEC/TEA.

## Honors College

Education majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in EDUC 30003: Honors Tutorial during their junior year and EDUC 40003 : Honors Research Paper during the fall or spring semester of their senior year. With permission from an adviser, EDUC 30003: Honors Tutorial may substitute for EDUC 30123: Educational Psychology.

## Education Major, Double Major, or Minor Declaration

Students may declare a major, double major or minor in education, but to be admitted into the Teacher Education Program, all majors and minors must meet the following criteria:

- TCU students must have a 2.75 or better GPA.
- Transfer students must bring a 3.0 or better GPA to declare an education major and have a 2.75 or better GPA on 12 hours of coursework at TCU to be admitted to the College of Education.
- Entering freshmen have no specific requirements to declare an education major but must have a 2.75 or better GPA to be admitted to the college.
- All education majors and minors must maintain high professional standards and acceptable academic performance (a minimum 2.75 GPA overall and a " C " or better in all content areas and education coursework).


## Pass/No-Credit Policy

The University Pass/No-Credit Policy states that students may take up to two courses ( 8 hours maximum) on a P/NC basis. No course applied to the student's major, minor or associated requirements may be taken on the $\mathrm{p} / \mathrm{nc}$ basis. Courses offered with only the p/nc option will not count toward this limit on the number of p/nc hours. Students in the College of Education may not take any education course required for teacher certification or in their teaching content area on the $\mathrm{p} / \mathrm{nc}$ basis, with the exceptions of student teaching and the Professional Practice Seminar.

## Teacher Education Program Admission

Students who plan to declare a major or minor in education or who plan to earn a teaching certificate must formally apply for admission to the Teacher Education Program. They must meet, or will meet during the semester in which they apply, the minimum criteria. However, doing only the minimum does not ensure admission to the program. According to the criteria, students must:

- Complete at least 54 semester hours of coursework.
- Attain a minimum overall 2.75 GPA on a minimum of 12 semester hours at TCU.
- Complete the ethics training module required by the Texas Education Agency.
- Complete with a "C" or better EDUC 20003 Critical Investigation: Teaching and Learning and speech communication (OC).
- Complete 12 hours of content area coursework or 15 hours if the certification sought is math or science at or above grade seven.
- Achieve a " C " or better in all content areas* and education courses taken prior to admission.
- Meet expectations for professionalism according to the admissions rubric in EDUC 20003 Critical Investigation: Teaching and Learning.
- Demonstrate high professional, ethical, and relational standards of behavior, appropriate emotional control, and communication (oral, written, technological) with adults, children and fellow students.
- Attach a current (within one year) criminal record check.
- Attach FERPA Agreement.
- Attain a required score on the following:THEA (TASP), SAT or ACT. These scores must not be older than five years.

| THEA | SAT | ACT |
| :--- | :--- | :--- |
| Reading - 260 | Critical Reading -500 | Reading - 19 |
| Mathematics - 230 | Mathematics -500 | Mathematics - 19 |
| Writing - 220 | Writing -500 |  |
|  | Composite - 1570 | Composite - 23 |

*content area for EC-6 certification includes history, government, mathematics, English, lab sciences, geography, fine arts and speech.
Students applying for admission to the Teacher Education Program should do so by March 1 for fall admission and Oct. 1 for the spring. Late applications will be considered on a space-available basis. Eligibility to apply does not ensure admission to the program. The Admissions Committee will consider minimum criteria, as well as student performance (professional attitude, demeanor, abilities and preparation) and space in the program.
Any exception to these admission standards must be approved by the program faculty and the College of Education dean and/or designee.
Prior to admission to the College of Education, students may take EDUC 20003 Critical Investigation: Teaching and Learning; EDUC/MS/SE 30113 Digital Literacy, Learning and Citizenship in Education; EDUC 30143 Child and Adolescent Development; EDEC 30103 Introduction to Early Childhood Education; and EDUC 30013 Professional Roles and Responsibilities. Students may not register for any other education courses until admitted to the College of Education.

## Texas Higher Education Assessment (THEA)

Students who do not have the required scores on the ACT or SAT must take the Texas Higher Education Assessment (THEA) examination prior to admission to the Teacher Education Program. The test consists of three sections: reading, writing and mathematics, which may be taken together or at separate test administrations. Students are encouraged to take the THEA as early as possible, preferably during their freshman year. Information about the THEA may be obtained in the College of Education or at www.thea.nesinc.com.

## Criminal Record Search

In accordance with Texas Senate Bill 9 and at the request of the State Board of Educator Certification, the College of Education has established procedures for annual criminal background checks for all education majors and minors. The College of Education requires a criminal background check prior to admission, field experiences and student teaching.

## Liability Insurance

As students enter public and private schools for observations, tutoring, afterschool programs and student teaching, it is important to be covered by liability insurance. Under Texas law, both the student intern and teacher can be held responsible for a child's injury. Liability insurance is offered at low cost to teachers-in-training who belong to a teacher organization such as the TCU chapter of the Texas Student Education Association (TSTA-NEA), which covers liability insurance, costs of defending claims and some attorney fees. Other teacher organizations in the state - ATPE, UEA, AFT - offer similar coverage.

## Teacher Education Program Retention

Students must maintain acceptable academic performance (a minimum 2.75 GPA overall and a grade of " $C$ " or better in content area and education courses), as well as high professional standards in order to advance in the program and to student teaching. The College of Education is dedicated to identifying and intervening to assist students who demonstrate difficulties maintaining these standards.
Any faculty member who has a concern with a student's performance and/or professionalism may initiate the Academic Performance and Professionalism Warning (APPW) process.

1. First, the faculty member fills out the APPW form describing the concerns and indicating potential solutions.
2. A conference between the student and two faculty members is required. The parties discuss the student's understanding of the problem and agree on a course of action. The APPW contract is signed by the student and faculty members. If the student fails to respond or attend a conference, the faculty will complete the form and notify the student via certified mail.
3. The completed form is submitted to the associate dean, the student and the Office of Campus Life.
4. Any student receiving three notices through this process may be considered for dismissal from the College of Education. Except in an unusually severe situation, just one notice will not result in dismissal. These notices do not become part of a student's permanent academic record.

## Student Teaching Admission

Any student who wishes to be considered for admission to student teaching must meet the following requirements:

- Completion of all content area and education coursework with a minimum 2.75 GPA and no grade lower than a " C ";
- A minimum overall TCU GPA of 2.75;
- Completion of the modules required by the Texas Education Agency regarding recognizing/intervening/referral services for emotionalbehavioral concerns of students;
- Successful completion of Senior Seminar EDEC/EDMS/EDSE 30001: Professional Practice Seminar.
- Demonstration of high professional, ethical and relational standards of behavior, appropriate emotional control, and communication (oral, written and technological) with adults, children and fellow students.
Applications for student teaching are due by May 1 for fall student teaching and October 1 for spring student teaching. The Admissions Committee will consider minimum criteria, as well as student performance (professional attitude, demeanor, abilities and preparation). Any exception to these student teaching standards must be approved by the program faculty and the College of Education dean and/or designee.


## Accelerated Master's Option

The Accelerated Option is for high-achieving undergraduate students enrolled in the College of Education. This option is available only to TCU undergraduates obtaining a baccalaureate degree and teacher certification in early childhood (EC-6), middle school or secondary education. The Accelerated Option allows outstanding students to complete a bachelor's degree with the Master of Education (M.Ed.) in five years. Students are eligible to apply for admission to the graduate program during the semester they complete 90 hours of undergraduate coursework. To be considered for admission to the Accelerated Option, students must submit a graduate program application packet. Only candidates demonstrating superior undergraduate academic performance and having strong recommendations are considered for admission.
Students intending to pursue the Accelerated Option should contact, as early as possible, their adviser in the College of Education. Students admitted to the Accelerated Option complete up to 12 hours of the MEd program during the fourth year of undergraduate study. Candidates must work with their advisers to determine how the courses they take will apply to the undergraduate degree

## International Student Teaching Opportunities

Students in the College of Education can participate in the many study abroad programs at TCU as well as experience student teaching in places like Belgium, Denmark, England, Finland, Norway, Sweden, Switzerland and The Netherlands.

## Certification

To obtain Texas teacher certification at TCU, students must complete the Teacher Education Program in the College of Education and achieve a bachelor's degree. Students who seek certification must take the state TExES proficiency exam at least once by midterm of the semester in which they plan to graduate. Students must also successfully complete the appropriate state certification exams for the content area and grade level they wish to teach.
After graduation TCU will recommend the student to the state of Texas for teacher certification upon completion of the following requirements:

- Conferred bachelor's degree
- Successful completion of the Teacher Education Program, including the student teaching experience
- Passing scores on the required state certification exams
- Final GPA of 2.75 with a "C "or better in education and content area coursework


## Texas Examination of Educator Standards (TExES)

All Teacher Education Program graduates applying for Texas certification must pass a proficiency test (TExES) in their field of certification or supplemental area and a professional development test. A single certification exam may be attempted five times. Anyone who has attempted a test (regardless of how many times before Aug. 31, 2015) may test up to
four more times after Sept. 1, 2015. Additional attempts require State Board for Educator Certification (SBEC) permission. Students who fail to take the appropriate TEXES within three years of program completion must present documentation of completion of TExES review or additional coursework prior to receiving permission to test.
To be eligible to take the TExES certification exam, students must pass the practice representative exams, which are offered during the Professional Practice Seminar. Students who do not pass the practice exams must present evidence of test preparation before the exam will be re-administered. A student who receives no credit in the Professional Practice Seminar is not considered a program completer and will not be released to take the TExES.

## Title II

Teacher preparation programs at institutions of higher learning are required to report the pass rates of their program graduates on the exams that qualify them for certification in their state. The most recent, complete Institutional Report for TITLE II is available on the College of Education website.

## Languages Other Than English (LOTE)

All individuals seeking Texas teaching certification with a major in Spanish, French, or German must take the Languages other than English (LOTE) state exam along with the EC-12PPR.

## Education Major Transfer Work Credit

After enrolling at TCU:

- All education majors must receive prior written approval from their academic adviser and the associate dean before taking courses at another institution. Coursework taken without prior written approval may not be applied to a degree.
- No more than 12 total semester hours, except those earned in an approved study abroad program, may be transferred from other schools.
- No credit may be transferred from a community college once 54 cumulative semester hours have been earned.
- Transcripts of coursework taken elsewhere must reach the Office of the Registrar within 30 days of completion of the coursework.


## College of Education Career Services Center

The Career Services Center maintains contact with public and private schools seeking teachers, school counselors, administrators and other types of educational personnel. Registration with the center entitles students to file a summary of their academic records together with requested recommendations from teachers and others acquainted with their qualifications. Former students may use the center in seeking positions. The center provides on-campus interviews with school districts in Texas, as well as outside the state. More than 75 school districts conduct interviews on campus each year.

## Education Student Organizations

The College of Education sponsors student organizations for the purpose of promoting professional goals and interests, as well as providing recreation and fellowship among members. An international honor society in education, Kappa Delta Pi, invites to membership juniors, seniors, graduate students and classroom teachers who possess high scholarship ability. TCU's chapter of the Texas Student Education Association provides students with associate membership in the National Education Association and the Texas State Teachers Association (TSEA). TSEA provides students with the opportunity to meet and discuss professional concerns and goals with experienced teachers in the profession. The Council for Exceptional Children pre-professional organization is open to all students interested in special education.

## Education Majors, Minors, and Certifications

## Early Childhood Education, BS

The early childhood major is designed for students who plan to teach in early childhood settings (EC through grade 6). Students focus on developmentally appropriate pedagogy for children. Field-based coursework provides prospective teachers with significant experiences in urban schools. Students interested in this major may select one of the following options:
Generalist EC- 6 with ESL Option: This option is designed for students who will teach in diverse early childhood settings, including English as a Second Language classrooms. Students must pass required state examinations in order to be awarded a Generalist EC-6 Teaching Certificate with English as a Second Language qualifications.

Generalist EC-6 with Special Education Option: This option is designed for students who will teach in special education settings at the EC-6 level. Students must pass the Generalist EC-6 Content Exam and the Special Education Supplemental Exam.
Generalist EC-6 with Bilingual Option: This option is designed for students who will teach in bilingual (Spanish) early childhood settings. Students wishing to pursue this degree option must demonstrate proficiency in Spanish as a condition for admission to the College of Education. The Department of Spanish and Hispanic Studies conducts the Spanish Language Assessment. Students must pass required state examinations, including the Bilingual Target Language Proficiency Test (BTLPT).

## Generalist EC-6 with ESL Option

## TCU Core Curriculum: 39 hours

| Humanities: $\mathbf{9}$ hours |  |
| :--- | :--- |
| Religion | RT, HUM |
| English Literature | LT, HUM |
| EDEC 30073 | Critical Literacy and Children's Literature |
| Social Studies: 9 hours |  |
| HIST 10603 | United States History: A Survey to 1877 |
| HIST 10613 | United States History: A Survey since 1877 |
| POSC 10133 | American and Texas Government |
| Natural Sciences: 6 hours |  |
| BIOL 10003 | Contemporary Issues in Biology |
| NSC | Any other Lab Science different from BIOL |

## Fine Arts: $\mathbf{3}$ hours

| FNRT 20903 | $\begin{array}{l}\text { Children, Creativity and } \\ \\ \\ \\ \\ \text { OR }\end{array}$ |
| :--- | :--- |
| Any other FAR |  |$]$| Mathematical | Reasoning: $\mathbf{3}$ hours |
| :--- | :--- |
| MATH 10033 | Topics in Mathematics |
|  | OR |
| MATH 10043 | Elementary Statistics |
|  | OR |
| MATH 10283 | Applied Calculus |
|  | OR |
| MATH 10524 | Calculus I |
|  | OR |

MATH 20254
Oral Communication: $\mathbf{3}$ hours (choose one)
COMM 10123 Communicating Effectively OR

## Written Communication: 6 hours

| ENGL 10803 | Introductory Composition: Writing as Inquiry | 3 |
| :--- | :--- | :--- |
| ENGL 20803 | Intermediate Composition: Writing Argument | 3 |

Major: 64 hours
EDEC $30073 \quad$ Critical Literacy and Children's Literature 3
EDEC 30103 Introduction to Early Childhood Education 3
EDUC 30143
Child and Adolescent Development

## Possible Sequence of Courses

Junior I Fall Block
EDSP 30603 Study of Exceptional Students

EDEC 30013
EDEC 30023

EDEC 30033

EDEC 30213
Creative Thinking and Problem Solving: Science
Creative Thinking and Problem Solving:
Mathematics I
Creative Thinking and Problem Solving: Play and
Creativity

Junior II Spring Block

| EDUC 30123 | Educational Psychology | 3 |
| :---: | :---: | :---: |
| EDEC 30203 | Education in Elementary Curriculum: Mathematics II | 3 |
| EDEC 31233 | Education in Elementary Curriculum: Social Studies | 3 |
| EDEC 30223 | Education in Elementary Curriculum: Reading | 3 |
| EDEC 30233 | Education in Elementary Curriculum: English as a Second Language (ESL) | 3 |

Senior I Fall Block
EDEC $30001 \quad$ Professional Practice Seminar 1
EDEC 41103 Learner-Centered Teaching: Assessment 3
EDEC 41113 Learner-Centered Teaching:Foundations 3
EDEC 41123 Learner-Centered Teaching: Families 3
EDEC 41143 Learner-Centered Teaching: Management 3
EDEC 41153 Learner-Centered Teaching:Internship 3

## Senior II Spring Block

| EDEC 42213 | Professional Induction: Curriculum for Diverse <br> Learners: ESL | 3 |
| :--- | :--- | :--- |
| EDEC 42236 | Professional Induction: Internship | 6 |

## Associated Requirements: $\mathbf{1 5}$ hours

EDUC 20003 Critical Investigation:Teaching and Learning 3
EDUC 30113 Digital Literacy, Learning, and Citizenship in 3
Education
GEOG 10003 World Regional Geography 3
MATH 20043 Mathematics for Elementary Teachers 3
EDEC 20013
Science for Elementary Teachers

## Electives: 6 hours

## Generalist EC-6 with Special Education Option

## TCU Core Curriculum: 39 hours

Humanities: 9 hours
Re
English Literature LT, HUM

EDEC $30073 \quad$ Critical Literacy and Children's Literature

## Social Studies: $\mathbf{9}$ hours

HIST $10603 \quad 3$
HIST 10613 United States History: A Survey since 1877
POSC 10133 American and Texas Government 3
Natural Sciences: 6 hours
BIOL 10003 Contemporary Issues in Biology 3

NSC Any other Lab Science different from BIOL
Fine Arts: $\mathbf{3}$ hours
FNRT 20903 Children, Creativity and the Fine Arts


## Possible Sequence of Courses

## Junior I Fall Block

EDSP 30603 Study of Exceptional Students 3
EDEC 30013 Creative Thinking and Problem Solving: Science 3
EDEC 30023 Creative Thinking and Problem Solving: 3
EDEC $30033 \quad$ Creative Thinking and Problem Solving: Play and 3 Creativity
EDEC $30213 \quad$ Creative Thinking and Problem Solving: Writing

## Junior II Spring Block

| EDUC 30123 | Educational Psychology | 3 |
| :--- | :--- | :--- |
| EDEC 30203 | Education in Elementary Curriculum: Mathematics | 3 |
|  | II |  |
| EDEC 30223 | Education in Elementary Curriculum: Reading | 3 |
| EDEC 31233 | Education in Elementary Curriculum: Social Studies | 3 |
| EDEC 30233 | Education in Elementary Curriculum: English as a | 3 |

## Senior I Fall Block

| EDEC 30001 | Professional Practice Seminar | 1 |
| :--- | :--- | :--- |
| EDEC 41103 | Learner-Centered Teaching: Assessment | 3 |
| EDEC 41113 | Learner-Centered Teaching: Foundations | 3 |
| EDEC 41123 | Learner-Centered Teaching: Families | 3 |
| EDEC 41143 | Learner-Centered Teaching: Management | 3 |
| EDEC 41153 | Learner-Centered Teaching: Internship | 3 |

## Senior II Spring Block

| EDEC 42213 | Professional Induction: Curriculum for Diverse <br>  <br> Learners: ESL |
| :--- | :--- |
| EDEC 42236 | Professional Induction: Internship |

## Associated Requirements: 21 hours

EDUC 20003 Critical Investigation:Teaching and Learning 3
EDUC 30113 Digital Literacy, Learning, and Citizenship in 3
GEOG 10003 World Regional Geography 3
EDUC 50213 Seminar in Bilingual Education 3
SPAN 31403 Advanced Spanish Grammar 3
SPAN 6 additional hours by advisement
Subtotal: 127

## Middle School Education, BSMathematics, Science or Social Studies

Middle school education (grades 4-8) is designed for students who want to teach in a specific content area (mathematics, science, or social studies) in elementary and middle school settings.

## Total Semester Hours Required for Degree: 128

## TCU Core Curriculum: 39 hours

Prior to Entry into College of Education: 9 hours
EDUC 20003 Critical Investigation: Teaching and Learning
EDMS 30013 Professional Roles and Responsibilities
EDMS 30103 Developmental Psychology of Adolescence

Junior Year: 17-20 hours

| EDMS 30113 | Digital Literacy, Learning, and Citizenship in <br> Education | 3 |
| :--- | :--- | :--- |
| EDMS 30123 | Educational Psychology | 3 |
| EDMS 30603 | Study of Exceptional Students | 3 |
| EDMS 41151 | Field Experience in Education | 1 |
| EDMS 40213 | Promoting Literacy in the Content Areas | 3 |
|  | Content Methods Courses |  |

EDMS 41151 is required two semesters
Content Methods Courses refer to content area course requirements

## Senior Year/Semester 1: 8 hours

EDMS $30001 \quad$ Professional Practice Seminar 1
EDMS 50663 Motivating and Managing Students in the 3
Classroom
EDMS 41151 Field Experience in Education 1
EDMS51103 Assessment 3
Senior Year/Semester 2: 6 hours
EDMS 40986 Student Teaching in the Middle School 6
Content Area Course Requirements
Mathematics ( $\mathbf{3 8} \mathbf{- 4 0}$ Hours)
EDMS 40443 Methods for Teaching Middle School Mathematics 3
EDMS 40473 Methods for Teaching Middle School Mathematics 3
II
Calculus I
Calculus II 4
Elementary Statistics 3
Discrete Mathematics I 3
Mathematics for Middle School Teachers I 3
Mathematics for Middle School Teachers II 3
Higher Geometry 3
History of Mathematics 3

Topics in Mathematics 3
OR
Probability 3
OR
Discrete Mathematics II
OR
Linear Algebra
OR
MATH Upper level 30000 and above math

PHYS 10154

PHYS 20053
General Physics I with Laboratory
OR
Physics of Music and Sound
Science (46 Hours)
BIOL $10003 \quad$ Contemporary Issues in Biology 3
BIOL 10501 Introductory Biology Lab I 1
BIOL 10503 Introductory Biology I 3
BIOL 10511 Introductory Biology Lab II
BIOL 10513 Introductory Biology II


EDMS 40463

## Middle School Education, BS-Language and Literacy

Middle school education (grades 4 to 8 ) is designed for students who want to teach in a specific content area (English/language arts, reading, and ESL) in elementary and middle school settings.

## Total Semester Hours Required for Degree: 124

## TCU Core Curriculum: 39 Hours

Prior to Entry into College of Education: 9 hours
EDUC 20003 Critical Investigation:Teaching and Learning 3
EDMS 30013 Professional Roles and Responsibilities 3
EDMS 30103 Developmental Psychology of Adolescence 3
Junior Year through Senior Year/Semester 1: 57 hours
EDMS $30001 \quad$ Professional Practice Seminar 1
EDMS 30113 Digital Literacy, Learning, and Citizenship in 3
EDMS 30123 Educational Psychology 3
EDMS 30603 Study of Exceptional Students 3
EDMS 50663 Motivating and Managing Students in the 3 Classroom

EDMS51103 Assessment
EDMS $41151 \quad$ Field Experience in Education 1
Content Methods Courses
EDMS 30001 must be taken semester prior to student teaching
EDMS 41151 is required two semesters
Content Methods Courses- refer to content area course requirements
Senior Year/Semester 2: 6 hours
EDMS 40986 Student Teaching in the Middle School
Content Area Course Requirements
Language and Literacy (39) Hours
ENGL 10103 Introduction to Fiction 3
ENGL 10113 Introduction to Poetry 3
ENGL 10123 Introduction to Drama 3
ENGL 10203 Introduction to Creative Writing 3

## Select 3 hours from:

Select 6 hours from English Major: Area A - American Literature
Select 3 hours from English Major: Area B - British Literature
Select 3 hours from English Major: Area C - Writing
Select 6 hours from English Major: Area D - Theory
EDMS 50153 Literature for Adolescents 3
EDMS 50173 Development of Written Communication 3
EDMS 50223 Practicum in Reading and ESL 3
EDUC 50003 Diversity in American Education 3
EDSP 50013 Literacy Methods in Special Education 3
EDUC 50503 Foundations of Language Acquisition 3
EDUC 50513 Curriculum and Instruction in the Second 3
Language Learning Classroom

## Secondary Education, BS-Life Science, Physical Science, or Social Studies

Secondary education is designed for students who want to teach in a specific content area (life science 7-12, physical science 6-12, or social studies 7-12).

## Total Semester Hours Required for Degree: 124-125

## TCU Core Curriculum: 39 hours

Prior to entry into the College of Education: 9 hours

| EDSE 30013 | Professional Roles and Responsibilities |
| :--- | :--- |
| EDSE 30103 | Developmental Psychology of Adolescence |
| EDUC 20003 | Critical Investigation: Teaching and Learning |

Junior Year: 17-20 hours

| EDSE 30113 | Digital Literacy, Learning, and Citizenship in <br> Education |
| :--- | :--- |
| EDSE 30123 | Educational Psychology |
| EDSE 30603 | Study of Exceptional Students |
| EDSE 41151 | Field Experience in Education |
|  | Content Methods Courses |

EDSE 41151 is required two semesters
Content Methods Courses refer to content area course requirements

## Senior Year/Semester 1: 8 hours

| EDSE $\mathbf{3 0 0 0 1}$ | Professional Practice Seminar |
| :--- | :--- |
| EDSE 41151 | Field Experience in Education |
| EDSE 51103 | Assessment |
| EDSE 50663 | Motivating and Managing Students in the <br> Classroom |

Senior Year/Semester 2: 6 hours
EDSE 40986 Student Teaching in the Secondary/School
Content Area Course Requirements
Life Science (42-46 Hours)

| BIOL 10003 | Contemporary Issues in Biology | 3 |
| :--- | :--- | :--- |
| BIOL 10501 | Introductory Biology Lab I | 1 |
| BIOL 10503 | Introductory Biology I | 3 |
| BIOL 10511 | Introductory Biology Lab II | 1 |
| BIOL 10513 | Introductory Biology II | 3 |
| BIOL 30403 | Ecology and the Environment | 3 |
| BIOL 30603 | Cellular, Molecular, and Developmental Biology | 3 |
| BIOL 20234 | Basic Microbiology | 4 |
| BIOL 30703 | Plant Systematics | 3 |
| BIOL 30613 | Natural History | 3 |

Select two courses from:

| BIOL 40313 | Biogeography |
| :--- | :--- |
| BIOL 50246 | Biodiversity |
| BIOL 30233 | Economic Botany |
| BIOL 30404 | Comparative Vertebrate Anatomy |
| EDSE 50553 | Methods for Teaching Secondary Science |
| MATH 10524 | Calculus I |
| MATH 20524 | Calculus II |
| CHEM 10113 | General Chemistry I |3

CHEM 10113 General Chemistry I

Social Studies (48-49 hours)

ECON 10233
ECON, HIST or
POSC
EDSE 40463
GEOG 10003

GEOG 20013

GEOG 30513

GEOG 30723

GEOG 30713

HIST 10203
HIST 10213
HIST 10223

CHEM 10125
General Chemistry II with Laboratory
BIOL 50246 requires two semesters
Physical Science (42-44 hours)
CHEM 10113
General Chemistry I
AND
CHEM 10125
General Chemistry II with Laboratory

CHEM 30121
CHEM 30123
CHEM
EDSE 50553
ENSC 10143
GEOL 30113

MATH 10524

MATH 20524

PHYS 10154
PHYS 10161
PHYS 10163

PHYS 10164

PHYS 20474

PHYS 20481
PHYS 20484

PHYS 10273
PHYS 10283
PHYS 30014
Organic Chemistry I Laboratory 1
Organic Chemistry I 3
Upper Division Elective
Methods for Teaching Secondary Science
Contemporary Environmental Issues
Weather and Climate

Calculus
OR
Calculus II

General Physics I with Laboratory
General Physics II Laboratory
General Physics II

General Physics II with Laboratory
OR
Physics I with Laboratory: Mechanics

Physics II Laboratory
Physics II with Laboratory: Electromagnetism and Optics
Introductory Astronomy: Earth and Planets 3
Introductory Astronomy:Stars and Galaxies 3
Materials Science

ECON 10223 Introductory Microeconomics 3

Upper Division Elective
Methods for Teaching Secondary Social Studies 3

OR
Geography of the United States
OR
Cultural Geography

OR
Urban Geography

| HIST 10613 | United States History: A Survey since 1877 |
| :---: | :---: |
|  | OR |
| HIST 10953 | Asian Civilization Since 1700 |
| HIST 10923 | Latin American History: Colonial Period |
|  | OR |
| HIST 10933 | Latin American History: National Period |
|  | OR |
| HIST 30993 | History of Mexico |
| HIST 40743 | History of Texas |
| POSC 10133 | American and Texas Government |
| POSC 20144 | Practicing American and Texas Politics |
|  | OR |
| POSC 20203 | Introduction to Political Theory |
| POSC 31XX3 | American Politics Elective |
| SOCI 20213 | Introductory Sociology |
| SOCI 30343 | American Minority Groups |
|  | OR |
| EDUC 50003 | Diversity in American Education |

## Secondary Education, BS - Language and Literacy

Secondary education is designed for students who want to teach in a specific content area (English/language arts, reading, and ESL 7-12).

## Total Semester Hours Required for Degree: 124

## TCU Core Curriculum: 39 hours

Prior to entry into the College of Education: 9 hours

| EDSE 30013 | Professional Roles and Responsibilities | 3 |
| :---: | :---: | :---: |
| EDSE 30103 | Developmental Psychology of Adolescence | 3 |
| EDUC 20003 | Critical Investigation: Teaching and Learning | 3 |
| Junior Year through Senior Year/Semester 1: 57 hours |  |  |
| EDSE 30001 | Professional Practice Seminar | 1 |
| EDSE 30113 | Digital Literacy, Learning, and Citizenship in Education | 3 |
| EDSE 30123 | Educational Psychology | 3 |
| EDSE 30603 | Study of Exceptional Students | 3 |
| EDSE 50663 | Motivating and Managing Students in the Classroom | 3 |
| EDSE 51103 | Assessment | 3 |

EDSE 30001 must be taken semester prior to student teaching
Refer to content area course requirements
EDSE 41151 is required two semesters
Senior Year/Semester 1: 6 hours
EDSP 51103
EDSE 50663
Motivating and Managing Students in the Classroom

## Senior II Spring Block: 6 hours

EDSE 40986 Student Teaching in the Secondary/School
6

## Educational Studies, B.S. in Chemistry

Students who major in chemistry and complete the Educational Studies Major in Chemistry will meet the requirements for certification in Chemistry 7-12.

## Requirements: 40 hours

## Prior to entry into the College of Education: 9 hours

| EDUC 20003 | Critical Investigation: Teaching and Learning |
| :--- | :--- |
| EDSE 30013 | Professional Roles and Responsibilities |
| EDSE 30103 | Developmental Psychology of Adolescence |

Junior Year: 17 hours
EDSE 30603 Study of Exceptional Students 3
EDSE 30113 Digital Literacy, Learning, and Citizenship in 3
Education
EDSE 30123 Educational Psychology 3
EDSE 40213 Promoting Literacy in the Content Areas 3
EDSE $41151 \quad$ Field Experience in Education 1
EDSE $50553 \quad$ Methods for Teaching Secondary Science
EDSE 41151 is required two semesters
Senior I Fall Block: $\mathbf{8}$ hours
EDSE $30001 \quad$ Professional Practice Seminar 1
EDSE $41151 \quad$ Field Experience in Education 1
EDSE 50663 Motivating and Managing Students in the 3
EDSE 51103 Assessment 3
Senior II Spring Block: 6 hours
EDSE 40986 Student Teaching in the Secondary/School

## Educational Studies, B.S. in Mathematics

Students who major in Mathematics and complete the Educational Studies Major in Mathematics will meet the requirements for certification in Mathematics 7-12.

## Requirements: 43 hours

## Prior to entry into the College of Education: 9 hours

| EDUC 20003 | Critical Investigation: Teaching and Learning |
| :--- | :--- |
| EDSE 30013 | Professional Roles and Responsibilities |
| EDSE 30103 | Developmental Psychology of Adolescence |

EDSE 30103 Developmental Psychology of Adolescence

## Junior Year: $\mathbf{2 0}$ hours

| EDSE 30603 | Study of Exceptional Students | 3 |
| :--- | :--- | :--- |
| EDSE 30113 | Digital Literacy, Learning, and Citizenship in <br> Education | 3 |
| EDSE 30123 | Educational Psychology | 3 |
| EDSE 40213 | Promoting Literacy in the Content Areas | 3 |
| EDSE 41151 | Field Experience in Education | 1 |
| EDSE 50443 | Methodsfor Teaching Secondary School | 3 |
|  | Mathematics I | 3 |
| EDSE 50453 | Methods for Teaching Secondary Mathematics II | 3 |

## Senior I Fall Block: 8 hours

| EDSE 30001 | Professional Practice Seminar | 1 |
| :--- | :--- | :--- |
| EDSE 41151 | Field Experience in Education | 1 |
| EDSE 50663 | Motivating and Managing Students in the <br> Classroom | 3 |
| EDSE 51103 | Assessment | 3 |
| Senior II Spring Block: $\mathbf{6}$ hours |  |  |
| EDSE 40986 | Student Teaching in the Secondary/School | 6 |

## Educational Studies, B.S. in Mathematics/Physics

Students who major in physics and complete the Educational Studies Major in Mathematics/Physics will meet the requirements for certification in Mathematics/Physics 7-12.

## Requirements: 48 hours

## Prior to entry into the College of Education: 9 hours

EDUC 20003 Critical Investigation:Teaching and Learning 3 EDSE $30013 \quad$ Professional Roles and Responsibilities 3
EDSE 30103 Developmental Psychology of Adolescence 3
Junior Year: $\mathbf{2 3}$ hours
EDSE 30603 Study of Exceptional Students 3
EDSE 30113 Digital Literacy, Learning, and Citizenship in 3 Education

EDSE 30123 Educational Psychology 3
EDSE 40213 Promoting Literacy in the Content Areas 3
EDSE $41151 \quad$ Field Experience in Education 1
EDSE 50443 Methodsfor Teaching Secondary School 3
Mathematics
EDSE 50453 Methods for Teaching Secondary Mathematics II 3
EDSE 50553 Methods for Teaching Secondary Science 3
EDSE 41151 is required two semesters

## Senior I Fall Block: 8 hours

EDSE $30001 \quad$ Professional Practice Seminar 1
EDSE $41151 \quad$ Field Experience in Education 1
EDSE 50663 Motivating and Managing Students in the 3
Classroom
EDSE 51103 Assessment
Senior II Spring Block: 6 hours
EDSE 40986 Student Teaching in the Secondary/School

## Educational Studies, B.S. in History

Students who major in History and complete the Educational Studies Major in History will meet the requirements for certification in History 8-12.

## Requirements: 40 hours

| Prior to entry into College of Education: $\mathbf{9}$ hours |  |  |
| :--- | :--- | :--- |
| EDUC 20003 | Critical Investigation: Teaching and Learning | 3 |
| EDSE 30013 | Professional Roles and Responsibilities | 3 |
| EDSE 30103 | Developmental Psychology of Adolescence | 3 |

## Junior Year: 17 hours

| EDSE 30603 | Study of Exceptional Students <br> EDSE 30113 <br> Digital Literacy, Learning, and Citizenship in <br> Education |
| :--- | :--- |
| EDSE 30123 | Educational Psychology |
| EDSE 40213 | Promoting Literacy in the Content Areas <br> EDSE 40463 |
| Methods for Teaching Secondary Social Studies |  |
| EDSE 41151 | Field Experience in Education |
| Senior I Fall Block: 8 hours |  |

## Educational Studies, B.S. in Languages Other Than English (LOTE)

Students who major in French, German or Spanish and complete the Educational Studies Major in Languages other than English will meet the requirements for certification in Languages other than English (LOTE) French, German or Spanish. Note: Students seeking LOTE certification must pass a language proficiency assessment administered by their major department the semester prior to student teaching.

## Requirements: 43 hours

## Prior to entry into the College of Education: 9 hours

EDUC 20003 Critical Investigation:Teaching and Learning
EDSE $30013 \quad$ Professional Roles and Responsibilities
EDSE 30103 Developmental Psychology of Adolescence

## Junior Year: $\mathbf{1 8}$ hours

| EDSE 30603 | Study of Exceptional Students | 3 |
| :--- | :--- | :--- |
| EDSE 30113 | Digital Literacy, Learning, and Citizenship in <br>  <br> Education | 3 |
| EDSE 30123 | Educational Psychology | 3 |
| EDSE 40213 | Promoting Literacy in the Content Areas | 3 |
| EDUC 50023 | Effective Teaching and Classroom Implementation | 3 |
| EDUC 50503 | Foundations of Language Acquisition | 3 |

## Senior I Fall Block: 8 hours

| EDSE 30001 | Professional Practice Seminar |
| :--- | :--- |
| EDSE 41151 | Field Experience in Education |
| EDSE 50663 | Motivating and Managing Students in the <br>  <br> Classroom |
| EDSE 51103 | Assessment |

EDSE 41151 is required 2 semesters
Senior II Spring Block: 6 hours
EDSE 40986
Student Teaching in the Secondary/School

## Educational Studies, B.S. in Business Administration, Computer Science, Theatre, Dance, J ournalism or Communication

Students who major in business administration, computer science, dance, theatre, journalism or communication and complete the Educational Studies Major in Business Administration, Computer Science, Dance, Theatre, Journalism or Communication will meet the requirements for certification in Business Education 6-12, Computer Science 8-12, Dance 8-12, Theatre EC-12, Journalism 7-12 or Speech 7-12.

## Requirements: 40 hours

## Prior to entry into the College of Education: 9 hours

EDUC 20003 Critical Investigation:Teaching and Learning 3
EDSE $30013 \quad$ Professional Roles and Responsibilities 3
EDSE 30103 Developmental Psychology of Adolescence 3
Junior Year: 17 hours
EDSE 30603 Study of Exceptional Students 3
EDSE 30113 Digital Literacy, Learning, and Citizenship in 3 Education
EDSE 30123 Educational Psychology 3
EDSE 40213 Promoting Literacy in the Content Areas 3
EDSE $41151 \quad$ Field Experience in Education 1
EDSE 50023 Effective Teaching and Classroom Implementation 3
EDSE 41151 is required two semesters
Senior I Fall Block: 8 hours
EDSE $30001 \quad$ Professional Practice Seminar 1
EDSE $41151 \quad$ Field Experience in Education 1
EDSE 50663 Motivating and Managing Students in the 3
Classroom
EDSE 51103 Assessment 3
Senior II Spring Block: 6 hours
EDSE 40986 Student Teaching in the Secondary/School
6

## Educational Studies, B.S. in English

Students who major in English and complete the Educational Studies Major in English will meet the requirements for certification in English 7-12.

## Requirements: 51 hours

## Prior to entry into the College of Education: 9 hours

EDUC 20003 Critical Investigation: Teaching and Learning 3
EDSE $30013 \quad$ Professional Roles and Responsibilities 3
EDSE 30103 Developmental Psychology of Adolescence 3

Junior year through senior year/semester 1: 36 hours
EDSE $30001 \quad$ Professional Practice Seminar 1

EDSE 30113 Digital Literacy, Learning, and Citizenship in 3
Education
EDSE 30123
Educational Psychology
EDSE 30603 Study of Exceptional Students 3
EDSE $41151 \quad$ Field Experience in Education 1
EDSE 50153 Literature for Adolescents 3
EDSE 50173 Development of Written Communication 3

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| EDSE 51103 | Assessment |
| :--- | :--- |
| EDSE 50223 | Practicum in Reading and ESL |
| EDUC 50503 | Foundations of Language Acquisition <br> EDUC 50513 |
| Curriculum and Instruction in the Second <br> Language Learning Classroom <br> Motivating and Managing Students in the <br> EDSP <br> EDSE 30001 must be taken the semester prior to student teaching |  |
| EDSE 41151 is required two semesters |  |
| Senior year/semester 2: 6 hours |  |
| EdUCational Studies Minor |  |

Students can minor in Educational Studies; however, completion of the minor does not meet the requirements for teacher certification. Students must meet college of education admission requirements.

## Requirements

## Prior to entry into the College of Education: 3 hours

EDUC $20003 \quad$ Critical Investigation:Teaching and Learning
Prior to entry into the College of Education, students may select from any of the following courses: 3 hours
EDUC $10433 \quad$ Freshman Seminar in Education 3
EDUC 10533 Freshman Seminar in Education 3
EDUC 30013 Professional Roles and Responsibilities 3
EDUC 30143 Child and Adolescent Development 3

## After entry into the College of Education,students may select from any of the following courses: $\mathbf{1 5}$ hours

| EDEC 30073 | Critical Literacy and Children's Literature | 3 |
| :--- | :--- | :--- |
| EDEC 30103 | Introduction to Early Childhood Education | 3 |
| EDSE 30113 | Digital Literacy, Learning, and Citizenship in <br> Education | 3 |
| EDSE 50173 | Development of Written Communication | 3 |
| EDSE 50663 | Motivating and Managing Students in the | 3 |
| EDUC 30123 | Classroom |  |
| EDUC 30603 | Educational Psychology | 3 |
| EDUC 50003 | Study of Exceptional Students | 3 |
| EDUC 50023 | Diversity in American Education | 3 |

EDUC 40213 content areas include business administration, computer science, dance, French, German, history, journalism, mathematics, Spanish and communication.

EDUC 50023 can be replaced with EDSE 50443 or EDSE 50453 for students with a mathematics major and EDSE 40463 for students with a history major.

## All Level Teacher Certification

All-level certification enables students to teach in grades EC-12. Majors include art, music, deaf and hard of hearing, and physical education. All-level certification students follow the same sequence of education courses as secondary certification students with the exception of student teaching. Alllevel certification students complete student teaching in the elementary and secondary schools. Students should contact the certification officer in the College of Education to be admitted to the Teacher Education Program

## The professional development courses that must be taken in education are as follows:

EDUC 30123
EDUC 30603
EDUC 30013
EDUC 40213
EDUC 50023
EDUC 30001
EDUC 40966
EDUC 50023 is not required for Art Education, Physical Education, and Music Education majors.
EDUC 30001 must be taken the semester prior to student teaching.

## English as a Second Language Supplemental Certificate

English as Second Language (ESL) is designed for students who intend to teach learners for whom English is a second or other language. The ESL supplemental certificate may be added to a valid Texas teacher certificate, special education certificate or a vocational education certificate.

| The coursework consists of $\mathbf{1 2}$ semester hours: |  |  |
| :--- | :--- | :--- |
| EDUC 50503 | Foundations of Language Acquisition | 3 |
| EDMS 50223 | Practicum in Reading and ESL | 3 |
| EDUC 50513 | Curriculum and Instruction in the Second <br> Language Learning Classroom | 3 |
| EDUC 50003 | Diversity in American Education | 3 |
| In addition to the above coursework, students are required to successfully |  |  |
| complete a student teaching experience in an approved ESL classroom. One |  |  |
| year of successful classroom teaching experience in an approved ESL or |  |  |
| bilingual education program may be substituted for student teaching. |  |  |

## College of Fine Arts

## Fine Arts Program of Study

Since the founding of Texas Christian University more than a century ago, fine arts and related professional studies have been integral parts of the University's educational program. Today, some 950 students concentrate their studies within the three departments and three schools that comprise the College of Fine Arts. Degree programs are available in art and art history; classical and contemporary dance; graphic design, interior design and merchandising; music; and theatre. The academic programs exact an appropriate balance between professional training and liberal arts studies. Personal counseling and relatively small classes enable the faculty to give attention to the work of each student.
College of Fine Arts faculty are dedicated teachers who combine strong academic training with years of professional experience in their disciplines. They pride themselves on the ability to convey to their students the knowledge necessary for successful lives and careers in the 21st century. Visiting faculty, guest artists and performers also interact with students throughout the year, enriching the learning experience.
Resources available to students include numerous computer labs, lighting and sound systems, specialized libraries and equipment, galleries, art and dance studios, theaters and performance halls. College of Fine Arts programs enjoy close working relationships with the Kimbell Art Museum, The Fort Worth Symphony, Texas Ballet Theatre and the other visual and performing institutions in the Dallas/Fort Worth Metroplex.

## College of Fine Arts Organization

The College of Fine Arts is organized into three schools and three departments, offering 26 major fields of concentration. The departments provide professional training in vocational fields for students planning careers and serious avocational training for those who wish to attain artistic ability without professional intent.

## Schools

School of Art

- Drawing and Painting
- Photography
- Printmaking
- Sculpture
- Ceramics
- Art Education
- Art History

School of Music

- Performance
- Piano, Organ, Voice, Strings, Wind and Percussion Instruments
- Piano Pedagogy
- Theory and Composition
- Music Education
- Church Music

School for Classical and Contemporary Dance

- Ballet/Pointe and Modern Dance Techniques
- Choreography
- Repertoire/Variations
- Teaching Methods
- Dance History
- Partnering
- Aesthetics
- Kinesiology
- Dance Lighting


## Departments

Department of Graphic Design

- Graphic Design

Department of Interior Design and Fashion Merchandising

- Interior Design
- Fashion Merchandising

Department of Theatre

- Acting
- Musical Theatre
- Directing
- Scenic Design
- Costume Design
- Lighting Design
- Makeup and Hair
- Stagecraft
- Costume Construction


## College of Fine Arts Degrees

The College of Fine Arts offers the following degrees:

- Bachelor of Fine Arts (BFA) with a major in graphic design, studio art or art education, classical or contemporary dance and theatre.
- Bachelor of Arts (BA) with a major in art history, design studies, music, studio art or theatre. (The BA degree requires a minor along with the completion of sophomore-level foreign language.)
- Bachelor of Science (BS) with a major in interior design or fashion merchandising.
- Bachelor of Music (BM) with a major in performance, piano pedagogy, theory/composition or church music.
- Bachelor of Music Education (BME)


## Multiple Majors

Students majoring in the College of Fine Arts who wish to pursue an additional major in the college must satisfy all degree requirements of the additional major, including courses specified in the TCU Core Curriculum as particular to that degree and major.
Students who wish to pursue an additional degree in another college, if additional majors are permitted in that college, must complete all degree requirements for each major, including courses specified in the TCU Core Curriculum as particular to each degree and major.
Students outside the College of Fine Arts whose home college permits an additional major in the College of Fine Arts must complete all degree requirements for the additional major, including courses specified in the TCU Core Curriculum for that particular degree and major.

## Requirements for Graduation

Students must make an online request for their official degree plan from the College of Fine Arts when they have completed 54 semester hours (usually at the end of the sophomore or the beginning of the junior year). The online Intent to Graduate form must be submitted when a student has completed 96 hours of coursework ( 86 hours for IDFM majors) or two semesters prior to graduation, whichever comes first.
Approval of the department chair is required for all nontraditional courses, i.e., special problems, independent study, research problems, etc.

Beyond the studies specified for each major, the bachelor's degree is built on the TCU Core Curriculum that applies to all University graduates.

## Transfer Credit

Students wishing to take courses at another institution, following their admission to TCU, must secure approval through the Office of the Dean of the College of Fine Arts before enrolling in those courses. Additionally, once admitted to TCU, students may only take 12 hours of coursework from another institution. Any exceptions require permission from the student's advisers, department chair/director and assistant to the dean.

## Pass/No-Credit Policy

Courses applied toward any major in the College of Fine Arts may not be taken on the pass/no-credit basis.

## College of Fine Arts Special Programs

The Artist Diploma is available for instrumentalists and vocalists with exceptional performance ability. See the School of Music section.

## College of Fine Arts Student Organizations

## Fraternities and Sororities

Alpha Psi Omega (Theatre)
Chi Tau Epsilon (Dance)
Mu Phi Epsilon (Music)
Phi Mu Alpha (Music)
Kappa Kappa Psi (Band)
Tau Beta Sigma (Band)
Pi Kappa Lambda (Music Honor Society)
Phi Upsilon Omicron (Merchandising, Interior Design and Nutrition Honor Society)
Clubs
ASTA (American String Teachers Association)
MEO (Music Education Organization)
TCU Honor Society of Artists and Designers
TIDA (TCU Interior Design Association)
Musical Organizations
Horned Frog Band (Marching)
Symphonic Band
Wind Symphony
Chamber Music
Jazz Ensemble
Symphony Orchestra
Cello Ensemble
Harp Ensemble
Percussion Ensemble
Tuba/Euphonium Ensemble
Collegium Musicum
Concert Chorale
Men's and Women's Chorus
Professional Organizations
American Advertising Federation
Design Focus
Texas Art Education Association (TAEA)
United States Institute of Theatre Technology (USITT) Student Chapter
Association for Theatre and Higher Education (ATHE)
Texas Educational Theatre Association (TETA)
Southwest Theatre and Film Association
Kennedy Center American College Theatre Festival (KCACTF)
American Textile Chemist and Colorist (AATCC)
International Textile and Apparel Association (ITAA)
American Association of Family and Consumer Sciences (AAFCS)
International Fashion Group
National Retail Federation (NRF)
American Collegiate Retail (ACRA)
International Association of Lighting Designers (IALD)
Interior Design Educator's Council (IDEC)
Illuminating Engineering Society of North America (IESNA)
International Interior Design Association (IIDA)
American Society of Interior Designers (ASID)
National Council for Interior Design Qualification (NCIDQ)
Network of Executive Women in Hospitality (NEWH)
International Dark Sky Association (IDA)

College Art Association (CAA)
National Association of Schools of Art and Design (NASAD)
American Institute of America Arts (AIGA)
Dallas Society of Visual Communication (DSVC)

## Arts Administration Minor

## The arts administration minor requires 18 total hours as follows:

Business Knowledge (9 hours)

Required Courses
ACCT 20653 Introduction to Accounting 3

ACCT 20353 Fundamentals of Accounting I 3

MANA 30653 Survey of Management 3
OR
MANA $30153 \quad$ Organizational Management 3

MARK $30653 \quad$ Principles of Marketing 3

MARK $30153 \quad$ Marketing Management 3
Permits required from the M.J. Neeley School of Business to enroll in courses for business majors.

## Aesthetic Experience (3 hours)

Fine arts majors must choose this from outside their major department from:
ARHI 10043 Introduction to Art History 3

ARHI 20503 Survey Topics in Art History 3
DANC 10453 Dance in World Cultures 3
DANC 40373 Dance History I 3
DANC 40383 Dance History II 3
MUSI 10033 Survey of Jazz and Popular Music 3
MUSI 10053 Survey of Music 3
MUSI 10073 From Rock to Bach 3
THEA 11003 Survey of Theatre 3
THEA 11013 Survey of Musical Theatre 3
Administration Integration (6 hours)
Required Courses
AADM 30103 The Arts Organization 3
AADM 40103 Management in the Arts 3
Optional, but recommended:
AADM 40903 Internship in Arts Administration

## School of Art

The School of Art administers the Bachelor of Fine Arts (BFA) degree with a major in studio art, art education, as well as the Bachelor of Arts (BA) degree with a major in art history and studio art.
The BFA is available in studio art with concentration in ceramics, painting, photography, printmaking or sculpture and art education. A minimum of 78 semester hours in art is required for studio majors; art education majors must complete a minimum of 66 hours of art. The degree plans are outlined below.

- BA degree ARGD, Art History and Studio Art
- Minors in Art History and Studio Art

All art courses taken in the major or minor sequences must be passed with a grade of "C" or better to fulfill graduation requirements.

## Departmental Requirements

A minimum 2.5 cumulative GPA in art is a required prerequisite to junior and senior-level studio art and art education courses. After entrance into upperdivision courses, a minimum 2.5 GPA must be maintained as a prerequisite to further advanced enrollment.

## Field Trips

Field trips may be required by instructors as a part of the content of any course. Every effort will be made to ensure that these trips do not conflict with other portions of the student's schedule.

## Honors College

School of Art majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in ARED, ARHI or ARST 30003 during their junior year and ARED, ARHI or ARST 40003 during the fall semester of their senior year.

## Transfer Students

Transfer students must have a 2.5 minimum GPA in art and present a portfolio or photographs/slides of their work for evaluation by the School of Art at least one week prior to registration or at the time of advisement.

## Declaration of a Major

The school requires students to declare a major during or before the second semester of their sophomore year. Students majoring in studio art must also declare a concentration in ceramics, painting, photography, printmaking or sculpture. Once a concentration is declared, a faculty adviser from that area will be assigned, and a sequence of courses to be taken will be formulated.

## Student Exhibitions

Both graduate and undergraduate student exhibitions take place at various times during the year in the Art Galleries at TCU. No work may be removed from exhibitions without school approval. Students must claim their work at the end of each exhibition. The school cannot accept responsibility for the care, storage or distribution of student work.

## Studio Art, BFA

To earn the BFA in studio art, students must complete the requirements outlined below and choose a concentration in ceramics, painting, photography, printmaking or sculpture.

## University Requirements

Undergraduate degree (124 hours minimum)
Upper-level coursework taken at TCU (42 hours minimum)
TCU Core Curriculum (39 hours minimum)
Core curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

## Art Requirements

## Studio Courses ( $\mathbf{3 6}$ hours)

| ARST 10103 | Drawing I | 3 |
| :--- | :--- | :--- |
| ARST 10113 | Drawing II | 3 |
| ARST 10123 | Design and Color | 3 |
| ARST 10133 | Three Dimensional Design | 3 |
| ARST 20143 | Painting | 3 |
| ARST 20163 | Printmaking (Etching) | 3 |
| ARST 20173 | OR |  |
|  | Printmaking (Lithography) | 3 |
| ARST 20183 | OR | 3 |
| ARST 20213 | Ceramics | 3 |
| ARST 20243 | Sculpture | 3 |

ARST 20743

Photography

ARST 21103 Life Studies 3
ARST 30903 Seminar in Art Professions
Art History (15 hours)
ARHI 10043 Introduction to Art History 3
In addition to ARHI 10043, it is recommended that all studio art majors take one pre-modern, one non-western and two modern/contemporary art history courses.

## Studio Area Concentration (21 hours)

Senior Exhibition (3 hours)
ARST 40893 Senior Art Exhibition
Art Elective (3 hours)

## General Electives (if needed to equal 124 hours

## Suggested Courses for Freshman Year

## Fall ( 15 hours)

TCU Core Curriculum (6 hours)
WCO Written Communication
NCS Natural Sciences
Art Courses (6 hours)
ARST 10103 Drawing I 3

ARST 10123 Design and Color 3
OR
ARST 10133 Three Dimensional Design 3
Art History Course (3 hours)
ARHI 10043 Introduction to Art History
Spring (15 hours)
TCU Core Curriculum (6 hours)
RT
Religious Traditions
NCS Natural Sciences

## Art Courses (6 hours)

ARST 10113 Drawing II 3

ARST 10123 Design and Color 3

ARST 10133 Three Dimensional Design 3
Art History Course (3 hours)
ARHI any 20000 level art history course

## Studio Art, BA

To earn a BA with a major in studio art, students must complete the requirements outlined below.

## University Requirements

## Undergraduate degree (124 hours minimum)

Upper-level coursework taken at TCU (42 hours minimum)
TCU Core Curriculum ( 39 hours minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

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The BA requires a minor (at least 18 hours)
Foreign Language
Six hours or demonstrated proficiency at the second-semester, sophomore level is required. See Modern Language Major (p. 128) for additional information.

General Electives (to equal 124 hours)
Major Requirements 39 hours

| Foundation Courses (12 hours) required |  |  |
| :--- | :--- | :--- |
| ARST 10103 | Drawing I | 3 |
| ARST 10113 | Drawing II | 3 |
| ARST 10123 | Design and Color | 3 |
| ARST 10133 | Three Dimensional Design | 3 |

Studio Art Courses (9 hours) Choose 3
ARST $20143 \quad$ Painting

| ARST 20143 | Painting | 3 |
| :--- | :--- | :--- |
| ARST 20163 | Printmaking (Etching) | 3 |
|  | OR | 3 |
| ARST 20173 | Printmaking (Lithography) | 3 |
|  | OR |  |
| ARST 20183 | Printmaking (Screenprinting) | 3 |
|  |  | 3 |
| ARST 20213 | Ceramics | 3 |
| ARST 20243 | Sculpture | 3 |
| ARST 20503 | Video Art: Beginning New Media | 3 |
| ARST 20743 | Photography |  |
| ARST 21103 | Life Studies |  |

Art History ( 9 hours) must be taken in sequence

| ARHI $10043 \quad$ Introduction to Art History |
| :--- | :--- |

ARHI 20000 level
ARHI 30000 level
ARHI 10043 is required
Upper-Level Studio Art (9 hours)
Choose any 30000-40000-level ARST offered in area of concentration

## Art Education, BFA

To earn the BFA with a major in art education, students must complete the requirements outlined below.

## University Requirements

Undergraduate degree (124 hours minimum)
Upper-level coursework taken at TCU (42 hours minimum)
TCU Core Curriculum (39 hours minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

## Art Requirements

## Studio Courses ( $\mathbf{3 0}$ hours)

| ARST 10103 | Drawing I | 3 |
| :--- | :--- | :--- |
| ARST 10113 | Drawing II | 3 |
| ARST 10123 | Design and Color | 3 |

ARST 10133
ARST 20143

ARST 20163

ARST 20173

ARST 20183

ARST 20213
ARST 20243
ARST 20743

Three Dimensional Design 3
Painting 3

Printmaking (Etching)
OR
Printmaking (Lithography) 3

OR
Printmaking (Screenprinting)

## Art Elective

## Elective

| ARST | 20000 level |
| :--- | :--- |
|  | OR |
| ARST | 30000 level or above |

## Art Education Courses (12 hours)

ARED 10803 Basics in Art 3
ARED 30013 Approaches to Studio Art 3
ARED 30803 The Child and Visual Arts 3
ARED 40803 Essentials of Visual Arts 3

Art History ( $\mathbf{1 2}$ hours)

| ARHI 10043 | Introduction to Art History | 3 |
| :--- | :--- | :--- |
| ARHI | 20000 level |  |
| ARHI | 30000 level or above |  |
| ARHI | 30000 level or above (for a total of 6 hours at this <br> level) |  |

Upper-level Art Electives (12 hours)

## Education Requirements

## Oral Communication (3 hours)

Required for admission to the College of Education;
COMM 10123 Communicating Effectively
OR
COMM 20103
OR
COMM 20133

## ED Psych/Development (6 hours)

EDUC 30123 Educational Psychology 3
EDUC 30143 Child and Adolescent Development 3
Education Certification ( 13 hours)
EDSE 30013 Professional Roles and Responsibilities 3
EDSP 30603 Study of Exceptional Students 3
EDSE 40216
EDSE $30001 \quad$ Professional Practice Seminar 1
Student Teaching ( 6 hours)
EDUC 40966 All Level Student Teaching 6

## Suggested Courses for Freshman Year

| Fall (15 hours) |  |
| :--- | :--- |
| TCU Core Curriculum (9 hours) |  |
| OCO | Oral Communication |
| HT | Historical Traditions |
| RT | Religious Traditions |

Art Courses (6 hours)
ARST 10103 Drawing I 3

ARST 10123 Design and Color 3
Art History Course (3 hours)
ARHI $10043 \quad$ Introduction to Art History

| Spring (15 hours) |  |
| :--- | :--- |
| TCU Core Curriculum (9 hours) |  |
| RT | Religious Traditions |
| NCS | Natural Sciences |

Art Courses (6 hours)
ARST 10113 Drawing II 3
ARST 10133 Three Dimensional Design 3
ARED 10803 Basics in Art 3

## Art History, BA

A major or a minor in art history may be taken on the BA degree. The Art History Program provides a broad undergraduate foundation in the humanities and the preparation necessary for professional careers in art. Potential careers open to art history majors include teaching, research, art administration, art writing/criticism, and museum and gallery professions.

## University Requirements

Undergraduate degree ( 124 hours minimum)
Upper-level coursework taken at TCU (42 hours minimum)
TCU Core Curriculum (39 hours minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

The BA requires a minor (at least 18 hours)

## Art History Requirements

The art history major requires 27 hours of art history courses, 6 hours of studio art courses and proficiency in a foreign language.

## Art History (27 hours)

Majors are expected to enroll in a broad range of courses, including both pre-modern (pre-1800) and post-modern (post-1800). The following courses are required toward completion of the major:

| ARHI 10043 | Introduction to Art History | 3 |
| :--- | :--- | :--- |
| ARHI | 20000 level (3 hours) |  |
| ARHI 30963 | Art Historical Methods | 3 |

ARHI 30963 Art Historical Methods
The remaining art history hours must meet the 27-hour requirement, and at least 12 of these hours must be 30000-level or above.

## Studio Courses (6 hours)

ARST 10103 Drawing
ARST 10113 Drawing II 3
ARST 10123 Design and Color 3
ARST 10133 Three Dimensional Design 3

Or Any other approved art coursework

## Foreign Language

Fourth-semester proficiency in a foreign language is required. See modern language major (p. 128) catalog listing for additional information.

Students planning to continue work at the graduate level should develop a proficiency in a second language; German, French, Italian or Spanish are recommended.

## General Electives (if needed to equal 124 hours)

## Suggested Courses for Freshman Year

| Fall (15 hours) |  |
| :---: | :---: |
| TCU Core Curriculum (6 hours) |  |
| WCO Written Communication |  |
| HT Historical Traditions |  |
| Foreign Language (3 hours) |  |
| Art History Course (3 hours) |  |
| ARHI 10043 Introduction to Art History | 3 |
| Art Course (3) |  |
| ARST 10103 Drawing I | 3 |
| Spring (15 hours) |  |
| TCU Core Curriculum (6 hours) |  |
| RT Religious Traditions |  |
| NCS Natural Sciences |  |
| Foreign Language (3 hours) |  |
| Art History Course (3 hours) |  |
| ARHI Any 20000-level art history course |  |

## Art Courses (3 hours)

| ARST 10113 | Drawing II | 3 |
| :--- | :--- | :--- |
| ARST 10123 | OR |  |
|  | Design and Color | 3 |
| ARST 10133 | Three Dimensional Design | 3 |

**Note: ARHI 10043 replaces ARTS 10053 and ARTS 10063. ARHI 10043 is the prerequisite for any course that requires one or both of those courses.

## Studio Art Minor

## The studio art minor requires 18 hours with a minimum of six hours of upperlevel coursework

## Art History (3 hours)

| ARHI 10043 | Introduction to Art History |
| :--- | :--- |
| ARHI $\quad$ OR |  |
| Any 20000-level art history course |  |
| Art Electives (ARST prefix only) ( $\mathbf{1 5}$ hours/ $\mathbf{6}$ hours must be upper |  |
| level courses) |  |
| Any approved art (ARST) courses |  |
| $* 6$ hours must be upper level. |  |

## Art History Minor <br> The art history minor requires 21 hours of art history courses.

## Art History (6 hours)

| ARHI 10043 | Introduction to Art History | 3 |
| :--- | :--- | :--- |
| ARHI | Any 20000-level art history course |  |

ARST 30730

Art History Electives ( $\mathbf{1 5}$ hours)
Art history courses as approved by adviser

## Arts Administration Minor

An optional minor in arts administration (p.78) is offered under the College of Fine Arts.

## School of Art Course Subcategories

| Studio Art |  |  |
| :---: | :---: | :---: |
| ARST 10103 | Drawing I | 3 |
| ARST 10113 | Drawing II | 3 |
| ARST 10123 | Design and Color | 3 |
| ARST 10133 | Three Dimensional Design | 3 |
| ARST 20143 | Painting | 3 |
| ARST 20163 | Printmaking (Etching) | 3 |
| ARST 20173 | Printmaking (Lithography) | 3 |
| ARST 20183 | Printmaking (Screenprinting) | 3 |
| ARST 20213 | Ceramics | 3 |
| ARST 20243 | Sculpture | 3 |
| ARST 20503 | Video Art: Beginning New Media | 3 |
| ARST 20743 | Photography | 3 |
| ARST 20970 | Intermediate Studio | $\begin{aligned} & 1.00- \\ & 20.00 \end{aligned}$ |
| ARST 21103 | Life Studies | 3 |
| ARST 30003 | Junior Honors Seminar | 3 |
| ARST 30100 | Life Studies | $\begin{aligned} & 1.00- \\ & 21.00 \end{aligned}$ |
| ARST 30140 | Advanced Painting | $\begin{aligned} & 1.00- \\ & 21.00 \end{aligned}$ |
| ARST 30150 | Artists' Books | $\begin{gathered} 1.00- \\ 21.00 \end{gathered}$ |
| ARST 30160 | Printmaking (Etching) | $\begin{aligned} & 1.00- \\ & 21.00 \end{aligned}$ |
| ARST 30170 | Adv Printmaking (Lithography) | $\begin{aligned} & 1.00- \\ & 21.00 \end{aligned}$ |
| ARST 30180 | Advanced Printmaking (Screenprinting) | $\begin{aligned} & 1.00- \\ & 21.00 \end{aligned}$ |
| ARST 30210 | Advanced Ceramics | $\begin{array}{r} 1.00- \\ 21.00 \end{array}$ |
| ARST 30220 | Ceramic Sculpture | $\begin{aligned} & 1.00- \\ & 21.00 \end{aligned}$ |
| ARST 30240 | Advanced Sculpture | $\begin{aligned} & 1.00- \\ & 21.00 \end{aligned}$ |
| ARST 30710 | Color Photography | 3 |
| ARST 30720 | Landscape Photography | $\begin{gathered} 1.00- \\ 21.00 \end{gathered}$ |

ARST 30743
ARST 30753
ARST 30760

ARST 30770
ARST 30790
ARST 30743
ARST 30753
ARST 30760

ARST 30770
ARST 30790
ARST 30743
ARST 30753
ARST 30760

ARST 30770
ARST 30790
ARST 30743
ARST 30753
ARST 30760

ARST 30770
ARST 30790
ARST 30743
ARST 30753
ARST 30760

ARST 30770
ARST 30790

ARST 30903
ARST 30913
ARST 40003
ARST 40710

ARST 40893
ARST 40970

Art History
ARHI 10043
ARHI 20003
ARHI 20013
ARHI 20063
ARHI 20073
ARHI 20083
ARHI 20093
ARHI 20103
ARHI 20113
ARHI 20303
ARHI 20403
ARHI 20503
ARHI 20603
ARHI 20833
ARHI 30003
ARHI 30073
ARHI 30113
ARHI 30123
ARHI 30143

ARHI 30153
ARHI 30163
ARHI 30173
ARHI 30183
ARHI 30193

ARHI 30203
ARHI 30213
ARHI 30333

ARHI 30343
ARHI 30353
ARHI 30363
ARHI 30413
ARHI 30500

| Zone System Photography | $\begin{aligned} & 1.00- \\ & 21.00 \end{aligned}$ |
| :---: | :---: |
| The Photographic Portrait | 3 |
| Photographic Illustration | 3 |
| Alternative, Non-Silver Photo Processes | $\begin{array}{r} 1.00- \\ 21.00 \end{array}$ |
| Documentary Photography | $\begin{aligned} & 1.00- \\ & 21.00 \end{aligned}$ |
| Interactive Media for Artists | $\begin{aligned} & 1.00- \\ & 21.00 \end{aligned}$ |
| Seminar in Art Professions | 3 |
| Seminar in Art Criticism and Theory | 3 |
| Senior Honors Research | 3 |
| Advanced Digital Photography | $\begin{aligned} & 1.00- \\ & 21.00 \end{aligned}$ |
| Senior Art Exhibition | 3 |
| Special Problems | $\begin{aligned} & 1.00- \\ & 21.00 \end{aligned}$ |
| Introduction to Art History | 3 |
| Classical Tradition in Art | 3 |
| Egyptian Art | 3 |
| Medieval Art | 3 |
| British Art: Medieval-Modern | 3 |
| American Indian Art | 3 |
| Art of Mexico from 1500 to the Present | 3 |
| 17th and 18th Century European Art | 3 |
| A New World: Survey of American Art | 3 |
| 19th and 20th Century Art | 3 |
| Introduction to Visual Culture | 3 |
| Survey Topics in Art History | 3 |
| Art History on Site | 3 |
| History of Visual Communication | 3 |
| Junior Honors Seminar | 3 |
| Modern British Art | 3 |
| American Art to 1913 | 3 |
| American Art, 1913 to the Present | 3 |
| Inka and Their Predecessors: Ancient South American Art | 3 |
| The Aztec, Maya, Olmec | 3 |
| Maya Art and Architecture | 3 |
| Early Italian Renaissance Art | 3 |
| High and Late Italian Renaissance Art | 3 |
| NorthernRenaissance Painting: Van Eyck Bruegel | 3 |
| 17th Century Italian and Spanish Art | 3 |
| Drawing as Artistic Invention | 3 |
| Modern Art I: Romantic Classicism to Impressionism | 3 |
| Van Gogh to Dali: Modern Art II | 3 |
| Picasso: Artist of the Century | 3 |
| 17th Century Flemish-Dutch Painting | 3 |
| Women and the Visual Arts, 1500-1800 | 3 |
| Special Topics in Art History | $1.00-$ |


| ARHI 30510 | Special Topics in Art History | $1.00-$ |
| :--- | :--- | ---: |
|  |  | 6.00 |
| ARHI 30600 | Art Study Abroad | $1.00-$ |
|  |  | 12.00 |
| ARHI 30603 | Art Since 1945 | 3 |
| ARHI 30613 | Modern Architecture: 1750 to the Present | 3 |
| ARHI 30623 | History of the Print | 3 |
| ARHI 30633 | Art in the Metroplex | 3 |
| ARHI 30823 | History of Photography | 3 |
| ARHI 40003 | Senior Honors Research | 3 |
| ARHI 40970 | Special Problems | $1.00-$ |
|  |  | 21.00 |
| ARHI 40980 | Directed Study in Art History | 3 |
| ARHI 40993 | Art Professions Internship | 3 |
| Art Education |  |  |
| ARED 10803 | Basics in Art | 3 |
| ARED 20970 | Intermediate Studio | $1.00-$ |
|  |  | 20.00 |
| ARED 30013 | Approaches to Studio Art | 3 |
| ARED 30803 | The Child and Visual Arts | 3 |
| ARED 40803 | Essentials of Visual Arts | 3 |
| ARED 40970 | Special Problems | $1.00-$ |
|  |  | 21.00 |

## Other Courses

ARST 10433
ARST 10533
FNRT 20903
Children, Creativity and the Fine Arts
3
FNRT 30900
FNRT 30903

## Dance

School for Classical \& Contemporary Dance
The School for Classical \& Contemporary Dance offers the Bachelor of Fine Arts (BFA) degree with a major in ballet, modern dance, and ballet and modern dance. An audition is required for entrance into any of the BFA degree programs to and placement in the program. Contact the School for Classical \& Contemporary Dance at TCU for audition information.
Dance Teacher Certification qualifies students to teach dance in secondary education (grades 6-12) in Texas. See the College of Education (p. 65)for details and specific admission requirements.
The School for Classical \& Contemporary Dance's mission is to develop educated dance artists who are prepared to become professionals and leaders in the global dance community.

## Departmental Policies

1. Students majoring in ballet and/or modern dance are accepted for a one-year trial period, during which potential and progress are evaluated by the dance faculty to ascertain the feasibility of continuing toward a dance degree. With faculty approval, this trial period may be extended for up to one additional year.
2. It is acceptable for dance majors to pursue two majors, two degrees or a minor at TCU. Students who want to earn a degree in ballet and/or modern dance while simultaneously working toward a second major in the College of Fine Arts, a second degree, a minor or a dance certification should expect to spend more than four years to complete the additional requirements.
3. All incoming dance majors are required to participate in technique placement classes at the beginning of their first semester at TCU.
4. Students with limited technical proficiency may be required to enroll in additional coursework.
5. A minimum 2.0 GPA in the major is required as a prerequisite to upperdivision dance courses. A student whose GPA falls below this level may not enroll in upper-division dance courses until the 2.0 average has been achieved. After enrollment in upper-division dance courses, a minimum 2.0 GPA must be maintained as a prerequisite to further advanced enrollment.
6. All dance majors will take at least one technique class daily.
7. Students must earn a minimum of 2.5 credit hours at the highest level of technique in their major for graduation.
8. Dance majors will adhere to policies outlined in the departmental handbook.
9. All majors are required to audition for major productions and participate when cast and/or given a crew assignment. Once a dance major is declared at TCU, students will take .5 credit hour of Dance Production Practicum each semester. Performance and production experiences are a vital part of a dancer's training.
10. All dance majors should maintain a level of health and wellness that enables full and consistent participation in all levels of required physical activity.
11. Dance majors receive a letter grade for all SCCD courses with the exception of Dance Production Practicum (DANC 10300/DANC 30300) (pass/no credit).

## Ballet, BFA

## University Requirements

```
Undergraduate degree (127 hours minimum)
Upper-level coursework taken at TCU (42 hours minimum)
TCU Core Curriculum (39 hours minimum)
TCU Core Curriculum requirements may range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.
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## Major Requirements

Ballet majors must earn a minimum of 2.5 credit hours at the highest level of ballet for graduation.

## Technique (20 hours)

| DANC 20100 | Classical Ballet Technique Level I | $.50-$ |
| :--- | :--- | ---: |
|  |  | 2.50 |
| DANC 30100 | Classical Ballet Technique and Artistry Level II | $.50-$ |
|  |  | 2.50 |
| DANC 40100 | Ballet Technique and Artistry Level III | $.50-$ |
| DANC 50100 | Ballet Technique and Artistry Level IV | 2.50 |
|  |  | $.50-$ |
|  |  | 2.50 |

## Pointe (1 hours)

DANC 30110 Pointe 0.5
Modern Dance Technique ( 7.5 hours)
DANC 20200 Modern Dance Technique Level I 1.00-
DANC 30200 Modern Dance Technique and Artistry Level II $1.00-$
DANC 40200 Modern Dance Technique and Artistry Level III $1.00-$

## Bodywork (3 hours)

DANC 10211 Bodywork I 1
DANC 10221 Bodywork II 1
DANC 20211 Bodywork III 1
DANC 20221 Bodywork IV 1

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| Additional Courses (47.5 hours) |  |  |
| :---: | :---: | :---: |
| DANC 10300 | Dance Production Practicum I | 0.5 |
| DANC 10302 | Music for Dancers | 2 |
| DANC 10311 | Career Preparation I | 1 |
| DANC 10312 | Improvisation | 2 |
| DANC 10331 | International Dance Forms | 1 |
| DANC 10341 | The Working Body | 1 |
| DANC 20300 | DanceTCU I | 0.5 |
| DANC 20303 | Functional Anatomy | 3 |
| DANC 20322 | Choreography I: Elements of Dance Composition | 2 |
| DANC 20333 | Dance Production | 3 |
| DANC 30161 | Ballet Variations | 1 |
| DANC 30181 | Ballet Partnering | 1 |
| DANC 30130 | Teaching Methods-Ballet | $\begin{array}{r} 1.00- \\ 3.00 \end{array}$ |
| DANC 30300 | Dance Production Practicum II | 0.5 |
| DANC 30332 | Choreography II: Intermediate Dance Composition | 2 |
| DANC 30311 | Career Preparation II | 1 |
| DANC 30333 | Lighting and Design for Dance | 3 |
| DANC 40300 | DanceTCU II | 0.5 |
| DANC 40343 | Choreography III: Advanced Dance Composition | 3 |
| DANC 40353 | Choreography IV: Senior Capstone | 3 |
| DANC 40373 | Dance History I | 3 |
| DANC 40383 | Dance History II | 3 |
| DANC 50303 | Dance Theory | 3 |

May move through DanceTCU levels differently.
Approved Dance Electives (9 hours)
Suggested Courses for First Year

| Fall (11.5 hours) |  |  |
| :--- | :--- | ---: |
| DANC 10211 | Bodywork I | 1 |
| DANC 10300 | Dance Production Practicum I | 0.5 |
| DANC 10311 | Career Preparation I | 1 |
| DANC 20200 | Modern Dance Technique Level I | $1.00-$ |
|  |  | 3.00 |
| DANC 20300 | DanceTCU I | 0.5 |
| DANC 20333 | Dance Production | 3 |
| DANC 30100 | Classical Ballet Technique and Artistry Level II | $.50-$ |
|  |  | 2.50 |
| DANC 30110 | Pointe | 0.5 |
|  | OR |  |
| DANC 30181 | Ballet Partnering | 1 |
| TCU Core Curriculum (6 hours) |  |  |
| Spring (12 hours) |  |  |
| DANC 10300 | Dance Production Practicum I | 0.5 |
| DANC 10221 | Bodywork II | 1 |
| DANC 10302 | Music for Dancers | 2 |
| DANC 10312 | Improvisation | 2 |
| DANC 10341 | The Working Body | 1 |
| DANC 20200 | Modern Dance Technique Level I | $1.00-$ |
|  |  | 3.00 |

DANC 30100
DANC 30110 Pointe 0.5

TCU Core Curriculum ( 6 hours)

## Modern Dance, BFA

 University RequirementsUndergraduate degree ( 127 hours minimum)
Upper-level coursework taken at TCU (42 hours minimum)
TCU Core Curriculum ( 39 hours minimum)
TCU Core Curriculum may range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

## Major Requirements

| Modern Dance | Technique (20 hours) |  |
| :--- | :--- | ---: |
| DANC 20200 | Modern Dance Technique Level I | $1.00-$ |
|  |  | 3.00 |
| DANC 30200 | Modern Dance Technique and Artistry Level II | $1.00-$ |
|  |  | 3.00 |
| DANC 40200 | Modern Dance Technique and Artistry Level III | $1.00-$ |
|  |  | 3.00 |

## Bodywork (4 hours)

DANC 10211 BodyworkI 1

DANC 10221 Bodywork II 1
DANC 20211 Bodywork III 1
DANC 20221 Bodywork IV 1
Ballet Technique ( 7.5 hours)

| DANC 20100 | Classical Ballet Technique Level I | $.50-$ |
| :--- | :--- | ---: |
|  |  | 2.50 |
| DANC 30100 | Classical Ballet Technique and Artistry Level II | $.50-$ |
|  |  | 2.50 |
| DANC 40100 | Ballet Technique and Artistry Level III | $.50-$ |
| DANC 50100 | Ballet Technique and Artistry Level IV | 2.50 |
|  |  | $.50-$ |
|  |  | 2.50 |

Additional Courses (47.5 hours)
DANC 10300 Dance Production Practicum I 0.5
DANC 10302 Music for Dancers 2
DANC 10311 Career Preparation I 1
DANC 10312 Improvisation 2
DANC 10331 International Dance Forms 1
DANC 10341 The Working Body 1
DANC 20262 Contact Improvisation 2
DANC 20300 DanceTCU I 0.5
DANC 20303 Functional Anatomy 3
DANC 20322 Choreography I:Elements of Dance 2
DANC 20333 Dance Production 3
DANC 30230 Teaching Methods - Modern Dance 1.00-
3.00

DANC 30300 Dance Production Practicum II 0.5
DANC $30311 \quad$ Career Preparation II 1
DANC 30332 Choreography II:Intermediate Dance 2

| DANC 30333 | Lighting and Design for Dance | 3 | DANC 40100 | Ballet Technique and Artistry Level III | .50- |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DANC 40272 | Advanced Performance Practicum | 2 |  |  | 2.50 |
| DANC 40300 | DanceTCU II | 0.5 | DANC 50100 | Ballet Technique and Artistry Level IV | .50- |
| DANC 40343 | Choreography III: Advanced Dance | 3 |  |  |  |
| DANC 40353 | Choreography IV: Senior Capstone | 3 | Pointe (1 hours) |  |  |
| DANC 40373 | Dance History I | 3 | DANC 30110 | Pointe | 0.5 |
| DANC 40383 | Dance History II | 3 | Modern Dance Technique (17.5 hours) |  |  |
| DANC 50303 | Dance Theory | 3 | DANC 20200 | Modern Dance Technique Level I | 1.00- |
| May move throur | DanceTCU levels differently. |  |  |  | 3.00 |
| Approved Da | Electives (9 hours) |  | DANC 30200 | Modern Dance Technique and Artistry Level II | $\begin{array}{r} 1.00- \\ 3.00 \end{array}$ |
| Suggested Courses for Freshman Year |  |  | DANC 40200 | Modern Dance Technique and Artistry Level III | $1.00-$ |
| Fall (11 hours) |  |  | Bodywork (4 hours) |  |  |
| DANC 10211 | BodyworkI | 1 | DANC 10211 BodyworkI |  | 1 |
| DANC 10300 | Dance Production Practicum I | 0.5 | DANC 10221 | Bodywork II | 1 |
| DANC 10311 | Career Preparation I | 1 | DANC 20211 | Bodywork III | 1 |
| DANC 20100 | Classical Ballet Technique Level I | $\begin{array}{r} .50- \\ 2.50 \end{array}$ | DANC 20221 | Bodywork IV | 1 |
| DANC 20200 | Modern Dance Technique Level I | 1.00- | Additional Courses (53.5 hours) |  |  |
|  |  | 3.00 | DANC 10300 | Dance Production Practicum I | 0.5 |
| DANC 20300 | DanceTCU I | 0.5 | DANC 10302 | Music for Dancers | 2 |
| DANC 20333 | Dance Production | 3 | DANC 10311 | Career Preparation I | 1 |
|  | Dance Electives (1 hour) |  | DANC 10312 | Improvisation | 2 |
| TCU Core Curriculum (6 hours) |  |  | DANC 10331 | International Dance Forms | 1 |
| Spring (12 hours) |  |  | DANC 10341 | The Working Body | 1 |
| DANC 10221 | Bodywork II | 1 | DANC 20262 | Contact Improvisation | 2 |
| DANC 10300 | Dance Production Practicum I | 0.5 | DANC 20300 | DanceTCU I | 0.5 |
| DANC 10302 | Music for Dancers | 2 | DANC 20303 | Functional Anatomy | 3 |
| DANC 10312 | Improvisation | 2 | DANC 20322 | Choreography I: Elements of Dance Composition | 2 |
| DANC 10341 | The Working Body | 1 |  |  |  |
| DANC 20200 | Modern Dance Technique Level I | $\begin{array}{r} 1.00- \\ 3.00 \end{array}$ | DANC 20333 | Dance Production | 3 |
|  |  |  | DANC 30161 | Ballet Variations | 1 |
| DANC 20300 | DanceTCU I | 0.5 | DANC 30181 | Ballet Partnering | 1 |
| TCU Core Curriculum (6 hours) |  |  | DANC 30130 | Teaching Methods-Ballet | $\begin{array}{r} 1.00- \\ 3.00 \end{array}$ |
| Ballet and Modern Dance Double Major |  |  | DANC 30230 | Teaching Methods - Modern Dance | $\begin{array}{r} 1.00- \\ 3.00 \end{array}$ |
| Students wishing to earn a degree in ballet and modern dance must complete three semesters as a single major and request approval of the dance faculty. A written petition to become a double major in dance must be submitted to the director during the third semester at TCU. |  |  | DANC 30300 | Dance Production Practicum II | 0.5 |
|  |  |  | DANC 30311 | Career Preparation II | 1 |
|  |  |  | DANC 30332 | Choreography II: Intermediate Dance Composition | 2 |
| University Requirements |  |  | DANC 30333 | Lighting and Design for Dance | 3 |
| Undergraduate double major (141.5 hours minimum) |  |  | DANC 40272 | Advanced Performance Practicum | 2 |
| Upper-level coursework taken at TCU (42 hours minimum) |  |  | DANC 40300 | DanceTCU II | 0.5 |
| TCU CoreCurriculum (39 hours minimum) |  |  | DANC 40343 | Choreography III: Advanced Dance Composition | 3 |
| TCU Core Curriculum may range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area. |  |  | DANC 40353 | Choreography IV: Senior Capstone | 3 |
| Major Requirements |  |  | DANC 40383 | Dance History II | 3 |
|  |  |  | DANC 50303 | Dance Theory | 3 |
| Ballet Technique (17.5 hours) |  |  | May move through DanceTCU levels differently |  |  |

## Approved Dance Electives (9 hours)

## Arts Administration Minor

An optional minor in arts administration is offered under the College of Fine Arts.

## Department of Graphic Design

The Department of Graphic Design administers the Bachelor of Fine Arts (BFA) degree in graphic design, the Bachelor of Arts (BA) degree in design studies and a minor in design studies.
A minimum of 84 semester hours is required for the BFA in graphic design; a minimum of 36 semester hours is required for the $B A$ in design studies; a minimum of 21 semester hours is required for the design studies minor. The degree plans are outlined below.

- BFA degree GRDE
- BA degree DEST
- Minor in DEST

All courses taken in the major or minor sequences must be passed with a "C" or better to fulfill graduation requirements.

## Departmental Requirements

A minimum 2.5 cumulative GPA in design is a prerequisite to junior and senior-level graphic design courses. After entrance into upper-division courses, a minimum 2.5 GPA must be maintained to advance. An annual qualifying portfolio examination is required for all students wishing to continue in the Graphic Design Program, whether or not they are graphic design/design studies majors or minors; a student may be required to repeat courses or may be removed from the Graphic Design Program.

## Field Trips

Field trips may be required by instructors of any course. Every effort will be made to ensure that these trips do not conflict with other portions of the student's schedule.

## Honors College

Graphic design majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in ARGD 30003 during their junior year and ARGD 40003 during the fall semester of their senior year.

## Transfer Students

Transfer students must have a 2.5 minimum GPA in design and present a portfolio or photographs/slides of their work for evaluation by the Department of Graphic Design at least one week prior to registration or at the time of advisement.

## Graphic Design Pre-major

Students intending to major in graphic design or design studies must be designated "graphic design pre-majors" by the Registrar's Office until passing the first required, qualifying portfolio examination, usually at the end of the third semester in the program. Then they will be assigned to the BFA or BA, based on qualification.

## Declaration of a Major

The department requires students to declare a major through the Registrar's Office following the first required, qualifying portfolio examination, usually at the end of the third semester in the program.

## Student Exhibitions

Undergraduate student exhibitions take place at various times during the year in the Art Galleries at TCU. No work may be removed from exhibitions without department approval. Students must claim their work at the end of each exhibition. The department cannot accept responsibility for the care, storage or distribution of student work.

## Design Studies, BA

To earn the BA with a major in design studies, students must complete the requirements outlined below.

## University Requirements


#### Abstract

Undergraduate degree ( 124 hours minimum) Upper-level coursework taken at TCU (42 hours minimum) TCU Core Curriculum ( 39 hours minimum) TCU Core Curriculum requirements can range from 39 to 63 hours depending on the courses. Some courses may count in more than one area. The BA requires a minor (at least 18 hours). Foreign Language Six hours or demonstrated proficiency at the second-semester, sophomore level is required. See Modern Language Major catalog listing for additional


 information.
## Graphic Design Requirements (36 hours)

## Foundation Courses ( 12 hours)



ARST 10123 Design and Color 3
ARHI 10043 Introduction to Art History 3
ARHI 20833 History of Visual Communication 3
Graphic Design Concentration ( 15 hours)
ARGD 10143 Introduction to Visual Communication 3
ARGD 20323 Typography I 3
ARGD 20333 Typography II 3
ARGD 30323 Typography III 3
ARGD 20453 Introduction to Computer Graphics 3
Upper-Division Graphic Design Electives (9 hours)
Choose three from the following:
ARGD 30400 Illustration 3.00-
ARGD 30423 Publication Design 3
ARGD 30433 Package Design 3
ARGD 30443 Corporate Identity 3
ARGD 30453 Computer Applications to Graphic Design 3
ARGD 30473 Advanced Computer Applications to Graphic 3
ARGD 30523 Advertising Design 3
Upper-Division Graphic Design Elective 3
General Electives (if needed to reach 124 hours)

## Graphic Design, BFA

To earn the BFA with a major in graphic design, students must complete the requirements outlined below.

## University Requirements

> Undergraduate degree (124 hours minimum)
> Upper-level coursework taken at TCU ( 42 hours minimum)
> TCU CoreCurriculum ( 39 hours minimum)
> TCU Core Curriculum requirements can range from 39 to 63 hours depending on the courses. Some courses may count in more than one area.

## Graphic Design Requirements

## Studio Art (15 hours)

ARST 10103 Drawing I 3

ARST 10113 Drawing II 3


## Interior Design and Fashion Merchandising

The Department of Interior Design and Fashion Merchandising offers the Bachelor of Science (BS) degree with two major options:

- Interior Design
- Fashion Merchandising

The Interior Design Program is accredited by the Council for Interior Design Accreditation (CIDA).

## Pass/No-Credit Policy

Students majoring in the College of Fine Arts may take up to two courses (eight hours maximum) on a P/NC basis. No course applied to the student's major, minor or associated requirements may be taken on the P/NC basis.

## Minimum Grade Requirement

A 2.5 cumulative GPA is required to declare a fashion merchandising or interior design major. To advance to upper-level courses and to graduate as a major in Interior Design or Fashion Merchandising, students must attain a " C " or better in all IDFM courses.

## Honors College

Students who are members of the Honors College may pursue Departmental Honors in Interior Design and Fashion Merchandising. See IDFM 30003, IDFM 40003.

## First-Year Portfolio Review

While all interested students may declare the interior design major at the first-year level, a mandatory competitive first-year portfolio review occurs during the spring semester. This is a competitive process, and a limited number of students will be selected to continue in the program based on skills demonstrated through their portfolio. Successful passage of the firstyear portfolio review is required to continue in the major. Students who do not pass the review may resubmit a portfolio the following academic year.

## Laptop Policy

After successful passage of the first-year portfolio review, interior design majors entering their second year will be required to purchase a PC laptop and required software. Details and specifications for the laptop may be found at www.idfm.tcu.edu.

## Transfer Policy

Transfer students wishing to apply for the interior design program must submit a comprehensive portfolio to the attention of the Interior Design Program coordinator after they have been accepted to the University. Detailed portfolio requirements, deadlines and procedure are available from the IDFM main office. All portfolio decisions are final. It is the transfer student's responsibility to be aware of and comply with departmental procedure.

## Senior Show Policy

All interior design majors are required to participate in a group exhibition of student work during their senior year. One exhibition will take place each spring semester. Students expecting to graduate in May will participate during their final semester. Students whose graduation is expected to be delayed until the following December will participate during the preceding May exhibition.

## Retention of Student Work Policy

The Department of Interior Design and Fashion Merchandising reserves the right to photograph, display and exhibit student work in order that a continuing body of work will be available. This policy applies during the completion of a student's undergraduate degree program and for two years following graduation.

## Interior Design and Fashion Merchandising Summer Study Programs

Summer study programs in New York City and Paris, France are available to fashion merchandising and interior design majors. The New York Study Program provides a study of the textile, apparel and merchandising industries, and the significance of New York City as an international business center. The Paris, France Program offers exposure to both historic and contemporary fashion, architecture and design as well as cultural trends and
influences. Each program offers 3 credit hours of undergraduate credit that applies to the major.

## Interior Design and Fashion Merchandising Student Affiliations

Students who demonstrate high scholarship are eligible for membership in the Beta Zeta chapter of Phi Upsilon Omicron, a national honor society. The department sponsors the Texas Christian University Interior Design
Association, a pre-professional organization. Opportunities are available for students to affiliate with student sections of professional organizations, including the American Society of Interior Designers, International Interior Design Association, Illuminating Engineering Society and Fashion Group International.

## Interior Design, BS (65 hours)

The interior design major prepares the student for a career as a professional interior designer. It educates the student in creativity, design process, technical skills and theory in order to successfully enter the profession. The CIDA-accredited program prepares students for the opportunity to complete the necessary steps to obtain state licensing and NCIDQ certification.

## Major Requirements

| IDFM 10403 | Space and Color Theory | 3 |
| :--- | :--- | :--- |
| IDFM 10411 | Hand Sketching for Interiors | 1 |
| IDFM 10413 | Design Fundamentals | 3 |
| IDFM 10423 | Introduction to Interior Design | 3 |
| IDFM 20413 | Applications in Design Process and Theory | 3 |
| IDFM 20433 | Interior Design Illustration | 3 |
| IDFM 20443 | Interior Design I | 3 |
| IDFM 20453 | Interior Components | 3 |
| IDFM 20463 | Building Systems and Interior Construction | 3 |
| IDFM 20503 | Fundamentals of Lighting | 3 |
| IDFM 30073 | Digital Media for Interior Design | 3 |
| IDFM 30093 | Professional Practices I | 3 |
| IDFM 30413 | Interior Design II | 3 |
| IDFM 30423 | Architectural Components | 3 |
| IDFM 30473 | History of Interiors I | 3 |
| IDFM 30483 | History of Interiors II | 3 |
| IDFM 30493 | Interior Design III | 3 |
| IDFM 40401 | Interior Design Senior Show | 3 |
| IDFM 40433 | Interior Design Research | 3 |
| IDFM 40453 | Professional Practices II | 3 |
| IDFM 40463 | Interior Design IV | 3 |
| IDFM 40473 | Interior Design V | 3 |
| IDFM 40493 | Interior Design Internship | 3 |

## Related Requirement

ARHI 10043 Introduction to Art History 3

## Associated Requirement

ARGD 20453 Introduction to Computer Graphics

## Electives to total 124 semester hours.

## Minor in Architectural Lighting Design

## Required Courses

| IDFM 20503 | Fundamentals of Lighting | 3 |
| :--- | :--- | :--- |
| IDFM 20513 | Digital Media in Lighting | 3 |

## Three of these courses:

IDFM 30503 Lighting and the Human Experience
IDFM 30513 Lighting for Interior Design I
ARST 20743
Photography
DANC 30333
Lighting and Design for Dance
THEA 21413
Stage Lighting
THEA 41413
Advanced Stage Lighting

## Fashion Merchandising, BS (56 hours)

The fashion merchandising program involves all activities related to the development, buying and selling of merchandise. This major is for students planning a career in retail buying, product development, management, wholesale or retail sales, public relations, event planning or visual merchandising. A supervised internship is required during the senior year.

## Major Requirements:

IDFM 10243
Introduction to the Fashion Industry
IDFM 20243
Consumers in the Marketplace
IDFM 20253
Textile Fundamentals
IDFM 20263
Fashion Drawing Fundamentals
IDFM 20273
Apparel Construction
IDFM 20283
Fashion Communications
IDFM 20291
MS Excel for Merchandising
IDFM 30233
History of Modern Dress and Culture
IDFM 30253
Merchandise Buying
IDFM 30263 Product Development
IDFM 30273 Digital Design 3
IDFM $30291 \quad$ Career Development for Merchandising 1
IDFM 40013 Entrepreneurship in Merchandising 3
IDFM 40203 Appearance and Dress 3
IDFM 40243 Global Trade of Textiles and Apparel 3
IDFM 40253 Textile Testing and Analysis 3
IDFM 40263 Merchandise Planning and Analysis 3
IDFM $40283 \quad$ Fashion Internship
**Additional 6 hours of electives in the major
Related Requirement

| ECON 10223 | Introductory Microeconomics | 3 |
| :--- | :--- | ---: |
| ECON 10233 | OR <br> Introductory Macroeconomics | 3 |
| PSYC 10213 | General Psychology | 3 |
| PSYC 10514 | OR |  |
|  | Principles of Behavior I <br> OR | 4 |
| PSYC 10524 | Principles of Behavior II | 4 |

## Associated Requirement

ARGD 20453 Introduction to Computer Graphics

## Minor Requirement

General business, journalism, art, foreign language, communication, writing (English),
architectural lighting design or other approved minor.

## Other

TCU Core Requirements and electives to total 124 semester hours.

## Interior Design and Fashion Merchandising Course Subcategories

IDFM 10433
Freshman Seminar in Interior Design and 3 Fashion Merchandising
IDFM 20303
Topics in Design and Merchandising
IDFM 30283
IDFM 40003
Technical and Creative Apparel Design
IDFM 4009
Senior Honors Project
IDFM 40223 Advance Topics in Merchandising 3
New York Study Program
3
IDFM 40970
Special Problems
1.00-
20.00

## School of Music

## School of Music Overview

The School of Music offers the Bachelor of Music degree (BM) with majors in performance, piano pedagogy, theory/composition, and church music; the Bachelor of Music Education degree (BME) with a concentration in vocal or instrumental music in preparation for all-level certification; and the Bachelor of Arts degree (BA) with either a major or minor in music.

## Admission/Audition

Acceptance to the School of Music requires passing an audition in the primary performance and scholarly area. Before an audition can be scheduled, applicants must submit a completed School of Music Audition Request Application, a résumé highlighting musical activities and an essay discussing a musical topic or experience. In addition, two separate letters of recommendation attesting to the candidate's musical accomplishments and ability must be provided. These required materials are uploaded through the School of Music Web site. Complete directions are available at: www.music.tcu.edu/admissions.asp.
Applicants applying in music composition must also mail physical copies of original scores and papers to the School of Music in support of their application. Applicants unable to visit the campus for a live audition may submit a video audition with the above required materials. Detailed audition repertoire requirements as well as mailing instructions are available at: www.music.tcu.edu/admissions.asp.
After satisfying all of the above requirements, final acceptance to the School of Music is contingent on being admitted to TCU.

## Pre-Major Status

All incoming music students are designated as music pre-majors (MUPM). A student must complete the above application requirements and pass an audition in the primary performance and scholarly area in order to be eligible for music major status. Once eligible, the student completes and submits a signed Change of Major form to the School of Music office. This form is then sent to the College of Fine Arts where it is processed and the new major is in effect once it appears on the student's my.tcu.edu account. Forms are available online at www.music.tcu.edu/Major_Authorization.pdf.

## Honors College

Music majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in the Honors sections of MUSI 20203, 20213, 30613 and 30623 prior to their senior year. They should enroll in MUSI 40003 the fall semester of their senior year.

## School Facilities

The School of Music is housed in historic Ed Landreth Hall, the Mary D. and F. Howard Walsh Center for Performing Arts, Music Building South, Waits Hall and Jarvis Hall. The Ed Landreth building includes the music offices and conference room; teaching studios; classrooms, a computer lab; practice and rehearsal facilities; and a 1,200-seat auditorium, once home to the Van Cliburn International Piano Competition. Instrumental resources include numerous upright and grand pianos, four pipe organs, two harpsichords, a clavichord and a collection of authentic Baroque instruments.
The Walsh Center is home to the unique 325 -seat PepsiCo Recital Hall, which is well known for its unprecedented acoustical design. The Walsh Center also
contains an instrumental rehearsal hall, a choral rehearsal hall, an electronic piano laboratory, piano teaching studios and piano practice rooms all furnished exclusively with Steinway pianos.
Located on the south side of the TCU campus, Music Building South serves the TCU Opera Studio and contains a 100-seat rehearsal studio theater and the John Large Vocal Arts Laboratory.
The third floor of Jarvis Hall contains teaching studios, two classrooms, the Upchurch Studio for Electro-Acoustic Music, the Music Education Resource Library and the School of Music student lounge.
In addition to these four buildings, practice rooms and teaching studios are located in Waits and Foster residence halls; and a large, comprehensive music library complete with recordings, reference books, texts, scores, and a listening room is housed in the Mary Couts Burnett Library.

## School of Music Requirements

## Keyboard Skills

All music majors, unless exempted by testing, register for MUSI 11030, Class Piano, in the first semester, and must continue in classes until they pass the Keyboard Proficiency exam. This requirement must be met by the end of the sophomore year. Students are not allowed to register for courses in the junior year until this requirement is met. Piano and organ majors meet this requirement by taking MUSI 20071 and 20081, Functional Piano.

## Recitals

All music majors participate in school and studio recitals. Students majoring in performance are required to present a half recital during their junior year and a full recital during their senior year. Students majoring in music education are required to present a half recital, typically the semester before student teaching.

## Juries

A jury examination takes place each semester for majors and minors in performance courses and annually for theory/composition majors beginning the sophomore year. At the end of the sophomore year, this examination determines whether the student is permitted to enroll in upper-division performance and composition lessons. The junior jury and/or recital determine admission to senior standing for performance majors.

## Recital/Concert Attendance

Music majors are required to enroll in and pass MUSI 11000, Recital Hour, each semester. This is a Pass/No-Credit, zero-credit course. Music majors are required to attend a minimum of 15 concerts each semester, with the exception of the student-teaching semester for BME students. Six of these concerts must be from the weekly School of Music Recital Hour Series. The remaining nine may be chosen from faculty and guest artist recitals, TCU and guest ensemble concerts, and student recitals. Students will submit to the School of Music office original printed concert programs signed by a TCU School of Music faculty member in attendance. Programs must be submitted to Ms. Ott in the School of Music office within five days after the event, or they will not be accepted. The deadline to submit programs for concert credit is 5 p.m. on the last day of classes.
Two-steps ensure that students in the School of Music are fulfilling the requirements for Recital Hour:

- Students must pass 3 semesters of Recital Hour before they are eligible to sign up for their sophomore barrier.
- Students must pass 6 semesters of Recital Hour before they are eligible to sign up for their senior recital.
Failure to do these steps may impact progress toward completion the degree program.


## Passing Grade Requirement

All music courses taken in the major or minor sequences must be passed with a grade of "C" or better to fulfill graduation requirements.

## Performance Major Requirements

The School of Music offers the BM with a major in performance in the following areas:

- Piano
- Organ
- Piano Pedagogy
- Wind and Percussion Instruments
- String Instruments
- Voice


## Piano, BM

The BM with a major in performance-piano requires the following:

## University Requirements

Undergraduate degree (124 hour minimum)
Some School of Music majors require more than 124 hours to complete. See individual music requirements for details.
Upper-level coursework taken at TCU (42 hour minimum)
TCU Core Curriculum (39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

## Music Requirements

## Ensembles (4 hours total, . 5 hour each semester)

Choral Ensemble-1 semester (Choose from MUSI 10040, MUSI 10060 or MUSI 10130 / MUSI 10140)
Undergraduate Collaborative Piano-4 semesters (MUSI 10170)
Chamber Music-3 semesters (MUSI 10080-In exceptional cases, a student may substitute MUSI 10080 for MUSI 10170, but not more than two semesters and only by petition to the piano faculty)

## Studio Performance Lessons (24 hours)

Lower Division-12 hours
Upper Division-12 hours

## Music Theory ( $\mathbf{2 5}$ hours)

MUSI 10201 Elementary Ear Training 1
MUSI 10203 Elementary Theory 3
MUSI $10211 \quad$ Elementary Ear Training 1
MUSI 10213 Elementary Theory 3
MUSI 20201 Advanced Ear Training 1
MUSI 20203 Advanced Theory 3
MUSI 20211 Advanced Ear Training 1
MUSI 20213 Advanced Theory 3
MUSI $30202 \quad$ Form and Analysis 2
MUSI 30222 Modal Counterpoint 2
MUSI 30232 Counterpoint 2
MUSI 50203 Musical Structure and Style 3

## Music History (17 hours)

MUSI 20613 History of Western Music I 3
MUSI $30602 \quad$ World Music for Music Majors 2
MUSI 30613 History of Western Music II 3
MUSI 30623 History of Western Music III 3
MUSI 50433 Keyboard Literature I Pre-Baroque through 3
Classical
MUSI 50533 Keyboard Literature II Romantic through 3

Performance Pedagogy (4 hours)
MUSI 30052 Beginning Piano Pedagogy 2
MUSI 30062 Intermediate Piano Pedagogy 2

## Functional Piano (2 hours)

MUSI $20071 \quad$ Functional Piano 1
MUSI $20081 \quad$ Functional Piano 1

## Conducting (2 hours)

| MUSI 20512 | Introduction to Conducting |
| :--- | :--- |
| Recitals (2 hours) |  |
| MUSP 30991 | Recital I |
| MUSP 40991 | Recital II |
| Music Electives (3 hours) |  |
| Must include three hours of Advanced Music Theory or Advanced Music  <br> History  <br> Acoustics (3 hours)  <br> PHYS 20053 Physics of Music and Sound <br>  OR <br> MUSI 30343 Electro-Acoustic Music |  |

## Organ, BM

The BM with a major in performance-organ requires the following:

## University Requirements

Undergraduate degree (124 hour minimum)
Some School of Music majors require more than 124 hours to complete. See individual music requirements for details.
Upper-level coursework taken at TCU (42 hour minimum)
TCU Core Curriculum (39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

## Music Requirements

## Ensembles (4 hours total-. 5 hour each semester)

Chamber Music or Collaborative Piano 4 semesters

| MUSI 10040 | Concert Chorale | 0.5 |
| :--- | :--- | :--- |
| MUSI 10060 | University Singers | 0.5 |
| MUSI 10130 | Cantiamo | 0.5 |


| Choral Ensemble- $\mathbf{4}$ semesters |  |  |
| :--- | :--- | :--- |
| MUSI 10080 | Chamber Music | 0.5 |
| MUSI 10170 | Undergraduate Collaborative Piano | 0.5 |

## Studio Performance Lessons (24 hours)

Lower Division-12 hours
Upper Division-12 hours

## Music Theory (25 hours)

MUSI 10201 Elementary Ear Training
MUSI 10203 Elementary Theory
MUSI 10211 Elementary Ear Training
MUSI 10213 Elementary Theory
MUSI 20201 Advanced Ear Training
MUSI 20203 Advanced Theory
MUSI 20211 Advanced Ear Training
MUSI 20213 Advanced Theory
MUSI 30202 Form and Analysis
MUSI 30222 Modal Counterpoint
MUSI 30232
Counterpoint

## 10170 <br> Undergraduate Collaborative Piano

MUSI $20071 \quad$ Functional Piano 1
MUSI 20081 Functional Piano 1
Conducting (2 hours)
MUSI 20512 Introduction to Conducting
Recitals (2 hours)
MUSP 30991 Recital I 1
MUSP 40991 Recital II 1
Music Electives (5 hours)
Must include three hours of Advanced Music Theory or Advanced Music History
Acoustics (3 hours)
PHYS $20053 \quad$ Physics of Music and Sound 3
OR
MUSI 30343 Electro-Acoustic Music 3

## Piano Pedagogy, BM

The BM with a major in performance-piano pedagogy requires the following:

## University Requirements

Undergraduate degree (124 hour minimum)<br>Some School of Music majors require more than 124 hours to complete. See individual music requirements for details.<br>Upper-level coursework taken at TCU (42 hour minimum)<br>TCU CoreCurriculum ( 39 hour minimum)<br>TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

## Music Requirements

## Ensembles (4 hours total- . 5 hour each semester) <br> Choral Ensemble-1 semester <br> Choose from: <br> MUSI $10040 \quad$ Concert Chorale 0.5 <br> MUSI $10060 \quad$ University Singers 0.5 <br> MUSI $10130 \quad$ Cantiamo 0.5 <br> $\begin{array}{lll}\text { Undergraduate Collaborative Piano-4 semesters } & \\ \text { MUSI } 10170 \quad \text { Undergraduate Collaborative Piano }\end{array}$ <br> Chamber Music- $\mathbf{3}$ semesters <br> MUSI $10080 \quad$ Chamber Music <br> 0.5

In exceptional cases, a student may substitute MUSI 10080 For MUSI 10170 but not more than two semesters and only by petition to the piano faculty

## Studio Performance Lessons ( $\mathbf{1 8}$ hours)

Lower Division -8 hours
Upper Division-10 hours

## Music Theory (25 hours)

MUSI 10201 Elementary Ear Training 1

MUSI 10203 Elementary Theory 3
MUSI $10211 \quad$ Elementary Ear Training 1
MUSI 10213 Elementary Theory 3
MUSI 20201 Advanced Ear Training 1
MUSI 20203 Advanced Theory 3
MUSI 20211 Advanced Ear Training
MUSI 20213 Advanced Theory
MUSI 30202 Form and Analysis
MUSI 30222 Modal Counterpoint
MUSI 30232 Counterpoint
MUSI 50203 Musical Structure and Style

| Music History (17 hours) |  |
| :--- | :--- |
| MUSI 20613 | History of Western Music I |
| MUSI 30602 | World Music for Music Majors |
| MUSI 30613 | History of Western Music II |
| MUSI 30623 | History of Western Music III <br> MUSI 50433Keyboard Literature I Pre-Baroque through <br> Classical |
| MUSI 50533 | Keyboard Literature II Romantic through <br> Contemporary |

## Performance Pedagogy (8 hours)

| MUSI 30052 | Beginning Piano Pedagogy | 2 |
| :--- | :--- | :--- |
| MUSI 30062 | Intermediate Piano Pedagogy | 2 |
| MUSI 40052 | Group Piano Pedagogy | 2 |
| MUSI 40062 | Piano Teaching Internship | 2 |


| Functional Piano (2 hours) |  |  |
| :--- | ---: | :--- |
| MUSI 20071 | Functional Piano | 1 |
| MUSI 20081 | Functional Piano | 1 |

Conducting (2 hours)
MUSI 20512 Introduction to Conducting

## Recitals (2 hours)

MUSP 30991 Recital I
MUSP 40991 Recital II
Music Electives (3 hours)
Must include three hours of Advanced Music Theory or Advanced Music History

## Education (6 hours)

EDUC 30123 Educational Psychology 3
EDUC 30143 Child and Adolescent Development 3
$\begin{array}{lll}\text { Acoustics and Natural Science (11 hours) } & \\ \text { PHYS 20053 } & \text { Physics of Music and Sound } & \\ & \text { OR } & 3 \\ \text { MUSI 30343 } & \text { Electro-Acoustic Music } & 3\end{array}$

PSYC $10514 \quad$ Principles of Behavior I 4
PSYC $10524 \quad$ Principles of Behavior II 4

## Wind and Percussion Instruments, BM

The BM in performance-wind and percussion instruments requires the following:

## University Requirements

Undergraduate degree (124 hour minimum)
Some School of Music majors require more than 124 hours to complete. See individual music requirements for details.
Upper-level coursework taken at TCU (42 hour minimum)
TCU CoreCurriculum ( 39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area

## Music Requirements

## Ensembles (4 hours total-. 5 hour each semester)

Wind Symphony, Symphonic Band, Orchestra or Marching Band-8 semesters Jazz Ensemble may be counted for a maximum of two semesters
Studio Performance Lessons ( $\mathbf{2 4}$ hours)
Lower Division-12 hours
Upper Division-12 hours
Music Theory ( $\mathbf{2 5}$ hours)
MUSI 10201 Elementary Ear Training 1
MUSI 10203 Elementary Theory 3
MUSI 10211 Elementary Ear Training 1
MUSI 10213 Elementary Theory 3
MUSI 20201 Advanced Ear Training 1
MUSI 20203 Advanced Theory 3
MUSI 20211 Advanced Ear Training 1
MUSI 20213 Advanced Theory 3
MUSI 30202 Form and Analysis 2
MUSI 30222 Modal Counterpoint 2
MUSI 30232 Counterpoint 2
MUSI $50203 \quad$ Musical Structure and Style 3

## Music History (14 hours)

MUSI $20613 \quad$ History of Western Music I 3
MUSI $30602 \quad$ World Music for Music Majors 2
MUSI $30613 \quad$ History of Western Music II 3
MUSI 30623 History of Western Music III 3
MUSI 50000 level 3
Instrumental Performance Pedagogy (3 hours)
MUSI 40033 Instrumental Performance Pedagogy 3
Conducting (4 hours)
MUSI $20512 \quad$ Introduction to Conducting 2
MUSI 30522 Instrumental Conducting 2
Recitals (2 hours)
MUSP 30991 Recital I 1
MUSP 40991 Recital II 1

## Music Electives (6 hours)

Must include three hours of Advanced Music Theory or Advanced Music
History

Acoustics (3 hours)

| PHYS 20053 | Physics of Music and Sound |
| :--- | :--- |
|  | OR |
| MUSI 30343 | Electro-Acoustic Music |

3

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## String Instruments, BM

The BM with a major in performance-string instruments requires the following:

## University Requirements

Undergraduate degree (124 hour minimum)
Some School of Music majors require more than 124 hours to complete. See individual music requirements for details.
Upper-level coursework taken at TCU (42 hour minimum)
TCU CoreCurriculum (39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

## Music Requirements

## Ensembles ( 6 hours total- .5 hour each semester minimum)

## Symphony Orchestra-8 semesters

MUSI 10120 Symphony Orchestra

## Chamber Music- 4 semesters

MUSI $10080 \quad$ Chamber Music

## Studio Performance Lessons (24 hours)

Lower Division-12 hours
Upper Division-12 hours

## Music Theory (25 hours)

| MUSI 10201 | Elementary Ear Training |
| :--- | :--- |
| MUSI 10203 | Elementary Theory |
| MUSI 10211 | Elementary Ear Training |
| MUSI 10213 | Elementary Theory |
| MUSI 20201 | Advanced Ear Training |
| MUSI 20203 | Advanced Theory |
| MUSI 20211 | Advanced Ear Training |
| MUSI 20213 | Advanced Theory |
| MUSI 30202 | Form and Analysis |
| MUSI 30222 | Modal Counterpoint |
| MUSI 30232 | Counterpoint |
| MUSI 50203 | Musical Structure and Style |

## Music History (14 hours)

MUSI $20613 \quad$ History of Western Music I
MUSI $30602 \quad$ World Music for Music Majors
MUSI 30613 History of Western Music II
MUSI 30623 History of Western Music III
MUSI
50000 level
Instrumental Performance Pedagogy (3 hours)
MUSI 40033 Instrumental Performance Pedagogy
Conducting (4 hours)
MUSI 20512
Introduction to Conducting

MUSI 30522
Instrumental Conducting

## Recitals (2 hours)

MUSP 30991 Recital I
MUSP 40991 Recital II 1
Music Electives ( 6 hours)
Must include three hours of Advanced Music Theory or Advanced Music History
Acoustics (3 hours)

| PHYS 20053 | Physics of Music and Sound |
| :--- | :--- |
|  | OR |
| MUSI 30343 | Electro-Acoustic Music |

## Voice, BM

The BM with a major in performance-voice requires the following:

## University Requirements

Undergraduate degree ( 124 hour minimum)
Some School of Music majors require more than 124 hours to complete. See individual music requirements for details.
Upper-level coursework taken at TCU (42 hour minimum)
TCU Core Curriculum ( 39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

## Music Requirements

Ensembles (4 hours total- . 5 hour each semester)
Ensemble- 4 semesters
Opera Studio- 4 semesters
MUSI $10100 \quad$ Opera Studio ..... 0.5
Studio Performance Lessons (20 hours)
Lower Division-8 hours
Upper Division-12 hours
Music Theory ( $\mathbf{2 3}$ hours)
MUSI 10201 Elementary Ear Training ..... 1
MUSI 10203 Elementary Theory ..... 3
MUSI 10211 Elementary Ear Training ..... 1
MUSI 10213 Elementary Theory ..... 3
MUSI 20201 Advanced Ear Training ..... 1
MUSI 20203 Advanced Theory ..... 3
MUSI 20211 Advanced Ear Training ..... 1
MUSI 20213 Advanced Theory ..... 3
MUSI 30202 Form and Analysis ..... 2
MUSI 30222 Modal Counterpoint ..... 2
MUSI 50203 Musical Structure and Style ..... 3
Music History ( $\mathbf{1 4}$ hours)
MUSI 20613 History of Western Music I ..... 3
MUSI $30602 \quad$ World Music for Music Majors ..... 2
MUSI 30613 History of Western Music II ..... 3
MUSI 30623 History of Western Music III ..... 3

50000 level

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| Vocal Pedagogy (3 hours) |  |
| :---: | :---: |
| MUSI 40063 | Voice Pedagogy |
| Diction (2 hours) |  |
| MUSI 10171 | Diction for Singers |
| MUSI 10181 | Diction for Singers |
| Conducting (4 hours) |  |
| MUSI 20512 | Introduction to Conducting |
| MUSI 30512 | Choral Conducting |
| Recitals (2 hours) |  |
| MUSP 30991 | Recital I |
| MUSP 40991 | Recital II |
| Music Electives (10 hours) |  |
| Must include three hours of Advanced Music Theory or Advanced Music History |  |
| Foreign Language (6 hours) |  |
| GRMN 20053 | Beginning German III |
|  | OR |
| FREN 20053 | Third Semester College French |
|  | OR |
| ITAL 20053 | Third Semester College Italian |
| GRMN 20063 | Intermediate German |
|  | OR |
| FREN 20063 | Fourth Semester College French |
|  | OR |
| ITAL 20063 | Fourth Semester College Italian |
| Acoustics (3 hours) |  |
| PHYS 20053 | Physics of Music and Sound |
|  | OR |
| MUSI 30343 | Electro-Acoustic Music |

## Music Theory/Composition, BM

The School of Music offers the BM with a major in music theory/composition. The requirements are outlined below.

## Composition Emphasis

The BM with a major in music theory/composition with emphasis in composition requires the following:

## University Requirements

Undergraduate degree (124 hour minimum)
Some School of Music majors require more than 124 hours to complete. See individual music requirements for details.
Upper-level coursework taken at TCU (42 hour minimum)
TCU Core Curriculum (39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area

## Music Requirements

## Ensembles (4 hours total- 5 hour each semester)

Any Ensemble-8 semesters
Studio Performance Lessons (8 hours)
Lower Division-4 hours

Upper Division-4 hours

3

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1

MUSI $10071 \quad$ Percussion Technique 1
MUSI 30151 Woodwind Technique I 1
MUSI $30161 \quad$ Brass Technique I 1
Conducting (4 hours)
MUSI $20512 \quad$ Introduction to Conducting 2

MUSI $30512 \quad$ Choral Conducting 2
OR
Instrumental Conducting
Recitals (1 hour)
MUSP 40991 Recital II
Composers present a recital of their work.

## Music Electives (3 hours)

Foreign Language (6 hours)
GRMN 20053 Beginning German III 3

GRMN 20063 Intermediate German 3

## Acoustics (3 hours)

PHYS $20053 \quad$ Physics of Music and Sound 3
OR
Electro-Acoustic Music
$\begin{array}{lll}\text { MUSI 20613 } & \text { History of Western Music I } & 3 \\ \text { MUSI 30602 } & \text { World Music for Music Majors } & 2\end{array}$
MUSI 30613 History of Western Music II 3
MUSI 30623 History of Western Music III 3
MUSI
50000 level

## Theory Emphasis

The BM with a major in music theory/composition with an emphasis in theory requires the following:

## University Requirements

Undergraduate degree (124 hour minimum)
Some School of Music majors require more than 124 hours to complete. See individual music requirements for details.
Upper-level coursework taken at TCU (42 hour minimum)
TCU Core Curriculum (39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

## Music Requirements

## Ensembles (4 hours total-. 5 hour each semester)

Any Ensemble-8 semesters
Studio Performance Lessons (8 hours)
Lower Division-4 hours
Upper Division-4 hours

## Music Theory ( 32 hours)

MUSI 10201 Elementary Ear Training 1

MUSI 10203 Elementary Theory 3
MUSI $10211 \quad$ Elementary Ear Training 1
MUSI 10213 Elementary Theory 3
MUSI 20201 Advanced Ear Training 1
MUSI 20203 Advanced Theory 3
MUSI $20211 \quad$ Advanced Ear Training 1
MUSI 20213 Advanced Theory 3
MUSI 30202 Form and Analysis 2
MUSI 30222 Modal Counterpoint 2
MUSI 30232 Counterpoint 2
MUSI 30312 Instrumentation 2
MUSI 30322 Orchestration 2
MUSI 30343 Electro-Acoustic Music 3
MUSI 50203 Musical Structure and Style

## Music History (14 hours)

| MUSI 20613 | History of Western Music I | 3 |
| :--- | :--- | :--- |
| MUSI 30602 | World Music for Music Majors | 2 |
| MUSI 30613 | History of Western Music II | 3 |
| MUSI 30623 | History of Western Music III | 3 |
| MUSI | 50000 level | 3 |


| Music Composition (4 hours) |  |  |
| :--- | :--- | :--- |
| MUSI 20412 | Composition I | 2 |

MUSI 20422 Composition II
Instrumental Technique (4 hours)
MUSI $10051 \quad$ String Instrument Technique
MUSI $10071 \quad$ Percussion Technique
MUSI $30151 \quad$ Woodwind Technique I
MUSI $30161 \quad$ Brass Technique I

## Conducting (4 hours)

MUSI 20512 Introduction to Conducting

MUSI 30512

MUSI 30522
Choral Conducting
OR

## Recitals (1 hour)

MUSP 40991 Recital II 1
Theorists present a research paper or lecture recital.

## Music Electives (13 hours)

Must include at least six hours upper-division coursework in the either theory or composition.

## Foreign Language (6 hours)

GRMN $20053 \quad$ Beginning German III 3
GRMN 20063 Intermediate German ..... 3

## Acoustics (3 hours)

| PHYS 20053 | Physics of Music and Sound | 3 |
| :--- | :--- | :--- |
|  | OR |  |
| MUSI 30343 | Electro-Acoustic Music | 3 |

## Church Music, BM <br> University Requirements

Undergraduate degree (124 hour minimum)
Some School of Music majors require more than 124 hours to complete. See individual music requirements for details.
Upper-level coursework taken at TCU (42 hour minimum)
TCU CoreCurriculum ( 39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

## Music Requirements

| Ensembles (4 hours total- . 5 hour each semester) |  |  |
| :---: | :---: | :---: |
| Choral Ensemble-6 semesters |  |  |
| Any Ensemble-2 semesters |  |  |
| Studio Performance Lessons (16 hours) |  |  |
| Choose organ or voice lessons |  |  |
| Lower Division-8 hours |  |  |
| Upper Division-8 hours |  |  |
| Secondary Instrument Performance Lessons (4 hours) |  |  |
| Choose organ, voice or piano, whichever is not primary instrument |  |  |
| Music Theory (22 hours) |  |  |
| MUSI 10201 | Elementary Ear Training | 1 |
| MUSI 10203 | Elementary Theory | 3 |
| MUSI 10211 | Elementary Ear Training | 1 |
| MUSI 10213 | Elementary Theory | 3 |
| MUSI 20201 | Advanced Ear Training | 1 |
| MUSI 20203 | Advanced Theory | 3 |
| MUSI 20211 | Advanced Ear Training | 1 |
| MUSI 20213 | Advanced Theory | 3 |
| MUSI 30202 | Form and Analysis | 2 |
| MUSI 30222 | Modal Counterpoint | 2 |
| MUSI 30232 | Counterpoint | 2 |

## Music History (14 hours)

MUSI 20613 History of Western Music I

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| MUSI 30602 | World Music for Music Majors |
| :--- | :--- |
| MUSI 30613 | History of Western Music II |
| MUSI 30623 | History of Western Music III |
| MUSI 50423 | Choral Literature |
| Conducting (4 hours) |  |
| MUSI 20512 | Introduction to Conducting |
| MUSI 30512 | Choral Conducting |
| Church Music (6 hours) |  |
| MUSI 30713 | Service Playing and Repertory |
| MUSI 30723 | Hymnology |
| Recitals (2 hours) |  |
| MUSP 30991 | Recital I |
| MUSP 40991 | Recital II |
| Music Electives (4 hours) |  |
| Acoustics (3 hours) |  |
| PHYS 20053 | Physics of Music and Sound |
|  | OR |
| MUSI 30343 | Electro-Acoustic Music |

Religion Requirements

## Introductory Religion (3 hours)

RELI $10023 \quad$ Understanding Religion: Communities
Church History or Religion and Learning (3 hours)
Choose three hours from
RELI 30323 Christian Tradition: Emergence to the Renaissance 3
RELI 30333 Christian Tradition: Reformation to Modernity 3
RELI 20703 Leadership in Ministry 3
RELI 30653
Religion in the Arts (3 hours)
MUSI 30743

## Music Education, BME

The School of Music offers the BME degree with the following concentrations:

- Instrumental
- Vocal


## Instrumental Concentration

## University Requirements

Undergraduate degree (124 hour minimum)
Some School of Music majors require more than 124 hours to complete. See individual music requirements for details.
Upper-level coursework taken at TCU (42 hours minimum)
TCU Core Curriculum (39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.
MUSI 20613 History of Western Music I ..... 3
MUSI $30602 \quad$ World Music for Music Majors ..... 2
MUSI 30613 History of Western Music II ..... 3
MUSI 30623 History of Western Music III ..... 3
Instrumental Techniques (7 hours)
Students not required to take technique class in their primary instrument
MUSI $10051 \quad$ String Instrument Technique I ..... 1
MUSI 10061 String Technique II ..... 1
MUSI $10071 \quad$ Percussion Technique ..... 1
MUSI $30151 \quad$ Woodwind Technique I ..... 1
MUSI 30161 Brass Technique I ..... 1
MUSI 3017 Woodwind Technique II ..... 1
MUSI 30181 Brass Technique II ..... 1
Class Voice (1 hour)
MUSI $20051 \quad$ Class Voice ..... 1
Music Education (9 hours)
MUSI 10511 Introduction to Music Education ..... 1
MUSI 20311 Field Experience in Music ..... 1
MUSI 30313 Elementary Music ..... 3
MUSI 30812 Instrumental Organization and Administration ..... 2
MUSI 30822 Instrumental Organization and Administration

## Conducting (4 hours)

## Recital (1 hour)

MUSP 30991 Recital I
Music Elective (1-2 hours)
Wind and Percussion, 1 hour
Strings, 2 hours

| Acoustics (3 hours) |  |
| :--- | :--- |
| PHYS 20053 | Physics of Music and Sound |
|  | OR |
| MUSI 30343 | Electro-Acoustic Music |

## Education Requirements

Communication Studies (3 hours)
Required for admission to the College of Education:
Choose from
COMM 10123 Communicating Effectively
COMM 20103
COMM 20133
ED Psych/Development (6 hours)

| EDUC 30123 | Educational Psychology |
| :--- | :--- |
| EDUC 30143 | Child and Adolescent Development |

Education Certification ( 10 hours)
EDSE $30013 \quad$ Professional Roles and Responsibilities 3
EDSP 30603 Study of Exceptional Students 3
EDSE 40213 Promoting Literacy in the Content Areas 3
EDSE $30001 \quad$ Professional Practice Seminar 1
Student Teaching (6 hours)
EDUC 40966 All Level Student Teaching

## Vocal Concentration

## University Requirements

Undergraduate degree (124 hour minimum)
Some School of Music majors require more than 124 hours to complete. See individual music requirements for details.
Upper-level coursework taken at TCU (42 hour minimum)
TCU CoreCurriculum ( 39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.

## Music Requirements

## Ensembles (4 hours total-. 5 hour each semester)

## 8 semesters

MUSI $10040 \quad$ Concert Chorale 0.5

MUSI 10130 Cantiamo 0.5
MUSI $10140 \quad$ Frog Corps 0.5
May be counted for a maximum of 2 semesters
MUSI $10100 \quad$ Opera Studio

## Studio Performance Lessons (14 hours)

Lower Division-8 hours
Upper Division-6 hours
MUSI 20511 Analytical Listening for Vocal Conductors

MUSI $30313 \quad$ Elementary Music
MUSI $30912 \quad$ Choral Organization and Administration
MUSI $30922 \quad$ Choral Organization and Administration

## Conducting (4 hours)

MUSI $20512 \quad$ Introduction to Conducting 2
MUSI $30512 \quad$ Choral Conducting 2
Recital (1 hour)
MUSP 30991 Recital I
Music Elective (2 hours)
Acoustics (3 hours)

| PHYS 20053 | Physics of Music and Sound | 3 |
| :--- | :--- | :--- |
| MUSI 30343 | OR |  |
|  | Electro-Acoustic Music | 3 |

Education Requirements
Communication Studies (3 hours)
Required for admission to the College of Education
Choose from
COMM 10123 Communicating Effectively
COMM 20103
COMM 20133
ED Psych/Development (6 hours)
EDUC 30123 Educational Psychology

## Music History ( 11 hours)

MUSI $20613 \quad$ History of Western Music I 3

MUSI $30602 \quad$ World Music for Music Majors 2
MUSI 30613 History of Western Music II 3
MUSI 30623 History of Western Music III 3
Diction (2 hours)
MUSI 10171 Diction for Singers 1
MUSI 10181 Diction for Singers 1
Class Guitar (1 hour)
MUSI $10021 \quad$ Class Guitar 1
Functional Instrumental Technique (1 hour)
MUSI $10081 \quad$ Functional Instrumental Technique 1
Music Education (10 hours)
MUSI 10511 Introduction to Music Education 1
MUSI $20311 \quad$ Field Experience in Music 1

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EDUC $30143 \quad$ Child and Adolescent Development

## Education Certification ( 10 hours)

| EDSE 30013 | Professional Roles and Responsibilities |
| :--- | :--- |
| EDSP 30603 | Study of Exceptional Students |
| EDSE 40213 | Promoting Literacy in the Content Areas |
| EDSE 30001 | Professional Practice Seminar |

## Student Teaching (6 hours)

EDUC 40966 All Level Student Teaching

## School of Music, BA <br> University Requirements

Undergraduate degree (124 hour minimum)
Some School of Music majors require more than 124 hours to complete. See individual music requirements for details.
Upper-level coursework taken at TCU (42 hour minimum)
TCU CoreCurriculum ( 39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.
Minor (18 hr. Minimum)

## Music Requirements

## Ensembles (2 hours total)

Any Ensemble-4 semesters
Studio Performance Lessons ( $\mathbf{1 2}$ hours)
Lower Division-8 hours
Upper Division-4 hours
Music Theory ( $\mathbf{1 6}$ hours)

| MUSI 10201 | Elementary Ear Training | 1 |
| :--- | :--- | :--- |
| MUSI 10203 | Elementary Theory | 3 |
| MUSI 10211 | Elementary Ear Training | 1 |
| MUSI 10213 | Elementary Theory | 3 |
| MUSI 20201 | Advanced Ear Training | 1 |
| MUSI 20203 | Advanced Theory | 3 |
| MUSI 20211 | Advanced Ear Training | 1 |
| MUSI 20213 | Advanced Theory | 3 |


| Music History (17 hours) |  |  |
| :--- | :--- | :--- |
| MUSI 20613 | History of Western Music I | 3 |
| MUSI 30602 | World Music for Music Majors | 2 |
| MUSI 30613 | History of Western Music II | 3 |
| MUSI 30623 | History of Western Music III | 3 |
| MUSI | 50000 level | 3 |
| MUSI | 50000 level | 3 |

Conducting (2 hours)
MUSI $20512 \quad$ Introduction to Conducting

## Music Electives (3 hours)

Must be advanced level coursework

## Foreign Language ( 6 hours)

Students may fulfill this requirement by demonstrating competency at the second semester sophomore level
MUSI $10203 \quad$ Elementary Theory

Lower-Division Studio Lessons (1-3 hours)
Music Theory/Composition-1 hour
Vocal Performance-2 hours
Music Education - 2 hours
Keyboard Performance-3 hours
Instrumental Performance-3 hours
Class Piano 11030
Recital Hour 11000
Ensemble (. 5 hour)
TCU CC (6-9 hours)
Spring
Music Theory (4 hours)
MUSI 10211 Elementary Ear Training 1
MUSI 10213 Elementary Theory 3

## Lower-Division Studio Lessons (1-3 hours) <br> Music Theory/Composition-1 hour <br> Vocal Performance-2 hours <br> Music Education-2 hours <br> Keyboard Performance-3 hours <br> Instrumental Performance-3 hours <br> Class Piano 11040 <br> Recital Hour 11000 <br> Ensemble (. 5 hour) <br> TCU CC (6-9 hours) <br> Music Minor <br> The minor in music requires a total of 21 hours

Studio Performance Lessons (4 hours)
Lower Division-4 hours
Requires four semesters of successful jury examinations designated to fulfill
music minor requirement
Music Theory (8 hours)
MUSI 10201 Elementary Ear Training 1
MUSI 10203 Elementary Theory 3
MUSI 10211 Elementary Ear Training 1
MUSI 10213 Elementary Theory 3

## Music History (9 hours)

MUSI $20613 \quad$ History of Western Music I 3
MUSI 30613 History of Western Music II 3
MUSI $30623 \quad$ History of Western Music III 3

## Arts Administration Minor - Music

An optional minor in arts administration (p. 78) is offered under the College of Fine Arts.

## School of Music Special Programs

## Artist Diploma (Pre-Baccalaureate)

The Artist Diploma is a program for the most advanced and gifted performers who, by their performance and credentials, demonstrate that they have serious potential to become concert artists. The program is designed to provide intensive study and performance opportunities under the guidance of master teachers in preparation for a concert career.
An audition for the appropriate applied studio faculty is required. Admission to the program is allowed only upon the recommendation of the appropriate applied studio faculty and the approval of the director of the School of Music.
The Artist Diploma is a three-year program available in both a prebaccalaureate and a post-baccalaureate track. A minimum cumulative GPA of 3.0 is required to maintain satisfactory academic progress in this program.

The Artist Diploma (pre-baccalaureate) requires 33 hours total as follows:

## Studio Performance Lessons

| 26 hours |  |  |
| :--- | :--- | ---: |
| MUSP 40XXX | Upper Division |  |
| Recitals (4 hours): |  | 1 |
| MUSP 30991 | Recital I | 1 |
| MUSP 40971 | Diploma Recital | 1 |
| MUSP 40981 | Diploma Recital | 1 |
| MUSP 40991 | Recital II |  |
| Chamber Music/Ensemble/Collaborative Piano (3 hours): |  |  |
| MUSI 10080 | Chamber Music |  |
| MUSI 100X0 | MUSI 100x0 |  |
| MUSI 21081 | Artist Diploma Pre-Baccalaureate Collaborative | 1 |
|  | Piano |  |

*Appropriate course determined by student's applied music area; specific ensemble assignment determined upon admission

## Studio Instruction

Keyboard Performance majors register for three credit hours each semester of lower- and upper-division study.
Piano Pedagogy majors register for two credit hours each semester of lower- and upper-division study until the senior year, when they register for 3 credit hours each semester.

Band and Orchestral Instrument majors register for three credit hours each semester of lower- and upper-division study.
Voice Performance majors register for two credit hours each semester of lower-division study and three credit hours each semester of upper-division study.
Secondary Voice for the non-major or for the music major whose principal instrument is other than voice. Requirements in repertoire differ from principal voice in difficulty rather than kind. The standard of achievement in vocal technique will be appropriate for the secondary student. Repertoire assignments will be made from the standard art song and operatic aria literature. Non-majors register for one or two credit hours.

Music Education majors register for two credit hours each semester of lower- and upper-division study.
Music Theory/Composition majors register for one credit hour each semester of lower- and upper-division study.

Music Performance Elective Credit. To register for private lessons, students must audition and obtain permission of the instructor.
Lower-Division Studio Lessons Variable credit. *1-4 semester hours

## Lower Division Studio Lessons:

*Variable credit 1-4 semester hours

## Vocal Studies

| MUSP 20110 | Voice | $1.00-$ |
| :--- | :--- | ---: |
|  |  | 4.00 |
| MUSP 21100 | Secondary Voice | $1.00-$ |
|  |  | 2.00 |

MUSP 21100: for students not majoring or minoring in voice

## Keyboard Studies

| MUSP 20210 | Piano | $1.00-$ |
| :--- | :--- | ---: |
|  |  | 4.00 |
| MUSP 20220 | Organ | $1.00-$ |
|  |  | 4.00 |
| MUSP 20230 | Jazz Piano | $1.00-$ |
|  |  | 4.00 |
| MUSP 20240 | Harpsichord | $1.00-$ |
|  |  | 4.00 |

Band/Orchestral Instrument Studies

| MUSP 20310 | Violin | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| :---: | :---: | :---: |
| MUSP 20320 | Viola | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20330 | Violoncello | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20340 | Double Bass | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20350 | Viola da Gamba | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20360 | Jazz Bass | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20410 | Flute | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20420 | Oboe | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20430 | Clarinet | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20440 | Saxophone | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20450 | Bassoon | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20460 | Jazz Saxophone | $\begin{array}{r} 1.00- \\ 2.00 \end{array}$ |
| MUSP 20510 | French Horn | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20520 | Trumpet | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20530 | Trombone | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20550 | Tuba | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20560 | Euphonium | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20610 | Percussion | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20620 | Jazz Drumset | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 20710 | Harp | $1.00-$ |

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| MUSP 20810 | Guitar | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSP 20810 | Guitar | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MUSP 20910 | Jazz Guitar | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSP 20910 | Jazz Guitar | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| Upper-Division Studio Lessons: |  |  | Recital Courses |  |  |
| Variable credit. *1-6 semester hours. |  |  | MUSP 30991 | Recital I | 1 |
| Vocal Studies |  |  | MUSP 40971 | Diploma Recital | 1 |
| MUSP 40110 | Voice | $\begin{array}{r} 1.00- \\ 5.00 \end{array}$ | MUSP 40981 MUSP 40991 | Diploma Recital Recital II | 1 |
| MUSP 20210 | Piano | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | Music Ensembles |  |  |
| MUSP 20220 | Organ | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | All majors and | rs in performance will participate in |  |
| MUSP 20230 | Jazz Piano | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | ensemble org the subject of is qualified to | ion each semester. Usually this will be mance study. There may be exception pate in more than one type of organiz |  |
| MUSP 20240 | Harpsichord | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | Requir | nts |  |
| Band/Orchestral Instrument Studies |  |  |  |  |  |
| MUSP 20310 | Violin | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | Each of the f MUSI 10010 | ing courses earn $\mathbf{.}$ semester hou Wind Symphony | 0.5 |
| MUSP 20320 | Viola | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSI 10020 MUSI 10040 | Percussion Ensemble Concert Chorale | 0.5 0.5 |
| MUSP 20330 | Violoncello | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSI 10060 | University Singers | 0.5 |
| MUSP 20340 | Double Bass | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSI 10070 MUSI 10080 | Vocal Jazz Ensemble Chamber Music | 0.5 0.5 |
| MUSP 20350 | Viola da Gamba | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSI 10090 | Woodwind Ensemble | 0.5 |
|  |  |  | MUSI 10100 | Opera Studio | 0.5 |
| MUSP 20360 | Jazz Bass | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSI 10110 | Marching Band | 0.5 |
|  |  |  | MUSI 10120 | Symphony Orchestra | 0.5 |
| MUSP 20410 | Flute | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSI 10130 | Cantiamo | 0.5 |
|  | Oboe | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSI 10140 | Frog Corps | 0.5 |
| MUSP 20420 |  |  | MUSI 10150 | New Music Ensemble | 0.5 |
| MUSP 20430 | Clarinet | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSI 10160 | Brass Ensemble | 0.5 |
|  |  |  | MUSI 10170 | Undergraduate Collaborative Piano | 0.5 |
| MUSP 20440 | Saxophone | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSI 10180 | Collegium Musicum | 0.5 |
| MUSP 20450 | Bassoon | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSI 10190 | Jazz Ensemble | 0.5 |
|  |  |  | MUSI 10210 | Symphonic Band | 0.5 |
| MUSP 20460 | Jazz Saxophone | $\begin{array}{r} 1.00- \\ 2.00 \end{array}$ | MUSI 10220 | Concert Band | 0.5 |
|  |  |  | MUSI 10350 | TCU Cello Ensemble | 0.5 |
| MUSP 20510 | French Horn | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ | MUSI 10360 | TCU Harp Ensemble | 0.5 |

## Music Course Subcategories

| Music Theory |  |  |
| :--- | :--- | :--- |
| MUSI 10003 | Fundamentals of Music Literacy | 3 |
| MUSI 10201 | Elementary Ear Training | 1 |
| MUSI 10211 | Elementary Ear Training | 1 |
| MUSI 10203 | Elementary Theory | 3 |
| MUSI 10213 | Elementary Theory | 3 |
| MUSI 20201 | Advanced Ear Training | 1 |
| MUSI 20211 | Advanced Ear Training | 1 |
| MUSI 20203 | Advanced Theory | 3 |


| MUSI 20213 | Advanced Theory | 3 | MUSI 30313 | Elementary Music | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MUSI 20412 | Composition I | 2 | MUSI 30512 | Choral Conducting | 2 |
| MUSI 20422 | Composition II | 2 | MUSI 30522 | Instrumental Conducting | 2 |
| MUSI 30202 | Form and Analysis | 2 | MUSI 30812 | Instrumental Organization and Administration | 2 |
| MUSI 30222 | Modal Counterpoint | 2 | MUSI 30822 | Instrumental Organization and Administration | 2 |
| MUSI 30232 | Counterpoint | 2 | MUSI 30912 | Choral Organization and Administration | 2 |
| MUSI 30312 | Instrumentation | 2 | MUSI 30922 | Choral Organization and Administration | 2 |
| MUSI 30322 | Orchestration | 2 | MUSI 50212 | Choral Conducting | 2 |
| MUSI 30332 | Marching Band Arranging | 2 | MUSI 50222 | Instrumental Conducting | 2 |
| MUSI 30342 | J azz Arranging | 2 | Honors Cou |  |  |
| MUSI 30343 | Electro-Acoustic Music | 3 | MUSI 30613 | History of Western Music II | 3 |
| MUSI 30420 | Composition | $\begin{array}{r} 1.00- \\ 6.00 \end{array}$ | MUSI 30623 | History of Western Music III | 3 |
| MUSI 50203 | Musical Structure and Style | 3 | MUSI 40003 | Senior Honors Research Project | 3 |
| MUSI 50523 | Linear Analysis | 3 | Special Top |  |  |
| Music History |  |  | MUSI 30970 | Directed Study in Music | $\begin{array}{r} 1.00- \\ 6.00 \end{array}$ |
| MUSI 10053 | Survey of Music | 3 | MUSI 50970 | Special Problems | $\begin{array}{r} 1.00- \\ 6.00 \end{array}$ |
| MUSI 10063 | World Music | 3 |  |  |  |
| MUSI 10073 | From Rock to Bach | 3 | Performance Studies Class Instruction |  |  |
| MUSI 10083 | Introduction to Film Music | 3 | MUSI 10021 | Class Guitar |  |
| MUSI 20613 | History of Western Music I | 3 |  | Introduction to Piano for the Non-Musician | 1 |
| MUSI 30602 | World Music for Music Majors | 2 | MUSI 11021 |  |  |
| MUSI 30613 | History of Western Music II | 3 | MUSI 11031 | Class Piano Piano for the Non-Musician | 1 |
| MUSI 30623 | History of Western Music III | 3 |  | Class Piano |  |
| MUSI 30723 | Hymnology | 3 | MUSI 10051 |  | 1 |
| MUSI 50303 | History of Sacred Music | 3 |  | String Technique II |  |
| MUSI 50403 | Symphonic Literature | 3 | MUSI 10061 |  | 1 |
| MUSI 50413 | Survey of Opera Literature | 3 | MUSI 10071 MUSI 10081 | Percussion Technique | 1 |
| MUSI 50423 | Choral Literature | 3 | MUSI 10091 | Functional Instrumental Technique Yoga for Musicians | 1 |
| MUSI 50433 | Keyboard Literature I Pre-Baroque through | 3 |  | Diction for Singers | 1 |
|  | Classical |  | MUSI 10171 |  |  |
| MUSI 50443 | Ethnomusicology | 3 | MUSI 10181 | Diction for Singers | 1 |
| MUSI 50453 | Music Criticism | 3 | MUSI 10191 | J azz Improvisation | 1 |
| MUSI 50463 | Topics in Music Since 1900 | 3 | MUSI 10601 | Introduction to Performance for Singers | 1 |
| MUSI 50473 | Survey of Song Literature | 3 | MUSI 21030 | Class Piano |  |
| MUSI 50483 | Chamber Music Literature | 3 | MUSI 21040 | Class Piano |  |
| MUSI 50493 | Music in the United States | 3 | MUSI 20051 | Class Voice | 1 |
| MUSI 50533 | Keyboard Literature II Romantic through Contemporary | 3 | MUSI 20071 | Functional Piano | 1 |
|  |  |  | MUSI 20081 | Functional Piano |  |
| Church Music |  |  | MUSI 30151 | Woodwind Technique I | 1 |
| MUSI 30512 | Choral Conducting | 2 | MUSI 30161 | Brass Technique I | 1 |
| MUSI 30522 | Instrumental Conducting | 2 | MUSI 30171 | Woodwind Technique II | 11 |
| MUSI 30713 | Service Playing and Repertory | 3 | MUSI 30181 | Brass Technique II |  |
| MUSI 30723 | Hymnology | 3 | Pedagogy |  |  |
| MUSI 30922 | Choral Organization and Administration | 2 | MUSI 30052 | Beginning Piano Pedagogy | 2 |
| MUSI 50423 | Choral Literature | 3 | MUSI 30062 | Intermediate Piano Pedagogy | 2 |
| Music Education |  |  | MUSI 40033 | Instrumental Performance Pedagogy |  |
| MUSI 10511 | Introduction to Music Education | 1 | MUSI 40052 | Group Piano Pedagogy | 2 |
| MUSI 20311 | Field Experience in Music | 1 | MUSI 40062 | Piano Teaching Internship | 2 |
| MUSI 20511 | Analytical Listening for Vocal Conductors | 1 | MUSI 40063 | Voice Pedagogy | 3 |
| MUSI 20512 | Introduction to Conducting | 2 | MUSI 50053 | Introduction to Voice Pedagogy | 3 |
| MUSI 20611 | Marching Band Techniques and Design | 1 | MUSI 50063MUSI 50081 | Comparative Voice Pedagogy <br> Business Practices for the Independent Music | 31 |
|  |  |  |  |  |  |

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| MUSP 40530 | Trombone | $\begin{array}{r} 1.00- \\ 5.00 \end{array}$ |
| :---: | :---: | :---: |
| MUSP 40550 | Tuba | $\begin{array}{r} 1.00- \\ 5.00 \end{array}$ |
| MUSP 40560 | Euphonium | $\begin{array}{r} 1.00- \\ 5.00 \end{array}$ |
| MUSP 40610 | Percussion | $\begin{array}{r} 1.00- \\ 5.00 \end{array}$ |
| MUSP 40620 | Jazz Drumset | $\begin{array}{r} 1.00- \\ 4.00 \end{array}$ |
| MUSP 40710 | Harp | $\begin{array}{r} 1.00- \\ 5.00 \end{array}$ |
| MUSP 40810 | Guitar | $\begin{array}{r} 1.00- \\ 5.00 \end{array}$ |
| MUSP 40910 | Jazz Guitar | $\begin{array}{r} 1.00- \\ 5.00 \end{array}$ |
| Recital Courses |  |  |
| MUSP 30991 | Recital I | 1 |
| MUSP 40971 | Diploma Recital | 1 |
| MUSP 40981 | Diploma Recital | 1 |
| MUSP 40991 | Recital II | 1 |
| Music Ensembles |  |  |
| MUSI 10010 | Wind Symphony | 0.5 |
| MUSI 10020 | Percussion Ensemble | 0.5 |
| MUSI 10040 | Concert Chorale | 0.5 |
| MUSI 10060 | University Singers | 0.5 |
| MUSI 10070 | Vocal Jazz Ensemble | 0.5 |
| MUSI 10080 | Chamber Music | 0.5 |
| MUSI 10090 | Woodwind Ensemble | 0.5 |
| MUSI 10100 | Opera Studio | 0.5 |
| MUSI 10110 | Marching Band | 0.5 |
| MUSI 10120 | Symphony Orchestra | 0.5 |
| MUSI 10130 | Cantiamo | 0.5 |
| MUSI 10140 | Frog Corps | 0.5 |
| MUSI 10150 | New Music Ensemble | 0.5 |
| MUSI 10160 | Brass Ensemble | 0.5 |
| MUSI 10170 | Undergraduate Collaborative Piano | 0.5 |
| MUSI 10180 | Collegium Musicum | 0.5 |
| MUSI 10190 | Jazz Ensemble | 0.5 |
| MUSI 10210 | Symphonic Band | 0.5 |
| MUSI 10220 | Concert Band | 0.5 |
| MUSI 10350 | TCU Cello Ensemble | 0.5 |
| MUSI 10360 | TCU Harp Ensemble | 0.5 |

## Theatre

The Department of Theatre offers two degrees in theatre: the Bachelor of Fine Arts (BFA) with a major in theatre and an emphasis chosen from acting, design, musical theatre, production or theatre studies; and the Bachelor of Arts ( BA ) with a major in theatre that permits the student to choose an additional major or minor in another academic field of study. (Note: The BA requires the student to have a minor.) Admission to the BFA program is only available through audition or portfolio review by the theatre faculty. Admission to the BA program is available to any TCU student.
The Department of Theatre functions within the context of a liberal arts university and sincerely believes that the student experience should include areas of investigation beyond the narrowly focused instruction that characterizes most non-university affiliated professional training programs.

The department requires a core of courses in all aspects of the theatre. These courses provide an overall view of the discipline, including acting, directing, history and dramatic literature, design, and technical production. The core provides a strong background for both the liberal arts and pre-professional student.

## Honors College

Theatre majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in THEA 31003 in their junior year and THEA 41003 during the fall semester of their senior year.

## Departmental Facilities

The Department of Theatre is housed in Ed Landreth Hall and the Walsh Center Complex at TCU. Facilities include the Jerita Foley Buschman Theatre, a 175 -seat proscenium arch theatre and the 200 -seat Spencer and Marlene Hays Theatre, with a thrust stage. The flexible Studio Theatre (75-100 seats) is in constant use by students involved in producing shows to test the skills they are developing in the classroom. All theatre spaces have state-of-the-art equipment for teaching theatre technology. Theatre productions are supported by a large Scenic Studio in the Walsh Center Complex with a counterweighted paint frame and spray booth for painting scenery and stage properties. A fully equipped Costume Studio for theatre is located at 2900 W. Berry Street. A computer lab is available for students' use and for teaching various software programs specific to the theatre. Additional classrooms for theatre graphics, acting and academic courses are located in Ed Landreth Hall.

## Departmental Requirements

The department requires majors to participate in departmental productions. Participation in both performance and production broadens students' backgrounds and prepares them for advanced study. Any student on academic probation is not permitted to perform in public productions. Additional department policies are explained in a departmental student handbook. All majors are responsible for securing and reading this handbook. Courses in the theatre major or minor must be taken for a letter grade, and must be completed with a grade of "C" or better to fulfill graduation requirements.

## Theatre, BFA

The School of Fine Arts offers the BFA with a major in theatre with an emphasis on the following:

- Acting
- Design
- Musical Theatre
- Production
- Theatre Studies

The requirements for each program are outlined below.

## Acting Emphasis

The BFA with a major in theatre and emphasis in acting requires:

## University Requirements

Undergraduate degree (124 hour minimum)
Upper-level coursework taken at TCU (42 hour minimum)
TCU Core Curriculum ( 39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.
Major Requirements: 81 hours

## Theatre Courses (41 hours)

THEA 11103 Art of the Theatre 3
THEA 11203 Stagecraft 3
THEA 11223 Stage Makeup 3
THEA $11233 \quad$ Practical Costuming 3
THEA 11303 Acting I: Introduction 3
THEA 11243 Introduction to Theatre Design 3
THEA 21103 Script Analysis 3

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| THEA 21413 | Stage Lighting | 3 |
| :--- | :--- | :---: |
| THEA 31103 | Theatre History I | 3 |
| THEA 31113 | Theatre History II | 3 |
| THEA 31343 | Directing | 3 |
| THEA 41002 | Professional Seminar | 2 |
| THEA 41103 | 20th Century Theatre | 3 |

## Choose one: (3 hours)

| THEA 31123 | Period Styles |
| :--- | :--- |
| THEA 41113 | History of Costume |
| THEA 41143 | Religious Drama |
| THEA 41153 | Social Values Drama |


| THEA 41002 | Professional Seminar | 2 |
| :--- | :--- | :--- |
| THEA 41103 | 20th Century Theatre | 3 |
| Choose one: |  |  |
| THEA 31123 | Period Styles | 3 |
| THEA 41113 | History of Costume | 3 |
| THEA 41143 | Religious Drama | 3 |
| THEA 41153 | Social Values Drama | 3 |

## Production Courses (8 hours)

| THEA 10901 | Theatre Production | 1 |
| :--- | :--- | :--- |
|  | OR |  |
| THEA 30901 | Advanced Theatre Production | 1 |

Eight semester hours are required; these courses may be repeated for credit
Design Coursework ( $\mathbf{3 6}$ hours)
THEA 21203 Stage Management 3

THEA 21213 Drawing for Theatre 3
THEA 21403 Rendering 3
THEA 31203 Computer Graphics for Theatre 3
THEA 31213 Scene Painting 3
THEA 31403 Scene Design 3
THEA 31413 Costume Design 3
THEA 31423 Sound Design 3
THEA 31433 Props Design 3
THEA 41413 Advanced Stage Lighting 3
THEA 40100 Design/Technical Workshop 1.00-
3.00

THEA 40100: 6 credits required, may be repeated for credit

## Musical Theatre Emphasis

The BFA with a major in theatre and an emphasis in musical theatre requires:

## University Requirements

Undergraduate degree ( 124 hour minimum)
Upper-level coursework taken at TCU (42 hour minimum)
TCU CoreCurriculum ( 39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.
Major Requirements: 85 hours
Theatre Courses ( $\mathbf{3 8}$ hours)
THEA 11103 Art of the Theatre 3
THEA 11203 Stagecraft 3
THEA 11223 Stage Makeup 3
THEA 11233 Practical Costuming 3
THEA 11243 Introduction to Theatre Design 3
THEA 11303 Acting I: Introduction 3
THEA 21103 Script Analysis 3
THEA 21413 Stage Lighting 3
THEA 31103 Theatre History 1 3
THEA 31113 Theatre History II 3
THEA 31343 Directing 3
THEA $41002 \quad$ Professional Seminar 2
THEA 41103 20th Century Theatre 3

Production Courses (8 hours)

| THEA 10901 | Theatre Production | 1 |
| :--- | :--- | ---: |
|  | OR |  |
| THEA 30901 | Advanced Theatre Production | 1 |
| Eight semester hours are required; these courses may be repeated for credit. |  |  |
| Musical Theatre Coursework (33 hours) |  |  |
| THEA 11501 | Musical Theatre Performance Lab I | 1 |
| THEA 21303 | Acting II: Realism | 3 |
| THEA 21312 | Auditioning | 2 |
| THEA 21323 | Stage Movement | 3 |
| THEA 21333 | Voice and Speech | 3 |
| THEA 21501 | Musical Theatre Performance Lab II | 1 |
| THEA 31502 | Musical Theatre Dance | 2 |
| THEA 31503 | Musical Theatre Theory | 3 |
| THEA 41133 | Musical Theatre History | 3 |
| THEA 41503 | Musical Theatre Performance | 3 |
| THEA 41513 | Advanced Musical Theatre Performance | 3 |

THEA 11501 Two semester hours are required; this course may be repeated for credit.
THEA 21501 Two semester hours are required; this course may be repeated for credit.
THEA 31502 Six semester hours are required; this course may be repeated for credit.

## Private Voice Lessons (6 hours) <br> MUSP 21100 Secondary Voice 1.00- <br> 2.00

Six semester hours are required, this course, may be repeated for credit.

## Production Emphasis

The BFA with a major in theatre and emphasis in production emphasis requires:

## University Requirements

Undergraduate degree ( 124 hour minimum)
Upper-level coursework taken at TCU (42 hour minimum)
TCU CoreCurriculum ( 39 hour Minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.
Major Requirements: 85 hours
Theatre Courses (41 hours)
THEA 11103 Art of the Theatre
THEA 11203 Stagecraft 3
THEA 11213 Theatre Graphics 3
THEA 11223 Stage Makeup
THEA 11233 Practical Costuming
THEA 11303 Acting I: Introduction
THEA 21103 Script Analysis
THEA 21413 Stage Lighting
THEA 31103 Theatre History I
THEA 31113 Theatre History II
THEA 31343 Directing
THEA $41002 \quad$ Professional Seminar
THEA 41103 20th Century Theatre

Choose one:

| THEA 31123 | Period Styles | 3 |
| :--- | :--- | :--- |
| THEA 41113 | History of Costume | 3 |
| THEA 41143 | Religious Drama | 3 |
| THEA 41153 | Social Values Drama | 3 |
| Production Courses (8 hours) |  |  |
| THEA 10901 | Theatre Production | 1 |
|  | OR |  |
| THEA 30901 | Advanced Theatre Production | 1 |

Eight semester hours are required; these course can be repeated for credit.
Production Coursework (36 hours)
THEA 21203 Stage Management 3

THEA 21213 Drawing for Theatre 3
THEA $31203 \quad$ Computer Graphics for Theatre 3
THEA 31213 Scene Painting 3
THEA 31223 Costume Technology 3
THEA 31423 Sound Design 3
THEA 31433 Props Design 3
THEA 41203 Advanced Stagecraft 3
THEA 41213 Technical Direction 3
THEA 41413 Advanced Stage Lighting 3
THEA 40100 Design/Technical Workshop 1.00-

THEA 40100: Six semester hours are required; this course may be repeated for credit.

## Theatre Studies Emphasis

The BFA with a major in theatre and emphasis in theatre studies requires the following:


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| THEA 41113 | History of Costume | 3 |
| :--- | :--- | :--- |
| THEA 41143 | Religious Drama | 3 |
| THEA 41153 | Social Values Drama | 3 |
| Production Courses (8 hours) |  |  |
| THEA 10901 | Theatre Production | 1 |
| THEA 30901 | Advanced Theatre Production | 1 |
| Eight semester hours are required; these courses may be repeated for credit. |  |  |
| Additional Theatre Coursework (30 hours) |  |  |
| THEA 21203 | Stage Management | 3 |
| THEA 21213 | Drawing for Theatre | 3 |
| THEA 21303 | Acting II: Realism | 3 |
| THEA 21323 | Stage Movement | 3 |
| THEA 21333 | Voice and Speech | 3 |
| THEA 21403 | Rendering | 3 |
| THEA 31403 | Scene Design | 3 |
| THEA 31413 | Costume Design | 3 |
| THEA 31423 | Sound Design | 3 |
| THEA 31433 | Props Design | 3 |

## Theatre, BA

## University Requirements

Undergraduate degree (124 hour minimum) Upper-level coursework taken at TCU (42 hour minimum)
TCU Core Curriculum (39 hour minimum)
TCU Core Curriculum requirements can range from 39 to 63 hours depending on the choice of courses. Some courses may count in more than one area.
Minor (18 hour minimum)

## Major Requirements: 46 hours

| Theatre Courses (42 hours) |  |  |
| :--- | :--- | :--- |
| THEA 11103 | Art of the Theatre | 3 |
| THEA 11203 | Stagecraft | 3 |
| THEA 11223 | Stage Makeup | 3 |
| THEA 11233 | Practical Costuming | 3 |
| THEA 11243 | Introduction to Theatre Design | 3 |
| THEA 11303 | Acting I: Introduction | 3 |
| THEA 21103 | Script Analysis | 3 |
| THEA 21413 | Stage Lighting | 3 |
| THEA 31103 | Theatre History I | 3 |
| THEA 31113 | Theatre History II | 3 |
| THEA 31403 | Scene Design | 3 |
| THEA 31343 | Directing | 3 |
| THEA 41103 | 20th Century Theatre | 3 |

## Choose one:

THEA 31123
Period Styles
THEA $41113 \quad 3$
THEA 41143 Religious Drama 3
THEA $41153 \quad$ Social Values Drama 3
Production Courses (4 hours)
THEA 10901
Theatre Production

THEA 30901 Advanced Theatre Production
1
Four semester hours are required; these courses may be repeated for credit.

## Foreign Language

Six hours or demonstrated proficiency at the second-semester, sophomore level is required. See Modern Language Major (p. 128) catalog listing for additional information.

## Arts Administration Minor - Theatre

An optional minor in arts administration (p.78) is offered under the College of Fine Arts.

## Theatre Professional Internship Program

With departmental approval, majors may take up to 12 hours of elective credit in Theatre Internship courses for experience working with professional programs at area theatres and theatres around the country.

## Theatre Teacher Certification

Teacher certification on the secondary level is available under the BA degree program. No second teaching field is required.

## Education Requirements (31 hours)

EDUC 20003 Critical Investigation: Teaching and Learning 3
EDUC 30113 Digital Literacy, Learning, and Citizenship in 3
EDSE 30153
EDSE 30163
EDSP 30603 Study of Exceptional Students 3
EDSE $30013 \quad$ Professional Roles and Responsibilities 3
EDSE 40213 Promoting Literacy in the Content Areas 3
EDSE 50023 Effective Teaching and Classroom Implementation 3
EDSE $30001 \quad$ Professional Practice Seminar 1
EDSE 40980
EDUC 40966 may be used to fulfill the Student Teaching requirement.

## Theatre Courses for the Freshman Year

For students working toward the BFA with a major in theatre, emphasis in acting, or theatre studies:
Fall
THEA 11103 Art of the Theatre 3
THEA $11303 \quad$ Acting I: Introduction 3
THEA 10901 Theatre Production 1

THEA 11203 Stagecraft 3

THEA 11243 Introduction to Theatre Design 3

Plus TCU Core Curriculum Courses

## Spring

THEA 10901 Theatre Production 1
THEA 21323 Stage Movement 3
THEA $21333 \quad$ Voice and Speech 3

| THEA 11203 | Stagecraft | 3 |
| :---: | :---: | :---: |
|  | OR |  |
| THEA 11243 | Introduction to Theatre Design | 3 |
|  | Plus TCU Core Curriculum Courses |  |
| For students working toward the BFA with a major in theatre, emphasis in musical theatre: |  |  |
| Fall |  |  |
| THEA 10901 | Theatre Production | 1 |
| THEA 11103 | Art of the Theatre | 3 |
| THEA 11303 | Acting I: Introduction | 3 |
| THEA 11501 | Musical Theatre Performance Lab I | 1 |
| THEA 11203 | Stagecraft | 3 |
|  | OR |  |
| THEA 11243 | Introduction to Theatre Design | 3 |
|  | Plus TCU Core Curriculum Courses |  |
| Spring |  |  |
| THEA 10901 | Theatre Production | 1 |
| THEA 21323 | Stage Movement | 3 |
| THEA 21333 | Voice and Speech | 3 |
| THEA 11501 | Musical Theatre Performance Lab I | 1 |
| THEA 11203 | Stagecraft | 3 |
|  | OR |  |
| THEA 11243 | Introduction to Theatre Design | 3 |
|  | Plus TCU Core Curriculum Courses |  |
| For students working toward the BFA with a major in theatre, emphasis in design or production: |  |  |
| Fall |  |  |
| THEA 11103 | Art of the Theatre | 3 |
| THEA 11203 | Stagecraft | 3 |
| THEA 10901 | Theatre Production | 1 |
| THEA 11233 | Practical Costuming | 3 |
|  | OR |  |
| THEA 11303 | Acting I: Introduction | 3 |
|  | Plus TCU Core Curriculum Courses |  |
| Spring |  |  |
| THEA 10103 |  |  |
| THEA 10901 | Theatre Production | 1 |
| THEA 11213 | Theatre Graphics | 3 |
| THEA 21213 | Drawing for Theatre | 3 |
| THEA 11233 | Practical Costuming | 3 |
|  | OR |  |
| THEA 11303 | Acting I: Introduction | 3 |

## Plus TCU Core Curriculum Courses

For students working toward the BA with a major in theatre:
Fall

| THEA 11103 | Art of the Theatre | 3 |
| :--- | :--- | ---: |
| THEA 11203 | Stagecraft <br> OR | 3 |
| THEA 11243 | Introduction to Theatre Design | 3 |
| Spring | Plus TCU Core Curriculum Courses |  |
| THEA 11303 | Acting I: Introduction | 3 |
| THEA 11203 | Stagecraft <br> OR <br> Introduction to Theatre Design | 3 |
| THEA 11243 | In | 3 |

## AddRan College of Liberal Arts

## Liberal Arts Program of Study

Texas Christian University was founded as AddRan Male and Female College, and its largest and most central academic unit continues to carry the distinctive name that Addison and Randolph Clark devised for their school.
AddRan College of Liberal Arts also continues TCU's well-developed tradition of emphasis on the liberal arts. The college's faculty and programs provide a sound foundation for a lifetime of intellectual growth and preparation for the multiple careers that most will experience in the 21st century. Courses in the humanities and social sciences form a major part of the core studies of all University students, and concentrated effort in one AddRan area can provide the base for future personal and vocational choices.
Degree programs within AddRan College vary widely. Some provide the solid liberal arts base needed for professional study toward the ministry, law, medicine, business, teaching and related fields. Some have a professional orientation within themselves, with specialized study leading toward specific career objectives. In all of the programs, students find flexibility and freedom balanced by structure and discipline.
AddRan's academic advisement system is part of its intent to help individual students meet their educational needs. Faculty members in each academic program serve as advisers. Students are expected to meet with their advisers at least once each semester as they plan studies for the next term, and appointments are encouraged at other times when students feel the need to discuss their academic options. All first-year students, whether entering freshmen or transfers, are required to see an adviser prior to registering. Names of advisers are available through each of the departments. All freshmen and pre-majors are advised through the Center for Academic Services.

## AddRan College Organization

AddRan College is organized into 11 departments, two interdepartmental programs, two units of Reserve Officers' Training Corps and one academic service unit.

## Departments

Criminal Justice
Economics
English
Geography
History
Modern Language Studies
Philosophy
Political Science
Religion
Sociology and Anthropology
Spanish and Hispanic Studies

## Cooperative Programs

Master's in Education (3/2 Program with College of Education)
Reserve Officers' Training Corps
Aerospace Studies, Air Force ROTC
Military Science, Army ROTC
Academic Service Unit
English Language Center

## Residence Study Abroad

TCU Summer Study Tours in Europe
TCU Summer Study Courses in Italy, Great Britain, and Germany
Administrative offices for AddRan College are on the second floor of Scharbauer Hall, which also houses the departmental offices of criminal justice, economics, modern language studies, philosophy, political science, sociology and anthropology, and Spanish and Hispanic studies. English, history and geography are located in Dave Reed Hall, and religion is in Theodore Beasley Hall.

## AddRan College Degree Programs

AddRan College administers programs that lead to the Bachelor of Arts (BA) and Bachelor of Science (BS) degrees.
The Bachelor of Arts (BA) degree is offered with majors in:

- Anthropology
- Economics
- English
- Geography
- History
- Interdisciplinary Inquiry
- International Economics
- Modern Language Studies
- Philosophy
- Political Science
- Religion
- Sociology
- Spanish and Hispanic Studies
- Writing

The Bachelor of Science (BS) degree is offered with majors in:

- Economics
- Geography
- Interdisciplinary Inquiry
- Philosophy
- Political Science
- Sociology


## Professions Program

The Bachelor of Science in Criminal Justice (BSCJ)

## Multiple Majors

Students with a first major in AddRan College may declare an additional major in lieu of or in addition to a minor. The additional major may be selected from the other colleges/schools at TCU. Students seeking an additional major in a school/college other than AddRan must have the approval of the dean of AddRan and the dean of the additional major.
Students with a first major in another TCU school/college may select additional majors from those available in AddRan with the approval of the dean of the school/college of the first major and the dean of AddRan. Students who seek a second major from AddRan, if that major is one approved for the $B A$, must satisfy the foreign language requirement described below.
The degree awarded will be that appropriate to the major designated as the first major. All degree requirements for each major must be satisfied. These include all TCU Core Curriculum requirements associated with any particular major, as well as all associated requirements.

## Pass/No-Credit Option

Students may take up to two courses (eight hours maximum) on a Pass/NoCredit (P/NC) basis. No course applied to the student's major, minor or associated requirements may be taken on the P/NC basis. Courses offered only with the P/NC grade will not be counted toward this limit on the number P/NC hours. The P/NC option is not allowed in any English as a Foreign Language course offered by the English Language Center.

## Transfer Credit

Students wishing to take courses at another college or university following their admission to TCU must receive approval of such courses through the office of the dean of AddRan College before enrolling in them.

## AddRan Minors

The following is a list of approved minors in AddRan College:

- African American and Africana Studies
- Asian Studies
- Anthropology
- British and Colonial/Post-Colonial Studies
- Chinese
- Classical Studies
- Creative Writing
- Criminal Justice
- Economics
- English
- French
- Geography
- German
- History
- Human-Animal Relationships
- International Economics
- International Relations
- Italian
- Jewish Studies
- Latino/a Studies
- Middle East Studies
- Philosophy
- Political Science
- Religion
- Sociology
- Spanish and Hispanic Studies
- Spanish for Business Professions
- Spanish for the Health Professions
- Urban Studies
- Writing

In addition, minors are accepted from the other colleges/schools at TCU. Students seeking a minor from the College of Education must obtain the approval of the office of the dean of the College of Education.

## AddRan Bachelor of Arts Degree

Students pursuing a program leading to a BA degree must complete a minimum of 124 semester hours, 42 of which must be advanced ( 30000 level or above) from TCU, with a major selected from the approved list of majors above and a minor chosen in consultation with the student's adviser. The specific number of hours required for the major and minor may be found in the appropriate section of this catalog.
A maximum of 36 semester hours in any one subject field may be counted toward the 124 -semester-hour minimum required for the BA degree. ENGL 10803 or 10833 and ENGL 20803 are excluded from the 36 -semester-hour maximum for students majoring in English.
In addition, students must complete the TCU Core Curriculum described elsewhere in this catalog.
Notes:

1. No more than eight semester hours of physical education activity courses may be applied toward graduation requirements.
2. Specific courses have been approved to meet the core curriculum. These courses are so identified in the schedule of classes for each term's offerings.
3. No course may be applied to more than one set of major or minor requirements without the express approval of the associate dean of AddRan College.

## Foreign Language Requirement

## All students pursuing the BA degree in AddRan College must demonstrate competency in a foreign language equivalent to the completion of one of the following:

FREN 20063
Fourth Semester College French
GRMN 20063
Intermediate German 3
GREE $20063 \quad$ Fourth Semester College Greek (Hellenistic) 3
ITAL 20063
Fourth Semester College Italian
JAPN 20063
SPAN 20203
SPAN 20213

Fourth Semester College J apanese
Intermediate Spanish 2
Intensive Intermediate Spanish 2

This requirement may be satisfied by either satisfactory completion of coursework taken at or transferred to TCU or by presenting satisfactory scores on recognized standardized tests (i.e., AP, CLEP or SAT III). Required scores on standardized tests may be found in the Credit by Exam booklet available from the Office of Admission. For languages not currently taught at TCU, six semester hours at the sophomore-level, transferred to TCU from another accredited institution, may be used to satisfy this requirement. Students may also provide evidence of competency in the non-English language by successfully completing one academic year in a secondary or post-secondary institution in which the language of instruction is other than English, for which the student will receive 12 hours of credit.

## AddRan Bachelor of Science Degree

Students pursuing a program leading to a BS degree must complete the minimum number of semester hours, 42 of which must be advanced ( 30000 level or above), specified for their particular major chosen from the list of approved majors for a BS degree above. Specific requirements of each major are to be found in the appropriate section of this catalog. Where a minor is called for, it is to be selected with the assistance of the student's adviser from the list of approved minors.
In addition to the specific requirements, students must complete the TCU Core Curriculum described elsewhere in this catalog.
Notes:

1. No more than eight physical education courses may be applied toward graduation requirements.
2. Specific courses have been approved to meet the core curriculum. These courses are so identified in the schedule of classes for each term's offerings.
3. No course may be applied to more than one set of major or minor requirements without the express approval of the associate dean of AddRan College.

## Other Bachelor of Science Degrees

All policies relevant to the BS degree also apply to the degree of BS in Criminal Justice.

## Aerospace Studies

The U.S. Air Force Reserve Officer Training Corps (AFROTC) provides women and men at Texas Christian University, Texas Wesleyan University, Dallas Baptist University, University of Texas at Arlington, Weatherford College, and Tarrant County College the education and training necessary to develop the management and leadership skills vital to professional Air Force officers.
Enrollment in the General Military Course (first two years) is voluntary for eligible students and does not obligate non-scholarship students for further military service. The Professional Officer Course (last two years) is also voluntary but competitive. Because the Professional Officer Course leads to a commission in the U.S. Air Force, those selected to continue training will incur military obligation.
Aerospace studies courses are taken concurrently with other degree programs. No degree is offered in aerospace studies, but up to 24 semester hours may be earned in aerospace studies over the four-year period. Some of the classes may be used to meet major elective requirements; students should see their academic adviser for confirmation. Students who enroll in aerospace studies classes must attend both classroom and leadership laboratory classes at TCU. The laboratory classes give students first-hand experience in developing leadership and organizational skills while preparing them for enrollment in the Professional Officer Course.

## Aerospace Studies Program Requirements

## Four-Year Program

This program enables students to take advantage of four years of aerospace studies courses. Each semester, for the first two years, cadets take a one-
credit hour academic class and a one-credit hour Pass/No-Credit Leadership Laboratory (LLab). The first two years collectively are referred to as the General Military Course (GMC). Upon successful completion of the GMC and an ensuing four-week Air Force paid field training course, qualified and selected students may elect to enroll in the final two years, referred to as the Professional Officer Course (POC). Each semester in the POC, students take a three-credit hour academic class and a one-credit hour Pass/No-Credit LLab. AFROTC uniforms and textbooks are issued by the unit.
More detailed information about the Air Force ROTC Program is available through the Department of Aerospace Studies. The department is located in office 247 of the Rickel Academic Wing. Call 817.257.7461 or visit www.afrotc.tcu.edu with questions.

## Aerospace Studies General Qualifications

A student enrolling in AFROTC must:

- Be a full-time student (12 semester hours or more)
- Be a U.S. citizen
- Be in good physical condition/health
- Have good moral character
- Be no older than 34 years upon commissioning


## AFROTC Program Benefits

As Air Force ROTC cadets, students are entitled to selective benefits. Social and co-curricular activities, together with leadership and academic training, are all part of Air Force ROTC. Contracted cadets receive a nontaxable subsistence allowance each month during the school year. The detachment sponsors a Civil Air Patrol where cadets can obtain front-seat and back-seat flying time in Cessna aircraft. Drill team, honor guard and Arnold Air Honor Society are just a few social outlets for the cadets. Summer opportunities for cadets can include a paid visit to a military installation for two weeks, freefall parachuting, combat survival training, flight nurse shadowing and cadet training assistant duty at field training.

## AFROTC Scholarships

Air Force ROTC offers scholarships that vary in length of award and amount based on academic major and applicant qualifications. All awarded scholarships pay a stipend for textbooks and fees, plus a monthly, nontaxable, stipend during the school year. Scholarship awards are based on specific academic majors related to the needs of the U.S. Air Force. These scholarship opportunities for in-college students are determined at the national level by Air Force ROTC and are subsequently administered by the detachment/Department of Aerospace Studies. Scholarship applicants are selected using the whole-person concept, which includes objective factors (i.e., GPA, standardized test scores (SAT/ACT), and physical fitness test) and subjective factors (i.e., personal evaluations). Students who are enrolled in Air Force ROTC generally improve their scholarship selection opportunity.
In addition to meeting the general qualifications mentioned above, scholarship applicants must be at least 17 years of age when the scholarship is activated and must be less than 31 years of age as of the end of their commissioning year. Because the scholarship program varies according to budget and needs of the Air Force, interested applicants should contact the Department of Aerospace Studies at 817.257.7461 or www.afrotc.tcu.edu for specifics.
High school students may apply for a four-year scholarship their high school senior year. High school students who are offered an AFROTC scholarship may be offered a TCU room and board subsidy. High school students who receive a three-year scholarship may also receive an additional semester of tuition paid if attending TCU.

## AFROTC Commissioning

Upon successful completion of the AFROTC Program and baccalaureate or graduate degree, a student is commissioned a second lieutenant in the U.S. Air Force. In some instances, active service can be delayed by students continuing in post-baccalaureate degree programs.

## African American and Africana Studies

African American and Africana Studies is a critical and scholarly engagement of African American and African Diasporic Life. The interdisciplinary discourse focuses on critical race theory, ethics, politics, religion, medicine, gender, history, language and literature.

## African American and Africana Studies Minor

Students seeking the minor must complete 18 hours.

## Requirements

## To include 6 hours chosen from:

| ENGL 20593 | Introduction to Literatures of the Global African <br> Diaspora | 3 |
| :--- | :--- | :--- |
| HIST 40873 | The Civil Rights Movement in America | 3 |
| POSC 31523 | The Civil Rights Movement in America | 3 |
| RELI 10043 | Understanding Religion: Society and Culture | 3 |

Select the remaining $\mathbf{1 2}$ hours from courses that carry the AAAS attribute from at least three different departments.

## Additional Requirement:

- No more than 9 hours may be taken throughout the minor program in any one department
- At least 9 hour must be at the 30000 level or above
- Courses may not count for both major and minor requirements. For example, if a student seeks an African American and Africana Studies minor and a religion major, RELI 30343 (Black Religion in the U.S.) could count toward the requirements for the minor or the major, but not both.


## African American and Africana Studies Emphasis

Students seeking the minor must complete 15 hours.

## Requirements

## To include 6 hours chosen from:

| ENGL 20593 | Introduction to Literatures of the Global African <br> Diaspora | 3 |
| :--- | :--- | :--- |
| HIST 40873 | The Civil Rights Movement in America | 3 |
| POSC 31523 | The Civil Rights Movement in America | 3 |
| RELI 10043 | Understanding Religion: Society and Culture | 3 |

## Select the remaining 9 hours from courses that carry the AAAS attribute from at least three different departments.

Emphasis students may count AAAS approved courses towards the emphasis as well as another major or minor. YThey also may concentrate their AAAS electives in a single department.
Emphasis students in a program requiring a minor must complete a minor in another disciplinary field.
A list of approved courses for the minor and emphasis
ADRN 20101 Make Your Major Work 1

ADRN 20103 Africa through Film 3
CRJU $30853 \quad$ Multiculturalism in the Criminal Justice System 3
CRJU 30903 Law and Society 3
EDUC 50003 Diversity in American Education 3
ENGL 10133 Introduction to Literature 3
ENGL 20593 Introduction to Literatures of the Global African 3
ENGL 30573 African-American Literature 3
ENGL 40533 Toni Morrison 3
HIST 10703 African American Experience Since 16193
HIST 30803 U.S. Urban History 3
HIST 31903 Summer Study in Ghana 3

HIST 40873
POSC 31523
POSC 31623
POSC 35023
RELI 10043
RELI 20503

RELI 20513

RELI 30343
RELI 30553
RELI 30813
RELI 30893
SPAN 41803
SOCI 30443
SOCI 40803
SOWO 30513
SOWO 30583

The Civil Rights Movement in America
The Civil Rights Movement in America
Urban Politics
Comparative Social Movements
Understanding Religion: Society and Culture
Africa and the African Diaspora: History, Religion, 3 and Culture
Africa and the African Diaspora: History, Religion, and Culture
Black Religion in United States

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## Anthropology

The anthropology major is administered by the Department of Sociology and Anthropology. It is available as a major on the BA degree and a minor on both the BA and BS degrees.
Anthropology is the holistic description and analysis of human beings in all their diversity. Anthropology emphasizes a cross-cultural and global perspective, and seeks to understand our species, Homo sapiens, both throughout time and in many different geographical regions. Anthropology is divided into four fields: sociocultural anthropology, archaeology, physical anthropology and linguistic anthropology. Anthropologists study a wide range of topics, including gender and ethnicity, race, material artifacts, human evolution, genetic diversity, medicine and healing, globalization, economic systems and social change, violence and social suffering, sociocultural systems of past societies, the rise of complex civilizations, language and culture, urbanization, religion and ritual, and the effect of the mass media. Anthropologists conduct their research in many different places throughout the world, including Mexico, Brazil, Germany, Japan and the United States.
Anthropology is an important component of a liberal arts education, as it complements a wide variety of other disciplines, encourages analytical thinking and fosters a holistic approach to learning. The undergraduate program in anthropology can provide a foundation for the pursuit of advanced degrees in anthropology and other disciplines such as law, medicine, social work, public health, education and history. Anthropology's focus on understanding different cultures makes it a particularly good preparation for work related to international and global issues, public policy and cultural diversity. Anthropology graduates use their degrees in a wide range of fields such as government service, museums, international organizations, business, education, advocacy, public policy analysis, market research and healthcare.

## Anthropology, BA

The BA with a major in anthropology requires 30 semester hours, at least $\mathbf{2 4}$ of which must be in anthropology, including at least nine hours from the following:
ANTH 20613 Introduction to Physical Anthropology 3
ANTH 20623 Introduction to Cultural Anthropology 3
ANTH 20633 Introduction to Archaeology 3
ANTH $20643 \quad$ Language and Culture 3
A maximum of six hours from outside the program may be applied toward the major upon approval of the anthropology faculty. Courses taken through other anthropology programs may be accepted toward the major or minor with approval of the TCU anthropology faculty.

## Anthropology Minor

## A minor in anthropology requires 18 semester hours of anthropology courses, including at least six hours from among the following:

| ANTH 20613 | Introduction to Physical Anthropology | 3 |
| :--- | :--- | :--- |
| ANTH 20623 | Introduction to Cultural Anthropology | 3 |
| ANTH 20633 | Introduction to Archaeology | 3 |
| ANTH 20643 | Language and Culture | 3 |

## Asian Studies

Asian studies is available as a minor on both the $B A$ and $B S$ degrees. The minor program offers students multidisciplinary opportunities to study subjects concerning the peoples and cultures of Asia.

## Asian Studies Minor

Students are required to take 18 hours, selected from at least three departments, from a variety of courses focusing on the history and thought of the peoples in Asia. No more than nine hours may be taken in any one department, and at least nine hours must be at the 30000 level or above. Up to six hours of a single foreign language (Japanese or Chinese), at the second semester level or higher, may be applied to minor requirements. The Culture and Civilization courses (CHIN 30113 and JAPN 30113) may be counted in addition to the six language credits.

## Asian Studies Approved Courses

ASST 20003 Introduction to Asian Studies 3

ASST 30013 Asian Culture and Society through Cinema 3
ANTH 30723 Ethnology of Selected Areas
CHIN 10163
Beginning Chinese II
CHIN 10173
CHIN 20063 Intermediate Chinese II
CHIN 30113
Chinese Civilization and Culture
CHIN 30123
ECON 30443
Asian Economics
ENGL 30783
HIST 10943
HIST 10953
HIST 20943
HIST 20953
HIST 30443
Modern India: Literature and Culture
Asian Civilization to 1700
Asian Civilization Since 1700
Honors History Asian Civilization to 15003
Honors History of Asian Civilization Since 1500
History of Modern China: from Ming to Mao 3
HIST 40843
JAPN 10163
JAPN 20053
JAPN 20063
The Vietnam War
Second Semester College Japanese 3
Third Semester College Japanese 3
Fourth Semester College J apanese 3
JAPN 30113
J apanese Culture and Civilization
3
JAPN 30123
POSC 33603
POSC 33613
POSC 33623
POSC 35613
POSC 35623
Japanese for Daily Use
3
International Relations of East Asia 3
The International Relations of Japan 3
Chinese Foreign Policy 3
The Politics of Japan 3

POSC 35633
Contemporary Issues in China
POSC 35643 Entrepreneurship in China 3

RELI 20573 Defining the Nation: China and India in Crisis
RELI 30513 Hindu Religious Perspectives
RELI 30523
East Asian Religious Perspectives
RELI 30533
Buddhism: Thought and Practice
RELI 30573
RELI 30753
The Many Faces of Krishna
RELI 30773
RELI 30863
India: Texts and Traditions Religion and Violence

Course offerings may vary, and other courses may be allowed with approval of the minor director when those courses focus on Asia. For more information, contact the program director, Carrie Currier, in the Department of Political Science.

## British and Colonial/Post-Colonial Studies

British and Colonial/Post-Colonial studies is available as a minor on both the $B A$ and $B S$ degrees. This minor is designed to provide students with an understanding of the current state and history of Great Britain and its former and current colonies. It is interdisciplinary in nature, drawing upon departments and course offerings throughout the University, as well as the TCU in London Program. Through this minor, students become aware of how different areas of study, including art, film, history, journalism, literature, religion, and social behavioral and natural sciences, coalesce and contribute to the knowledge of a particular region. It also provides students with a framework for investigating issues of globalization, such as the impact of colonization on nations and their history and the state of the former colonies in contemporary life.

## British and Colonial/Post-Colonial Studies Minor

## Requirements

The minor is 18 hours and requires completion of two core courses, a disciplinary concentration consisting of three courses, and one elective course. The designated core courses draw from a variety of disciplines and are selected to provide students with:

- Foundational knowledge about Great Britain, its history and culture, and the processes of change over time.
- An introduction to the critical issues of Colonial/Post-Colonial studies (see list below).
The disciplinary concentration allows students to develop an area of specialization-arts and humanities or natural and social sciences-within the minor. For further information, contact the program director.


## Restrictions

Courses must draw from at least three different departments with no more than nine hours completed in one department. No more than six hours can be completed at the 10000/20000 level. A maximum of 12 hours completed through the TCU in London Program or any other TCU Study Abroad Program can count toward the minor, but no more than six of those 12 hours can be London Internship hours. The program director must approve the application of any transfer credit to the minor requirements.

## Specific Requirements

## 1. Three hours in a foundations course selected from this list or any other relevant course submitted and approved by program director:

ARHI 20073
British Art: Medieval-Modern
ARHI 30073
Modern British Art
ENGL 20403
Major British Writers
ENGL 30113
British Literature to 1800
ENGL 30123
British Literature since 1800
ENGL 30413
Studies in Medieval Literature and Culture
HIST 30503
History of England to 16033

HIST 30513
HIST 30523
HIST 30593
2. Three hours in a Colonial/Post-Colonial studies course selected from this list or any other relevant course submitted and approved by program director:
ECON 40413 U. S. Economic History - The Founding Eras 3

ENGL 30443 Twentieth Century Irish Literature 3
ENGL 30473 Wilde Years: Oscar Wilde and the 1890s 3
ENGL 30683 Post-Colonial Anglophone Literature 3
ENGL 30693 U.S. Multi-Ethnic Literature 3
ENGL 30773 India: Texts and Traditions 3
HIST 30533 England, 1815-1901, Politics, Prudery, and the Pax 3
HIST 30543
HIST 30563
Twentieth-Century Britain, Empire to Welfare State: 1901 to the Present

HIST 30573
The British Empire, 1603-1857

HIST 40603 Colonial America: From the Age of Discovery to 3 1763
JOUR 40543
International and Intercultural Communication
RELI 30553
RELI 30773
African Religions
India: Texts and Traditions
RELI 30893
FTDM 30643
Caribbean Religions
British Cinema and European Culture
3. Nine hours of disciplinary concentration in one of the following two groups, with courses taken from at least two different departments within that group. Courses may be selected from the list in 1. or 2. above, or any other course relevant to the minor. While students may take courses for the concentration from their major department, no course may be applied to both major and minor requirements.
Arts and Humanities:art history, communication studies, design, english, journalism, music, philosophy, religion, FTDM, theatre.
Natural and Social Sciences:economics, education, geography, geology, history, political science, psychology.
4. Three elective hours selected from the list of courses in 1. or 2. above or any relevant course in any participating department.The following courses taught at the London Centre and the London Internship may be applied toward the minor:
ART 20603
ART 20003
BRST 40920 London Internships $\quad 1.00-$
ENGL 30973
ENGL 20403 Major British Writers 3
HIST 30583 Living in London 3
JOUR 40773 Media in Britain 3
POSC 40920 London Internships 1.00-
12.00

FTDM 40773
Media in Britain
3
THEA 30123

## Classical Studies

Classical studies is available as a minor on both the BA and BS degrees.

## Classical Studies Minor

The minor in classical studies requires 18 semester hours, with a six-hour minimum of upper-division courses, selected from at least three areas. Up to nine hours of Greek/Latin can be counted toward the minor (including applicable AP/CLEP credit). Other courses may be applied to the minor with the approval of the minor coordinator or the AddRan associate dean.
Students are encouraged to take part in a study abroad program relevant to the minor.

| Current approved courses include: |  |
| :---: | :---: |
| ANTH 30923 | Studies in Anthropology |
| ARHI 20003 | Classical Tradition in Art |
| ENGL 20633 | Mythology |
| ENGL 50253 | Classical Rhetoric |
| GREE 40970 | Directed Studies in Greek |
| GRMN 20973 | Honors: The Afterlife of the Classical Greek Tradition |
| GRMN 20983 | Honors: The Afterlife of the Classical Roman Tradition |
| HIST 30003 | The Greek World |
| HIST 30013 | The Roman Republic and Empire |
| PHIL 40213 | Ancient Philosophy |
| POSC 30203 |  |
| RELI 30113 | Jesus and the Gospels |
| RELI 30123 | Paul and the Early Church |
| THEA 30103 |  |
| Students who Policy of their | r in classical studies are subject to the Pass/N department. |

## Criminal Justice

Criminal justice is available as a major on the BS degree and as a minor on both the BA and BS degrees. Criminal justice serves the academic needs and career objectives of a variety of students. The major in criminal justice can serve as preparation for further formal education in graduate or law school, as well as for immediate entry into careers in the criminal justice system. Courses may be selected to emphasize any of the three components of the criminal justice system: police, courts or corrections. Alternatively, students may choose courses that provide exposure to special issues and problems in criminal justice. In addition, the internship program provides students opportunities to experience working in the criminal justice field.
Transfer students may receive a maximum of nine hours credit in the major for criminal justice courses taken at accredited colleges and universities. A maximum of six hours may be counted toward the minor. The chair of the Criminal Justice Department determines the applicability of such coursework to the program's degree requirements.

## Honors College

Criminal justice majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in CRJ U 30003 during their junior year and CRJU 40003 during the fall semester of their senior year.

## Alpha Sigma

The Criminal Justice Program sponsors a chapter of Alpha Phi Sigma, the national honor society in the discipline. Any criminal justice major or minor with a 3.2 overall GPA and a 3.2 in criminal justice-related courses is eligible.

## Criminal Justice, BS

The BS with a major in criminal justice requires a total of 124 semester hours. The degree does not require a foreign language. The major requires 45 hours in criminal justice courses:

The 45 semester hours in criminal justice (CRJU) must include:

| Required Criminal Justice Courses (24 hours) |  |  |
| :---: | :---: | :---: |
| CRJU 20123 | Career Planning, Ethics, and Professional Development in Criminal Justice | 3 |
| CRJU 20413 | Introduction to Criminal Justice | 3 |
| CRJU 20423 | Critical Issues in Crime and Justice | 3 |
| CRJU 20873 | Criminal Justice Research Methods I | 3 |
| CRJU 20883 | Criminal Justice Research Methods II | 3 |
| CRJU 30313 | Criminology | 3 |
| CRJU 30423 | Courts and Judicial Process | 3 |
| CRJU 40963 | Internship in Criminal Justice | 3 |
| Law Enforcement (3 hours) |  |  |
| CRJU 30613 | Police in a Free Society | 3 |
|  | OR |  |
| CRJ 30623 | Policing Cyberspace | 3 |
|  | OR |  |
| CRJU 30633 | Federal Law Enforcement | 3 |
| Law (3 hours) |  |  |
| CRJU 30433 | Criminal Law | 3 |
|  | OR |  |
| CRJU 30903 | Law and Society | 3 |
| Corrections (3 hours) |  |  |
| CRJU 30393 | Sociology of Corrections | 3 |
|  | OR |  |
| CRJ 30643 | Community Corrections | 3 |
| Diversity (3 hours) |  |  |
| CRJU 30853 | Multiculturalism in the Criminal Justice System | 3 |
| CRJU 40463 | Juvenile Delinquency | 3 |
|  | OR |  |
| CRJ 40503 | White Collar Crime | 3 |
| Electives (9 hours) |  |  |
| Although taught regularly, not all required courses are scheduled every semester. It is the students' responsibility to complete the major requirements for graduation as early in their tenure as possible. Exemptions to the major requirements will not be made because of student failure to complete coursework in a timely fashion. |  |  |
| Criminal Justice Minor |  |  |
| The minor in criminal justice requires 18 hours |  |  |

## Required courses for the minor are:

| CRJU 20413 | Introduction to Criminal Justice | 3 |
| :--- | :--- | :--- |
| CRJU 30313 | Criminology | 3 |

## Economics

Economics is available as a major or a minor on both the BA and BS degrees. It is also available on the BA degree in international economics. Students who plan to pursue a graduate degree in economics should be certain to meet early and often with their faculty adviser to ensure that appropriate supplemental coursework is completed.

The Department of Economics is part of the AddRan College of Liberal Arts and, thus, has a liberal arts focus. The program fosters an intellectual community, based on critical inquiry, that explores the human condition while enabling students to develop the capacity to "think like an economist," thereby providing the skills necessary for meaningful work, citizenship and leadership. Upon completion of the undergraduate degree programs, students majoring in economics should be able to analyze human action and interaction in economic terms, formally model economic phenomena, and apply core economic concepts to novel situations.

## Honors College

Economics majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in ECON 30003 during their junior year and ECON 40003 during the fall semester of their senior year.

## Minimum Grade Requirements

To graduate with a major in economics or international economics, students must earn a grade of "C" or better in all courses applied to the major, including associated requirements. In addition, a grade of "C" or better must be earned in any course serving as a prerequisite for a subsequent course in economics.

## Course Scheduling

Although taught regularly, not all required courses are scheduled every semester. It is the students' responsibility to complete the major requirements for graduation as early in their tenure as possible. Exceptions to the major requirements or to course prerequisites will not be made because of student failure to complete coursework in a timely fashion. In particular, since they serve as prerequisites to many advanced courses, the foundations courses and associated requirements should be completed as early as possible in a student's academic career.

## Omicron Delta Epsilon

The Eta of Texas Chapter of Omicron Delta Epsilon (ODE) is sponsored by the Department of Economics. ODE is the national honor society in economics.

## Economics, BA

## Requirements

The BA with a major in economics requires 30 semester hours in economics, 24 of which must be at the 30000 level or above, plus a minimum of six semester hours in associated requirements. A grade of "C" or better must be attained in any course that is to count as one of the 30 hours in economics or as one of the associated requirements. Specific requirements are as follows:

## Foundations (12 hours)

## ECON

Any 10000-level economics course
ECON 30223 Intermediate Microeconomics
ECON 30233 Intermediate Macroeconomics
ECON $30243 \quad$ Contending Perspectives in Economics
Breadth Requirements ( 9 hours, 3 from each subsection)
Historical Context (3 hours)
ECON 30253 History of Economic Thought
ECON 30423 European Economic History - The Industrial Revolution

ECON $30483 \quad$ Financial History
ECON 30533 Happiness: Culture, Economics, and Being
ECON 40413 U. S. Economic History - The Founding Eras
ECON 40423 U. S. Economic History - the Rise of the Modern Era
ECON 50463 Perspectives in Macroeconomics
International Economics (3 hours)
ECON 30213 Development Theory
ECON 30433 Development Studies
ECON 30443 Asian Economics
ECON 30453 Economics of the European Union
ECON 30463 Latin American Economics

ECON 30493
International Economic Studies
ECON 30513 Perspectives in International Economics 3
ECON 40213 International Trade and Payments 3
ECON 40223 International Monetary Economics

## Public Economics (3 hours)

ECON 30473 Regional and Urban Economics 3
ECON 30503 Health Economics 3
ECON 40113 Industrial Organization 3
ECON 40133 Labor Economics 3
ECON 40143 Public Finance 3
ECON 40153 Economics of Financial Markets 3
ECON 40433 Law and Economics 3
ECON 50463 Perspectives in Macroeconomics 3
Additional Electives in Economics (9 hours)
Associated Requirements (6-7 hours)
MATH 10283 Applied Calculus
OR
MATH $10524 \quad$ Calculus I

INSC 20153 Statistical Analysis 3
OR
MATH 10043 Elementary Statistics
Note that the MATH 10283 and MATH 10524 will not serve as the prerequisite for any upper-level math courses
A minor is required. Any minor approved by AddRan College is acceptable. A minor in mathematics is recommended for those planning to enter graduate school in economics. With the approval of the chair of the Department of Economics and the associate dean of undergraduate studies of the M.J. Neeley School of Business, economics majors may minor in finance or accounting. For the finance minor, ECON 40153 may substitute for FINA 30203, but cannot be used to satisfy both the major and minor requirements.

## Economics, BS

## Requirements

The BS with a major in economics requires 30 semester hours in economics, 24 of which must be at the 30000 level or above, plus a minimum of six semester hours in associated requirements. A grade of "C" or better must be attained in any course that is to count as one of the 30 hours in economics or as one of the associated requirements. Specific requirements are as follows:

## Foundations ( $\mathbf{1 5}$ hours)

| ECON | Any 10000-level economics course |  |
| :--- | :--- | :--- |
| ECON 30223 | Intermediate Microeconomics | 3 |
| ECON 30233 | Intermediate Macroeconomics | 3 |
| ECON 30243 | Contending Perspectives in Economics | 3 |
| ECON 40313 | Econometrics | 3 |
| Breadth Requirements (9 hours, 3 from each subsection) |  |  |
| Historical Context (3 hours) |  |  |
| ECON 30253 | History of Economic Thought | 3 |
| ECON 30423 | European Economic History - The Industrial | 3 |
|  | Revolution |  |
| ECON 30483 | Financial History | 3 |
| ECON 30533 | Happiness: Culture, Economics, and Being | 3 |
| ECON 40413 | U.S. Economic History - The Founding Eras | 3 |
| ECON 40423 | U. S. Economic History - the Rise of the Modern Era | 3 |
| ECON 50463 | Perspectives in Macroeconomics | 3 |

International Economics (3 hours)

| ECON 30213 | Development Theory |
| :--- | :--- |
| ECON 30433 | Development Studies |
| ECON 30443 | Asian Economics |
| ECON 30453 | Economics of the European Union |
| ECON 30463 | Latin American Economics |
| ECON 30493 | International Economic Studies |
| ECON 30513 | Perspectives in International Economics |
| ECON 40213 | International Trade and Payments |
| ECON 40223 | International Monetary Economics |

## Public Economics (3 hours)

| ECON 30473 | Regional and Urban Economics | 3 |
| :--- | :--- | :--- |
| ECON 30503 | Health Economics | 3 |
| ECON 30763 | Economic Geography | 3 |
| ECON 40113 | Industrial Organization | 3 |
| ECON 40133 | Labor Economics | 3 |
| ECON 40143 | Public Finance | 3 |
| ECON 40153 | Economics of Financial Markets | 3 |
| ECON 40433 | Law and Economics | 3 |
| ECON 50463 | Perspectives in Macroeconomics | 3 |

## Additional Electives in Economics (6 hours)

| Associated Requirements |  |
| :---: | :---: |
| All students must complete six to seven hours of coursework in Calculus and Statistics from the following: |  |
| MATH 10283 | Applied Calculus |
|  | OR |
| MATH 10524 | Calculus I |
| INSC 20153 | Statistical Analysis |
|  | OR |
| MATH 10043 | Elementary Statistics |

(Note that MATH 10283 and MATH 10524 will not serve as the prerequisite for any upper-level math courses)

## In addition, students must choose one of the following four options:

Mathematics (7-8 hours)

| MATH 20524 | Calculus II |
| :--- | :--- |
| MATH | Upper level 30000 and above math |

## Accounting (6 hours)

ACCT $\quad 6$ hours of Accounting

## Business (6 hours)

| ACCT | 3 hours of Accouting |
| :--- | :--- |
| FINA | 3 hours of Finance |

## Geographic Information Systems (6 hours)

| GEOG 30313 | Introducation to Geographic Information Systems | 3 |
| :--- | :--- | :--- |
| GEOG 40313 | Advanced Geographic Information Systems | 3 |
| GEOG 40323 | Urban and Business Applications of Geographic | 3 |
|  | Information Systems |  |
| GEOL 30363 | Introduction to Geospatial Technology | 3 |
| GEOL 50523 | Introduction to Geographic Information Systems | 3 |

Minor: A minor is required. Any minor approved by AddRan College is acceptable. A minor in mathematics is recommended for those planning to enter graduate school in economics. With the approval of the chair of the

Department of Economics and the associate dean of undergraduate studies of the M.J. Neeley School of Business, economics majors may minor in finance or accounting. For the finance minor, ECON 40153 may substitute for FINA 30203, but cannot be used to satisfy both the major and minor requirements.

## International Economics, BA Requirements

The BA with a major in international economics requires 30 semester hours in economics, 24 of which must be at the 30000 level or above, plus a minimum of 18 semester hours in associated requirements. A grade of "C" or better must be attained in any course that is to count as one of the 30 hours in economics or as one of the associated requirements. Specific requirements are as follows:

| Foundations (12 hours) |  |  |
| :--- | :--- | :--- |
| ECON | Any 10000-level economics course |  |
| ECON 30223 | Intermediate Microeconomics | 3 |
| ECON 30233 | Intermediate Macroeconomics | 3 |
| ECON 30243 | Contending Perspectives in Economics | 3 |

International Economics (12 hours)
Core ( 6 hours)
ECON 40213 International Trade and Payments 3
ECON 40223 International Monetary Economics 3

## Electives (6 hours)

ECON 30213 Development Theory 3
ECON 30433 Development Studies 3
ECON 30443 Asian Economics 3
ECON 30453 Economics of the European Union 3
ECON 30463 Latin American Economics 3
ECON 30493 International Economic Studies 3
ECON $30513 \quad$ Perspectives in International Economics 3
Additional Electives in Economics (6 hours)
Associated Requirements
Quantitative Skills (6 to 7 hours):
Note that MATH 10283 and MATH 10524 will not serve as the prerequisite for any upper-level math courses
MATH 10283 Applied Calculus 3
OR

MATH $10524 \quad$ Calculus I

OR
Elementary Statistics
3

POSC 20303 International Politics
POSC 33XX3 Any course in International Politics
POSC 35XX3 Any course in Comparative Politics

## Language, History and Culture (6 hours)

Internationally related courses from ANTH, GEOG, HIST, JOUR, RELI, FINA, MANA or MARK, or upper-division foreign language, selected with department approval (current list of approved classes available; offerings by other departments may be substituted with permission). Participation in TCU's Study Abroad Program may waive three hours of this requirement (with prior approval from the Department of Economics).

A minor is required. Any minor approved by AddRan College is acceptable. A minor in mathematics is recommended for those planning to enter graduate school in economics. With the approval of the chair of the Department of Economics and the associate dean of undergraduate studies of the M.J. Neeley School of Business, economics majors may minor in finance or accounting. For the finance minor, ECON 40153 may substitute for FINA 30203, but cannot be used to satisfy both the major and minor requirements.

## Economics Minor

## The minor in economics requires 18 semester hour

## To include 3 hours chosen from:

| ECON 30223 | Intermediate Microeconomics | 3 |
| :--- | :--- | :--- |
| ECON 30233 | Intermediate Macroeconomics | 3 |

A minimum of 12 advanced hours ( $\mathbf{3 0 0 0 0}$ level or above) is required International Economics Minor The minor in international economics requires 18 semester hours


#### Abstract

And at least nine hours chosen from any class that would count as international economics under the breadth requirements of the Bachelor of Arts in Economics


A minimum of 12 advanced hours (30000-level or above) is required
To include at least three hours chosen from
ECON 30223 Intermediate Microeconomics 3
ECON 30233 Intermediate Macroeconomics 3
Not available to economics majors.

## English

English is available as a major on the BA degree and as a minor on both the BA and BS degrees. The English department also offers writing major and minor (find it here under "Writing (p. 140)" or see the department website, www.eng.tcu.edu).

## Honors College

English majors who plan to pursue Departmental Honors must be members of the Honors College and enroll in ENGL 30003 in their junior year and ENGL 40003 in the fall semester of their senior year.

## English, BA <br> Requirements

Each student forms a program of study in consultation with a faculty adviser in English.
To earn a BA with a major in English, students must complete 33 hours in English or Writing (exclusive of ENGL 10803, ENGL 10833, ENGL 20803 and ENGL 20833). Of these, at least 24 hours must be in upper-division ENGL or WRIT courses ( 30000 level and above). No more than 9 hours of lowerdivision credit may be applied to the major.
General Requirements. ENGL 30970 and ENGL 50970, courses in special topics that change from semester to semester, usually satisfy one or more of the requirements for majors. Consult the Department of English or check the department website, www.eng.tcu.edu.
Specific Requirements. To earn a major, students must complete at least 6 of the 33 hours in Early Literature and Culture courses (p. 116)(see subcategory for courses or consult the department). Most of these courses can be used to satisfy one of the distribution requirements listed below in categories $A, B, C$ and E .
In addition, all majors in English are required to complete at least 3 of the 33 hours in a junior-level Research Seminar after they have attained junior standing and completed at least one 30000 -level ENGL class. This seminar is taken as part of the required upper-division coursework and can be used to
satisfy one of the distribution requirements listed below in categories $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and E .
Other than courses for the Early Literature and Culture category, courses may not count more than once among categories $1,2,3,4$ and 5 .
These additional distribution requirements apply:

1. 6 upper-division hours from the American Literature subcategory (p. 117)
2. 6 upper-division hours from the British Literature subcategory (p. 117)
3. 3 upper-division hours from the Global and Diasporic Literature subcategory (p. 117)
4. 3 upper-division hours from the Writing subcategory (p. 118)
5. 3 upper-division hours from the Theory subcategory (p. 118)
6. 12 elective hours of any courses offered by the Department of English, at least 3 of which must be upper division

## English Minor

To earn a minor in English, students must complete 18 semester hours in English (exclusive of ENGL 10803, ENGL 10833, ENGL 20803 and ENGL 20833). Of these, 12 hours must be in upper-division courses. These distribution requirements apply:

1. 3 hours from the American Literature subcategory (p. 117)
2. 3 hours from the British Literature subcategory (p. 117)
3. 3 hours from the Writing subcategory (p. 118)
4. Nine elective hours of any ENGL courses

## Creative Writing Minor

The minor in creative writing requires 18 semester hours in Writing or English (exclusive of ENGL 10803 and ENGL 20803). Of these, 12 hours must be in upper-division courses.
Students who major in English or Writing may count no more than 6 hours of creative writing toward their major. These distribution requirements apply:

1. ENGL 10203/WRIT 10203 or ENGL 20103
2. 9 hours of upper-division creative writing workshops with one at the 40000 level or higher
3. 6 hours of ENGL or WRIT electives

## English Course Subcategories

## Writing Workshops (WCO)

ENGL 10803 Introductory Composition: Writing as Inquiry 3

ENGL 20803 Intermediate Composition: Writing Argument 3

## Early Literature and Culture

ENGL 20423
Introduction to Medieval Literature 3
ENGL 20433 Introduction to Shakespeare 3
ENGL 20603
Western World Literature I 3
ENGL20633 Mythology 3
ENGL 20913 Literature and Civilizations I 3
ENGL $30113 \quad$ British Literature to $1800 \quad 3$
WRIT 30253 Rhetorical Traditions 3
ENGL 30413 Studies in Medieval Literature and Culture 3
ENGL 30423 Early British Drama 3
ENGL 30433 Renaissance Poetry 3
ENGL 30583 Early American Literature 3
ENGL 30623 Medieval Literature in Translation 3
ENGL 30633 Medieval and Early Modern Women Writers 3
ENGL 30673 King Arthur in Literature and Legend 3
ENGL 40323 History of the Language 3

| ENGL 40403 | Chaucer | 3 |
| :--- | :--- | :--- |
| ENGL 40413 | Renaissance in England | 3 |
| ENGL 40423 | Restoration and 18th Century Literature, 1660- | 3 |
|  | 1790 | 3 |
| ENGL 40453 | British Novel to 1832 | 3 |
| ENGL 40473 | Milton and his Contemporaries | 3 |
| ENGL 40483 | Shakespeare and Marlowe | 3 |
| ENGL 40493 | Shakespeare | 3 |
| ENGL 40543 | Studies in Early American Literature | 3 |
| ENGL 40653 | Renaissance Literature and the 'New' Science | 3 |
| ENGL 40663 | Modern Fiction | 3 |
| Research Seminars |  |  |
| ENGL 38013 | Research Seminar in British Literature | 3 |
| ENGL 38023 | Research Seminar in American Literature | 3 |
| ENGL 38033 | Reseach Seminar in Global Literature | 3 |

## American Literature

ENGL 20503
ENGL 20523
ENGL 20533
ENGL 20543
ENGL 20553
ENGL 20573
ENGL 20583
ENGL 30133
ENGL 30143
ENGL 30163
ENGL 30183
ENGL 30503
ENGL 30513
ENGL 30523
ENGL 30533
ENGL 30553
ENGL 30563
ENGL 30573
ENGL 30583
ENGL 30593
ENGL 30693
ENGL 30703
ENGL 30713
ENGL 30853
ENGL 40513
ENGL 40523
ENGL 40533
ENGL 40543
ENGL 40553
ENGL 40563
ENGL 40573
ENGL 40583
ENGL 40593
ENGL 40683
ENGL 40723

Major American Writers 3

## British Literature

ENGL 20403 Major British Writers 3
ENGL20433 Introduction to Shakespeare 3
ENGL 30113
ENGL 30123
ENGL 30413
ENGL 30423
ENGL 30433
ENGL 30443
ENGL 30453
ENGL 30463
ENGL 30473
ENGL 30633
ENGL 30653
ENGL 30673
ENGL 30683
ENGL 30773
ENGL 30783
ENGL 30793
ENGL 40403
ENGL 40413
ENGL 40423

ENGL 40433
ENGL 40443
ENGL 40453
ENGL 40463
ENGL 40473
ENGL 40483
ENGL 40493
ENGL 40633
ENGL 40643
ENGL 40653
ENGL 40663
ENGL 40693
Global and Diasporic Literature

ENGL 20593

ENGL 30493
ENGL 30533
ENGL 30573
ENGL 30623
ENGL 30663
ENGL 30683
ENGL 30693
ENGL 30703
ENGL 30713
ENGL 30743

ENGL 30763

ENGL 30773
ENGL 30783

Introduction to Literatures of the Global African Diaspora
Women Poets and Poetic Tradition
Modern American-J ewish Literature 3
African-American Literature

Lesbian, Gay, Bisexual and Transgender Authors

India: Texts and Traditions

ENGL 30793
ENGL 30843
ENGL 30853
ENGL 30863
ENGL 40533
ENGL 40663
ENGL 40693
ENGL 40723
ENGL 50253

## Writing

WRIT 10203
WRIT 20103
WRIT 20303
WRIT 20333
WRIT 30213
WRIT 30223
WRIT 30233
WRIT 30263
WRIT 30273
WRIT 30343
WRIT 30353
WRIT 30363
WRIT 30373
WRIT 40133
WRIT 40163
WRIT 40203
WRIT 40213
WRIT 40223
WRIT 40233
WRIT 40243
WRIT 40263
WRIT 40273
WRIT 40283
WRIT 40363
ENGL 50233
Theory
ENGL 30103
ENGL 30173
WRIT 30203
WRIT 30243
WRIT 30253
WRIT 30273
WRIT 30283
WRIT 30663
WRIT 30803
ENGL 30833
ENGL 40123
WRIT 40253
ENGL 40323
WRIT 40333
ENGL 50243
ENGL 50253
Multi-Ethnic Literature of the World
Australian Literature
Asian American Literature
Literature of the Middle East and North Africa
Toni Morrison
Modern Fiction
British and Irish Poetry Since 1900
Young Adult Literature in American Culture
Classical Rhetoric

| Electives |  |  |
| :---: | :---: | :---: |
| ENGL 10103 | Introduction to Fiction | 3 |
| ENGL 10113 | Introduction to Poetry | 3 |
| ENGL 10123 | Introduction to Drama | 3 |
| ENGL 10133 | Introduction to Literature | 3 |
| ENGL 10303 | Approaches to Film | 3 |
| ENGL 10503 | Introduction to Nonfiction Genres | 3 |
| ENGL 20203 | Girls' Studies | 3 |
| ENGL 20213 | Global Women's Literature | 3 |
| ENGL 20223 | Gender, Culture and Representation | 3 |
| ENGL 20233 | Sex and Gender in Literature | 3 |
| WRIT 20333 | Language, Technology, and Society | 3 |
| ENGL 20423 | Introduction to Medieval Literature | 3 |
| ENGL 20603 | Western World Literature I | 3 |
| ENGL 20613 | Western World Literature II | 3 |
| ENGL 20623 | Introduction to Women's Writing | 3 |
| ENGL 20633 | Mythology | 3 |
| ENGL 20643 | Fable and Fantasy | 3 |
| ENGL 20653 | The Romantic Imagination | 3 |
| ENGL 20663 | Why Read Literature? | 3 |
| ENGL 20713 | Literature and Medicine | 3 |
| ENGL 20733 | Science Fiction | 3 |
| ENGL 20743 | Detective Fiction | 3 |
| ENGL 20913 | Literature and Civilizations I | 3 |
| ENGL 20923 | Literature and Civilizations II | 3 |
| ENGL 30013 | Distinction Program: Thesis I | 3 |
| ENGL 30153 | Nature Writing in Nature | 3 |
| WRIT 30391 | Publication Production | 1 |
| ENGL 30613 | Women's Lives: Memoir and Fiction | 3 |
| ENGL 30723 | Short Story | 3 |
| ENGL 30733 | Satire | 3 |
| ENGL 30753 | Literature and Film | 3 |
| WRIT 30813 | Books and the History of Print Culture | 3 |
| ENGL 30970 | Directed Studies in English | $\begin{array}{r} 1.00- \\ 6.00 \end{array}$ |
| ENGL 30823 | Law and Literature | 3 |
| ENGL 40613 | King Arthur in Modern Literature and Culture | 3 |
| ENGL 40673 | Modern Drama | 3 |
| ENGL 40733 | Children's Literature | 3 |
| ENGL 40743 | The Long Novel | 3 |
| Seminars and Directed Studies |  |  |
| ENGL 30003 | Junior Honors Seminar | 3 |
| ENGL 30970 | Directed Studies in English | $\begin{array}{r} 1.00- \\ 6.00 \end{array}$ |
| ENGL 40003 | Senior Honors Seminar | 3 |
| ENGL 40831 | Senior Seminar | 1 |
| ENGL 50973 | Directed Study in English | 3 |

## English as a Foreign Language

English as a Foreign Language (ENFL) courses offer elective credits for international students who have been admitted to TCU. These courses are designed to provide additional help in composition, reading and general study skills development.

## Placement

Placement in these courses is based on the results of the Test of English as a Foreign Language (TOEFL) section scores; the Test of Written English (TWE); and/or other standardized English proficiency exams, which are given to new students during their orientation. Those required to take any ENFL course(s) must successfully complete the course(s) before they will be allowed to continue their academic program.

## Credit

Elective credit for ENFL courses is granted only for a grade of "C" or better. Students who make a "D" will receive a grade of "NC" (no-credit) and must repeat the course. A student who receives an " F " must also repeat the course if eligible to enroll. The Pass/No-Credit grading option is not permitted for ENFL courses.

## Foreign Language Requirement

Students may demonstrate competency in a language other than English by meeting the TCU non-English language undergraduate requirement (and earn credit for this requirement) in a variety of ways. First, the student may meet the requirement by successful completion of coursework at TCU or by approved transfer credit from another institution, as specified in each academic major and receive the number of credit hours earned in those courses. Additionally, a student may provide evidence of competency in the non-English language by:

- Scores on standardized tests approved by the University, for which the student will receive three to 12 hours of credit depending on the examination score; or
- Successful completion of one academic year in a secondary or postsecondary institution in which the language of instruction is other than English, for which the student will receive 12 hours of credit.


## General Studies

A program leading to the Bachelor of General Studies (BGS) degree is available for students whose educational goals may not be realized by traditional degree programs of the University. This program does not include a major or minor, but does require that a student satisfy all general University requirements and have an emphasis of at least 24 hours. Emphasis areas are restricted to those that allow non-majors to take advanced-level (30000 or above) courses. Degree plans must be approved by the director of general studies. For further information, please contact Dr. Michael Butler, Associate Dean of AddRan College.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36) in the Bachelor's Degree section of the University requirements.

## General Studies, BGS <br> Requirements

In addition to satisfying the TCU Core Curriculum requirements, students must take:

- A total of 124 semester hours with at least 45 semester hours taken at TCU.
- A minimum of 24 semester hours in an emphasis area approved by the director of general studies.
- Thirty-six semester hours at the advanced level (30000 level or above) with 24 or more of these advanced hours being taken at TCU. A minimum of 12 semester hours must be in the emphasis area. The last 30 semester hours for the degree must be taken at TCU.


## Geography

Geography is available as a major on the BA and BS degrees and as a minor on both the BA and BS degrees. The program is administered by the Department of History.

## Geography, BA

## Requirements

The BA with a major in Geography requires 30 semester hours from among the following. No grade lower than ' $\mathrm{C}-$ ' can be applied to the major.

## The following $\mathbf{1 2}$ hours of required courses:

GEOG 10003 World Regional Geography 3

GEOG 20013 Human Geography 3
GEOL 10113 Understanding the Earth 3
GEOG 30313 Introducation to Geographic Information Systems

## A minimum of 6 hours of courses with the regional designation (GEOG 305xx), including but not limited to:

GEOG 30503 Topics in Regional Geography 3
GEOG 30513 Geography of the United States 3
GEOG 30523 Geography of Latin America 3
GEOG 30533 Geography of Western Europe 3
A minimum of 6 hours of courses with the systematic designation (GEOG 307xx), including but not limited to:

GEOG 30703 Topics in Systematic Geography 3
GEOG 30713 Urban Geography 3
GEOG 30723 Cultural Geography 3
GEOG 30733 Geography of Religion 3
GEOG 30743 Applied Geography 3
Six hours of electives will consist of any two upper-division Geography courses.

## Geography, BS

The BS with a major in geography requires 42 semester hours plus associated requirements of six hours. No grade lower than 'C-' can be applied to the major. A minor is not required.

## Requirements

## Associated Requirements-6 hours:

Pick one of the following:

| COSC 10403 | Introduction to Programming | 3 |
| :--- | :--- | :--- |
| GEOG 30323 | Data Analysis and Visualization | 3 |

Pick one of the following:
MATH 10043 Elementary Statistics
INSC 20153 Statistical Analysis
Foundations- $\mathbf{1 5}$ hours

Part I. The following twelve hours of required introductory courses:
GEOG 10003 World Regional Geography 3
GEOG 20013 Human Geography 3
GEOL 10113 Understanding the Earth 3
GEOG 30313 Introducation to Geographic Information Systems 3

Part II. A minimum of three hours of the following GIS courses:

| GEOG 40313 | Advanced Geographic Information Systems |
| :--- | :--- |
| GEOG 40323 | Urban and Business Applications of Geographic <br> Information Systems |

## Geography

A minimum of twelve hours of other upper-division geography courses, including but not limited to:
GEOG 30503 Topics in Regional Geography
GEOG 30513 Geography of the United States 3

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GEOG 30523 Geography of Latin America 3
GEOG 30533 Geography of Western Europe 3
GEOG 30703 Topics in Systematic Geography 3
GEOG 30723 Cultural Geography 3
GEOG 30733 Geography of Religion 3
GEOG 30753 Population Geography 3
GEOG 30763 Economic Geography 3

## Specialization

A minimum of nine hours of electives selected from the two following groups. Students must take at least one course from Group A and Group B. Some of these courses have prerequisites that are not part of the Geography BS. If required, permission for the course must be obtained from the instructor.

## Group A - Urban - Social Focus

GEOG 30743 Applied Geography
GEOG 30713 Urban Geography
GEOG 40323 Urban and Business Applications of Geographic Information Systems
ANTH 30623
Urban Anthropology
CRJU 30703
Crime Mapping
ECON 40463
HIST 30803
U.S. Urban History

HIST $30813 \quad$ Oral History Field Research Seminar
POSC 31623
Urban Politics
Group B - Earth and Environmental Sciences
GEOL 30113 Weather and Climate
GEOL 30363 Introduction to Geospatial Technology
GEOL 40393
GEOL 40493
GEOL 50493
GEOL 50863
ENSC 40503
ENSC 50763
BIOL 30403
BIOL 40313
Soils in the Environment
Geomorphology
Physical Hydrology
Spatial Analysis
Environmental Methods and Statistics

## Electives

6 hours selected from any of the upper-division courses listed in the BS degree plan, including but not limited to all upper-division geography courses.

## Geography Minor

The minor in geography requires 18 semester hours

| Including |  |
| :--- | :--- |
| GEOG 10003 | World Regional Geography |
| GEOG 20013 | Human Geography |
| GEOG | 9 semester hours of upper division geography <br> courses |

## 3 semester hours from

| GEOL 10113 | Understanding the Earth | 3 |
| :--- | :--- | :--- |
| GEOL 30113 | Weather and Climate | 3 |
| GEOL 40493 | Geomorphology | 3 |
| No grade lower than |  | C" can be applied to the minor. |

## History

History is available as a major on the BA degree and as a minor on both the $B A$ and $B S$ degrees.

## Honors College

History majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in HIST 30153 during their junior year and HIST 40103 during the fall semester of their senior year.

## History Honor Society

The Department of History sponsors the Eta Kappa Chapter of Phi Alpha Theta, national honor society in the discipline of history.

## History, BA

## The BA with a major in history requires 31 semester hours in history courses, which include the following:

## A minimum of nine hours of survey courses, drawn from at least three out of the following five categories: <br> U.S.: <br> HIST 10603 United States History: A Survey to 1877 <br> HIST 10613 United States History: A Survey since 1877 <br> OR <br> The American Mind (HON) <br> HIST 20603 <br> HIST 20613 <br> The American Mind since 1877 (Honors)

Europe:
HIST 10203 Origins of Western Civilization: Europe to 1348
HIST 10213 The World Expanded: Europe 1348-1789 3
HIST 10223 Modernization and its Discontents: Europe 1789 to 3 the Present
OR
HIST 20203 Origins of Western Civilization: Europe to 1348 (Honors)
The World Expanded: Europe 1348-1789 (Honors) 3
Honors Modernization and its Discontents: Europe 3 1789 to the Present

## Latin America:

HIST 10923
Latin American History: Colonial Period
3
HIST 10933

HIST 20923
HIST 20933

Asia:
HIST 10943
HIST 10953

HIST 20943
HIST 20953
Middle East:
HIST 10803 Introduction to Islamic Civilization 3

HIST $10813 \quad$ Introduction to the Modern Middle East 3

- A maximum of 15 hours (exclusive of the History Major Seminar) in any one of these geographic areas may count toward the requirements for
the major. Geographic association is indicated by the abbreviations U.S., EU, LA, AS and ME
- A minimum of 12 hours taken in courses numbered 30000 or above


## History majors must take

ADRN 20101 Make Your Major Work
The department recommends that students take this course their sophomore year.

## History Major Seminar:

History majors must take the history major seminar (HIST 49903), a capstone research course. Topics vary by semester and instructor. The department recommends that this course be taken prior to the semester when the student plans to graduate. It is available to history majors only. Students pursuing Departmental Honors may, with the adviser's approval, substitute a History Major Seminar for the Juniors Honors Tutorial (HIST 30153) as preparation for completing the honors thesis. This course may not be repeated for credit

## History Minor

The minor in history requires 18 hours, to be distributed as follows:

## A minimum of nine hours of survey courses, drawn from at least three out of the following five categories:

U.S.:

| HIST 10603 | United States History: A Survey to 1877 |
| :---: | :---: |
| HIST 10613 | United States History: A Survey since 1877 |
|  | OR |
| HIST 20603 | The American Mind (HON) |
| HIST 20613 | The American Mind since 1877 (Honors) |
| Europe: |  |
| HIST 10203 | Origins of Western Civilization: Europe to 1348 |
| HIST 10213 | The World Expanded: Europe 1348-1789 |
| HIST 10223 | Modernization and its Discontents: Europe 1789 to the Present |
|  | OR |
| HIST 20203 | Origins of Western Civilization: Europe to 1348 (Honors) |
| HIST 20213 | The World Expanded: Europe 1348-1789 (Honors) |
| HIST 20223 | Honors Modernization and its Discontents: Europe 1789 to the Present |
| Latin America: |  |
| HIST 10923 | Latin American History: Colonial Period |
| HIST 10933 | Latin American History: National Period |
|  | OR |
| HIST 20923 | Honors History of Latin American Civilization to 1830 |
| HIST 20933 | Honors History of Latin American Civilization since 1830 |

Asia:
HIST 10943
Asian Civilization to 1700
HIST 10953

HIST 20943
HIST 20953

## Middle East:

| HIST 10803 | Introduction to Islamic Civilization | 3 |
| :--- | :--- | :--- |
| HIST 10813 | Introduction to the Modern Middle East | 3 |


| Three hours from the following are recommended but not required |  |  |
| :--- | :--- | :--- |
| HIST 10203 | Origins of Western Civilization: Europe to 1348 | 3 |
| HIST 10213 | The World Expanded: Europe 1348-1789 | 3 |
| HIST 10223 | Modernization and its Discontents: Europe 1789 to <br> the Present | 3 |
| HIST 10603 | United States History: A Survey to 1877 | 3 |
| HIST 10613 | United States History: A Survey since 1877 | 3 |

Six hours must be 30000 or above.

## History Secondary Certification

To earn the history secondary certificate, students must complete 24 semester hours, which include two of the three European survey courses
HIST 10203 Origins of Western Civilization: Europe to 1348

HIST 10213 The World Expanded: Europe 1348-1789 3

HIST 10223 Modernization and its Discontents: Europe 1789 to the Present

HIST 10603

HIST 10613

HIST 10903

HIST 10913

HIST 40743
History of Texas
9 semester hours at the 30000 level or above

## History Course Subcategories

## History

HIST 10203
Origins of Western Civilization: Europe to 1348
3
HIST 10213
HIST 10223

HIST 10533
HIST 10603
HIST 10613
HIST 10703
HIST 10713
HIST 10803
HIST 10813
HIST 10923
HIST 10933
HIST 10943
HIST 10953
The World Expanded: Europe 1348-1789 ..... 3Modernization and its Discontents: Europe 1789 to 3the Present
Freshman Seminar in History ..... 3
United States History: A Survey to 1877 ..... 3
United States History: A Survey since 1877 ..... 3
African American Experience Since 1619 ..... 3
Multicultural America: A Historical Survey ..... 3
Introduction to Islamic Civilization ..... 3
Introduction to the Modern Middle East ..... 3
Latin American History: Colonial Period ..... 3
Latin American History: National Period ..... 3
Asian Civilization to 1700 ..... 3

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Classical Studies: T
HIST 30003
HIST 30013
HIST 30023
HIST 30033
The Middle Ages

HIST $30133 \quad$ Th
Early Modern Europe

| HIST 30203 | The Renaissance |
| :--- | :--- |
| HIST 30223 | The Seventeenth Century |
| HIST 30233 | Enlightenment Europe |
| HIST 30243 | Spain: From Columbus to Franco |
| HIST 30253 | Popular Culture in Early Modern Europe |
| HIST 30403 | History of Russia to 1861 |

## Modern Europe

HIST 30303

HIST 30323
HIST 30333
HIST 30343
HIST 30363
HIST 30373
HIST 30383
HIST 30393
HIST 30413
HIST 30423

## Asia

HIST 30443
HIST 40843
The Age of Great Transformation: Europe, 1815-
1870
Peace or Pause? Europe, 1919-1945
A Whole New World: Europe since 1845
The French Revolution: from Subjects to Citizens
Modern Germany, 1815 to the Present
European Thought and Culture, 1800 to the
Present

## England and the British Empire

| HIST 30503 | History of England to 1603 | 3 |
| :--- | :--- | :--- |
| HIST 30513 | History of England and Great Britain since 1603 | 3 |
| HIST 30523 | Tudor-Stuart England, 1485-1714 | 3 |
| HIST 30533 | England, 1815-1901, Politics, Prudery, and the Pax | 3 |
|  | Britannica |  |
| HIST 30543 | Twentieth-Century Britain, Empire to Welfare State: | 3 |
|  | 1901 to the Present |  |
| HIST 30553 | History of Ireland since 1600 | 3 |
| HIST 30563 | The British Empire, 1603-1857 | 3 |
| HIST 30573 | British Empire and Commonwealth, 1857-1975 | 3 |
| HIST 30583 | Living in London | 3 |
| HIST 30593 | Making of Modern England | 3 |
| HIST 30653 | The Life and Times of Benjamin Disraeli | 3 |

## Latin America

HIST 30903
HIST 30913
HIST 30923
HIST 30933
HIST 30943
HIST 30953

| HIST 30963 | History of Brazil | 3 |
| :--- | :--- | :--- |
| HIST 30973 | Biography in Latin American History | 3 |
| HIST 30983 | Aztecs, Incas, and Mayas: The Indians of Middle | 3 |
|  | and South America |  |
| HIST 30993 | History of Mexico | 3 |
| HIST 41903 | History of Cuba | 3 |

## Africa and the Middle East

| HIST 30703 | Modern Egypt: A History | 3 |
| :--- | :--- | :--- |
| HIST 30713 | Revolutionary Iran:A History | 3 |
| HIST 30723 | Women in the Middle East | 3 |
| HIST 30733 | Syria and Iraq: Troubled History from WWI to the <br> Rise of ISIS | 3 |
| HIST 31903 | Summer Study in Ghana | 3 |

Period Studies in U.S. History

| HIST 40603 | Colonial America: From the Age of Discovery to <br>  <br>  <br> HI6T 40613 | 3 |
| :--- | :--- | :--- |
| Revolutionary America, 1763-1789 | 3 |  |
| HIST 40623 | The Age of Jefferson, 1789-1828 | 3 |
| HIST 40633 | The Age of Jackson, 1829-1860 | 3 |
| HIST 40643 | Civil War and Reconstruction, 1861-1876 | 3 |
| HIST 40653 | Beer Drinkers, Hell Raisers, and Robber Barons: <br>  <br> America in the Gilded Age and Progress Era | 3 |
| HIST 40663 | America Between World Wars, 1919-1941 | 3 |
| HIST 40673 | The United States from 1941 to 1975 | 3 |

## Topical Studies in U.S. History

HIST 20763 U. S. Military History 3

HIST $30603 \quad$ History of Women in America 3
HIST 30613 History of Working People in America 3
HIST $30643 \quad 3$
HIST $30803 \quad 3$
HIST $30813 \quad$ Oral History Field Research Seminar 3
HIST 40693 American Empire 3
HIST 40703 Indians of the United States 3
HIST 40713 Indians of the Greater Southwest 3
HIST 40723 The Early American Frontier 3
HIST 40733 The American West to 1900
HIST 40743 History of Texas 3
HIST 40763 The Old South 3
HIST $40783 \quad$ Constitutional History of the United States 3
HIST $40793 \quad$ Business in American Life 3
HIST 40803 History of Medicine and Public Health 3
HIST 40823 U.S. South since 1865
HIST 40833 The American Presidency 3
HIST 40843 The Vietnam War 3
HIST 40853 American Environmental History 3
HIST 40863 American Sport History 3
HIST 40873 The Civil Rights Movement in America
HIST $40883 \quad$ War and Memory in American Culture
HIST $40893 \quad$ War and Gender in American History
Honors and Pre-Honors Courses
HIST 20203 Origins of Western Civilization: Europe to 1348 (Honors)

HIST 20213
The World Expanded: Europe 1348-1789 (Honors) 3

HIST 20223

HIST 20603
HIST 20613
HIST 20923

HIST 20933

HIST 20943
HIST 20953
HIST 30153
HIST 40103

## Topical Studies in History

(Area selected by student)
HIST $30970 \quad$ Topical Studies in History $\quad 1.00-$
HIST 40003 The Women's Movement in England and

HIST 50133 America, 1792-1972

HIST 50970
Semina in Literature and History
Special Studies in History

## History Major Seminars

HIST 49903 History Major Seminar
Professional Courses for Archivists and Specialists
HIST 30073 Internship in Public History
HIST 50080
Archival Internship

HIST 50960

## Human-Animal Relationships Minor

The Interdisciplinary minor in Human-Animal Relationships (HARE) provide theoretical and practical expertise in the crucial, diverse, yet often overlooked roles animals play in human society, culture and well-being. Moreover, the minor helps students understand how humans impact the lives of other animals, both wild and domestic.

## Human-Animal Relationships Minor

Students seeking the minor must complete 18 hours.

## Requirements

HARE 30403 Perspectives on Human-Animal Relationships

## Select the remaining 15 hours from courses that carry the HARE attribute.

ANTH 20613
Introduction to Physical Anthropology
ANTH 30743
Animals, Religion, and Culture
ANTH 30783
Anthropological Approaches to Nature and the

ANTH 30823
BIOL 30613
ENGL 30743

ENSC 40353 Native American Religions and Ecology
Natural History

ENSC 40603 Illustrated Storytelling: Comic Books, Graphic Novels, Art and Film
Wildlife Ecology and Management
South African Biodiversity and Human

ENSC 50233
GEOG 30703
Urban Wildlife
3

Topics in Systematic Geography
PSYC 30473 Comparative Psychology 3
PSYC 30533 Animal Cognition 3
RAMA 20103
SOCI 30223
Challenges of Global Food Production
Contemporary Topics in Sociology
SOCI 40303
SOCI 40623
Animals, Culture and Society
Sociology Internship in Public and Non-profit 3
SOWO 40413 Agencies
Animal Assisted Therapy in Social Work
WRIT 40333

## Additional Requirement:

- No more than 6 hours may be taken throughout the minor program in any one major or program.
- No course may count for both the students major and this minor.
- ENGL 30743, SOCI 30223 and WRIT 40333 only count as approved electives when their topic is appropriate. Courses applying toward the HARE minor will be identified by the "Human-Animal Relationships" class attribute in Class Search each semester.
Other courses may be applied with the approval of the minor coordinator.


## Interdisciplinary Inquiry

Offered as a way for students to "create their own major" when their academic interest do not fall neatly along traditional disciplinary lines. Proposed interdisciplinary majors which appear designed to avoid particular required courses in established majors will not be approved.
Interested students contact the Undergraduate Associate Dean of AddRan College. If the student's plan of study has merit, the Associate Dean will work with him/her to identify appropriate faculty to Serve on the student's Faculty Supervisory Committee which will consist of at least two relevant faculty members in different departments with one designated as chair and primary academic adviser. The student, with assistance from the Faculty Committee, will propose a specific course of study, which will then be submitted to the Associate Dean for formal approval and which will then serve to create the student's official degree plan. Programs of study involving coursework from outside AddRan College must also be approved by the Dean or Associated Dean of the school(s) or college(s) offering those courses.
In addition to the specific coursework to be completed, the student's proposal must address each of the following:

1. Discuss your long term educational and career goals.
2. Discuss why these goals cannot be achieved within an existing departmental major or within a combination of a department major and minor and/or certificate.
3. How do you propose to integrate the courses you have listed into a unified course of study? Explain how you propose to make your major more than just a series of courses in different departments.
To be eligible for the program, students must have earned a TCU GPA of at least 3.0 and have earned at least 24 , but not more than 66 , semester hours credit. The eligibility of incoming transfer students (who lack a TCU GPA) will be considered on a case-by-case basis.
The proposed program of study must consist of a minimum of 36 semester hours chosen from at least two different academic disciplines, 24 of which must be upper-division (30000 or above).

- No more than 24 hours may be taken from a single academic discipline.
- At least 24 hours must be taken from within AddRan College.
- A maximum of 6 hours of independent or directed study (or Junior Honors Seminar and Senior Honors Thesis) may be applied to the major. Students in the John V. Roach Honors College interested in pursing departmental honors may, with the approval of the department chair, do so in one the departments making up their interdisciplinary course of study.
For both the B.A. and B.S. degrees, a minor is required. For the B.A. degree, 4th semester proficiency in a foreign language is required. For the B.S.
degree, sufficient coursework of a quantitative nature must be included in the proposed course of study to justify the B.S. degree. The choice between

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the B.A. and B.S. degrees is to be determined by the nature of the proposed course of study, rather than any aversion to either foreign language or quantitative coursework, and is subject to the approval of the Associate Dean.

No course applied to the student's major may also be applied to the minor.

## Interdisciplinary Minor in International Relations

## The International Relations minor is 21 credit hours.

| Required Courses |  |  |
| :---: | :---: | :---: |
| Intro to IR (3 hours) |  |  |
| POSC 20303 | International Politics | 3 |
| Comparative Politics (3 hours) |  |  |
| POSC 20503 | Introduction to Comparative Politics | 3 |
| POSC 35013 | Comparative Democratic Systems | 3 |
| POSC 35023 | Comparative Social Movements | 3 |
| POSC 35043 | Politics of Developing Nations | 3 |
| Foreign Policies of States (3 hours) |  |  |
| POSC 33503 | Contemporary U.S. Foreign Policy | 3 |
| POSC 33513 | United States Foreign Policy Making | 3 |
| POSC 33603 | International Relations of East Asia | 3 |
| POSC 33613 | The International Relations of Japan | 3 |
| POSC 33623 | Chinese Foreign Policy | 3 |
| POSC 33633 | Russian Foreign Policy | 3 |
| International Processes (3 hours) |  |  |
| POSC 33033 | Conflict and Negotiation | 3 |
| POSC 33113 | Globalization and Political Economy | 3 |
| POSC 33123 | Globalization | 3 |
| POSC 33703 | Mideast Conflicts | 3 |

9 hours of $30000+$ level electives selected from the following list of courses, or courses that are advisor approved.
ANTH 30323 Migration: Crossing Borders, Crossing Cultures 3
ANTH 30333
ANTH 30773
ANTH 30973

ANTH 40433

CHIN 30113
CRJU 30943
CRJU 30963

ECON 30213
ECON 30433
ECON 30443
ECON 30453
ECON 30463
ECON 30493
ECON 40213
ECON 40223
ENGL 30173

Mexican American Culture 3
Latin American Pop Culture 3
France Today: Citizenship, Identity, and 3 Nationalism
Transnational Processes: Globalization, Migrations, 3 and Borders

Chinese Civilization and Culture 3
Japan: Heritage, Culture, and Globalization 3
Japan: Environment, Technology, and
Sustainability
Development Theory
Development Studies
Asian Economics
Economics of the European Union
Latin American Economics
International Economic Studies
International Trade and Payments
International Monetary Economics
Marxist Cultural Theory

ENGL 30683
ENGL 30783
ENGL 30793
ENGL 40413
ENGL 40693
FINA 40623
FINA 40703
FREN 30153
FREN 30163
FREN 30173

FREN 30176

FREN 30253
GEOG 30523
GEOG 30533
GEOG 30723
GRMN 30053
GRMN 30063
GRMN 30173

GRMN 40023
HIST 30003
HIST 30013
HIST 30023
HIST 30033
HIST 30133
HIST 30203
HIST 30223
HIST 30233
HIST 30243
HIST 30253
HIST 30303

HIST 30323
HIST 30333
HIST 30343
HIST 30363
HIST 30373

HIST 30383

HIST 30393
HIST 30403
HIST 30413
HIST 30423
HIST 30443
HIST 30503
HIST 30513
HIST 30523
HIST 30533

HIST 30543
HIST 30553

Post-Colonial Anglophone Literature 3
Modern India: Literature and Culture
Multi-Ethnic Literature of the World 3
Renaissance in England 3
British and Irish Poetry Since 1900
International Finance 3
International Finance Study Abroad 3
French Culture and Civilization I
French Culture and Civilization II 3
France Today: Citizenship, Identity, and 3
Nationalism
French Culture and Civilization: Study Abroad in 6
France
Contemporary France through the Media 3
Geography of Latin America 3
Geography of Western Europe 3
Cultural Geography 3
German Geography, Culture, and Language 3
German Politics, Culture and Language 3
German Culture in Cologne, the Rhineland and 3
Beyond
German Culture and Civilization 3
The Greek World 3
The Roman Republic and Empire 3
Ancient Egypt and the Near East 3
Ancient Mysteries: Sense and Nonsense 3
The Middle Ages 3
The Renaissance 3
The Seventeenth Century 3
Enlightenment Europe 3
Spain: From Columbus to Franco 3
Popular Culture in Early Modern Europe 3
The Age of Great Transformation: Europe, 1815- 3
1870
Peace or Pause? Europe, 1919-1945 3
A Whole New World: Europe since 18453
The French Revolution: from Subjects to Citizens 3
Modern Germany, 1815 to the Present 3
European Thought and Culture, 1800 to the 3
Present
Experiences and Encounters: Paris and Madrid, 3
1880-1940
Totalitarianism in Europe 3
History of Russia to 18613
History of Russia from 1861 to the Present 3
Central Europe since 17003
History of Modern China: from Ming to Mao 3
History of England to 1603
History of England and Great Britain since 1603
Tudor-Stuart England, 1485-1714 3
England, 1815-1901, Politics, Prudery, and the Pax 3
Britannica
Twentieth-Century Britain, Empire to Welfare State: 1901 to the Present
History of Ireland since 1600

ADDRAN COLLEGE OF LIBERAL ARTS|

HIST 30563
HIST 30573
HIST 30583
HIST 30593
HIST 30633
HIST 30703
HIST 30713
HIST 30723
HIST 30913
HIST 30923
HIST 30933
HIST 30943
HIST 30953
HIST 30963
HIST 30973
HIST 30983

HIST 30993
HIST 31903
HIST 40003
HIST 40103
HIST 40663
HIST 40693
HIST 40843
HIST 41903
HIST 49903
IDFM 40243
INSC 40353
ITAL 30176
JAPN 30113
MARK 30703
POSC 32053
POSC 33003
POSC 33013
POSC 33023
POSC 33033
POSC 33103
POSC 33113
POSC 33123
POSC 33133
POSC 33203
POSC 33503
POSC 33513
POSC 33523
POSC 33603
POSC 33613
POSC 33623
POSC 33633
POSC 33703
POSC 34063
POSC 35003
POSC 35013

The British Empire, 1603-1857 3
British Empire and Commonwealth, 1857-1975
Living in London
Making of Modern England
Women in European History 1789 to the Present
Modern Egypt: A History
Revolutionary Iran:A History
Women in the Middle East
History of Central America
The United States and Latin America
Revolution in Latin America
The Spanish Borderlands
History of Argentina and Chile
History of Brazil
Biography in Latin American History
Aztecs, Incas, and Mayas: The Indians of Middle and South America
History of Mexico
Summer Study in Ghana 3
The Women's Movement in England and America, 1792-1972
Senior Honors Project
America Between World Wars, 1919-1941
American Empire
The Vietnam War
History of Cuba
History Major Seminar
Global Trade of Textiles and Apparel
$\begin{array}{ll}\text { Global Supply Chain Management } & 3 \\ \text { Study Abroad in Italy: Language and Culture } & 6\end{array}$
Japanese Culture and Civilization
Consumption and Culture:Marketing Study Abroad
Global Justice
Topics in International Politics
United Nations Institutions and Processes
International Organizations Research 3
Conflict and Negotiation 3
Feminist International Relations Theory 3
Globalization and Political Economy 3
Globalization 3
Energy and Global Geostrategy 3
Political Economy of Human Trafficking 3
Contemporary U.S. Foreign Policy 3
United States Foreign Policy Making 3
U.S. Foreign Policy in Film 3

International Relations of East Asia 3
The International Relations of Japan 3
Chinese Foreign Policy 3
Russian Foreign Policy 3
Mideast Conflicts 3
International Human Rights and Humanitarian Law 3
Topics in Comparative Politics 3
Comparative Democratic Systems 3

| POSC 35023 | Comparative Social Movements |
| :---: | :---: |
| POSC 35033 | Islam and Politics |
| POSC 35043 | Politics of Developing Nations |
| POSC 35503 | The Politics and the Culture of the Middle East and North Africa |
| POSC 35613 | The Politics of Japan |
| POSC 35623 | Politics of China |
| POSC 35633 | Contemporary Issues in China |
| POSC 35643 | Entrepreneurship in China |
| POSC 35703 | Politics of Western Europe |
| POSC 35713 | Politics of the European Union |
| POSC 35723 | Political Life in Central Europe |
| POSC 35803 | Latin America: The Challenge of Democratic Consolidation |
| RELI 30493 | Latina/o Religion, Law and Identity |
| RELI 30513 | Hindu Religious Perspectives |
| RELI 30523 | East Asian Religious Perspectives |
| RELI 30533 | Buddhism: Thought and Practice |
| RELI 30543 | Islam |
| RELI 30553 | African Religions |
| RELI 30563 | Judaism |
| RELI 40613 | Constructive Global Ethics |
| SOCI 30923 | Leadership London: Social and Cultural Contexts of Leadership |
| SOCI 30953 | J apan: Crime, Criminal Justice and Social Problems |
| SOCI 30963 | J apan: Environment, Technology, and Sustainability |
| SOCI 30973 | Scandinavia: Sociology and Sustainability |
| SPAN 30023 | Summer Study Abroad - Culture |
| SPAN 32003 | Culture of Spain |
| SPAN 32103 | Culture of Latin America |
| SPAN 32203 | Popular Cultures of Spanish-speaking Countries |
| SPAN 42203 | Borderland Cultures |
| STCO 44433 | Global Branding |
| STCO 47433 | Global Communication |
| 12 hours must be 30000 or above. |  |
| All courses in the minor must be passed with a C- or better. |  |
| The minor is not available to political science majors. |  |
| Jewish | dies |

## Jewish Studies

Jewish studies is available as a minor on both the BA and BS degrees. The minor offers students an opportunity to explore in depth the diverse religious and cultural phenomenon that is Judaism. Courses taught within the minor introduce the languages, histories and beliefs of Jewish communities around the globe. From a rigorous study of the ancient text of Judaism to an unbiased engagement of the challenges facing the Jewish people today, this interdisciplinary minor offers a window into an oftenoverlooked aspect of Western culture.

## Jewish Studies Minor

The minor in Jewish studies requires 18 hours, including the required course RELI 30563. No more than 9 hours in the minor may have the same prefix. Up to 6 hours of Biblical Hebrew may be applied to minor requirements.

## Requirements

## Current approved courses include:

| ANTH 30763 | Archaeology of the Biblical World: Syria-Palestine <br> and TransJ ordan, 1550-332 BCE | 3 |
| :--- | :--- | :--- |
| GEOG 30733 | Geography of Religion | 3 |
| HEBR 10053 | Biblical Hebrew I | 3 |
| HEBR 10063 | Biblical Hebrew II | 3 |
| HIST 30653 | The Life and Times of Benjamin Disraeli | 3 |
| NTDT 21163 | Food and Culture | 3 |
| POSC 33703 | Mideast Conflicts | 3 |
| RELI 30133 | Religion and the Search for Meaning in the Old | 3 |
|  | Testament | 3 |
| RELI 30153 | How to Read the Bible: Story and Politics | 3 |
| RELI 30183 | Revelation and Rhetoric: Biblical Prophets and | 3 |
| RELI 30563 | Prophecy | 3 |
| RELI 40143 | Judaism | 3 |
| SOWO 40453 | Love and Sex in the Biblical World | 3 |

Other courses may be applied to the minor with the recommendation of the minor coordinator and the chair of the Religion Department, subject to approval of the dean. Courses in the minor may not be taken pass/nocredit. As per University policy, courses applied to the minor may not also be applied to the major or another minor.

## Latina/o Studies Courses

Latina/o studies is available as a minor on both the BA and BS degrees. Latina/o studies is an interdisciplinary program that critically examines cultural, political, historical, religious and social conditions of Latina/o communities in the United States, providing students a larger awareness of diversity in the U.S. society.

## Latina/o Studies Minor

The Latina/o studies minor requires 18 hours to include Introduction to Latina/o Studies. The remaining 15 hours are to be chosen from at least three different departments.

## Currently, approved courses include:

LTNO 20003 Introduction to Latina/o Studies 3

ANTH 30333 Mexican American Culture 3
ANTH 30433 Mexican-American Folklore: Traditions of La Raza 3
ANTH 30703 Archaeology of Mexico and Peru 3
CRJU 30843
ENGL 10833
ENGL 30703
ENGL 30713
Contemporary Latino Literature

HIST 30923 The United States and Latin America 3
RELI 30463 Being Latina/o and Religious in the U.S. 3
RELI 30843
SOCI 30343
SPAN 31803
Latina Feminist Religious Thought
American Minority Groups

SPAN 42003
Service-Learning in the Latino Community

Other courses may be applied to the minor with the approval of the minor coordinator or the associate dean of AddRan College.

## Middle East Studies

## Middle East Studies is an interdisciplinary program that critically examines historical, social, political, cultural and religious conditions of states and societies of the Middle East and Eastern communities in Diaspora. The goal of the program is to provide students a deeper understanding of the complexity of one of the most critical, but least understood, regions in world. <br> Middle East Studies Minor <br> Students seeking the minor must complete 18 hours. <br> Requirements

| To include 6 hours chosen from: |  |  |
| :--- | :--- | :--- |
| HIST 10803 | Introduction to Islamic Civilization <br> OR | 3 |
| RELI 30543 | Islam | 3 |
| HIST 10813 | Introduction to the Modern Middle East <br> OR | 3 |
| POSC 35503 | The Politics and the Culture of the Middle East and | 3 |

## Select the remaining $\mathbf{1 2}$ hours from courses that carry the MES attribute from at least three different departments.

Other courses may be applied to the minor with the approval of the minor coordinator.

## Additional Requirement:

- No more than 9 hours may be taken throughout the minor program in any one department.
- At least 9 hours must be at the 30000 level or above.
- Courses may not count for both major and minor requirements. For example, if a student seeks a Middle East Studies minor and a history major, Introduction to Islamic Civilizations (HIST 10803) could count toward the requirements for the minor or the major, but not both.
Courses may not count for both major and minor requirements. For example, if the student seeks a Middle East minor and a history major, HIST 10803 (Introduction to Islamic Civilizations) could count toward the requirements for the minor OR the requirements for the major, but not both.


## Middle East Studies Emphasis

## Students seeking the minor must complete 15 hours.

## Requirements

## To include 6 hours chosen from:

| HIST 10803 | Introduction to Islamic Civilization | 3 |
| :--- | :--- | :--- |
| RELI 30543 | OR <br> Islam | 3 |
| HIST 10813 | Introduction to the Modern Middle East <br> OR | 3 |
| POSC 35503 | The Politics and the Culture of the Middle East and <br> North Africa | 3 |

[^5]
## A list of approved courses for the Middle Eastern Studies Minor and Emphasis.

ANTH 30323 Migration: Crossing Borders, Crossing Cultures

ANTH 30973
France Today: Citizenship, Identity, and Nationalism

ENGL 20213
Global Women's Literature
ENGL 30793
Multi-Ethnic Literature of the World
ENGL 20933 Non-Western World Literature

HIST 10803 Introduction to Islamic Civilization

HIST 10813
HIST 30703
HIST 30713
HIST 30723
POSC 33033 Introduction to the Modern Middle East

Modern Egypt: A History

POSC 33703
POSC 35033
POSC 35043
Politics of Developing Nations
POSC 35503
The Politics and the Culture of the Middle East and North Africa

RELI 10023
RELI 10043
Understanding Religion: Communities Understanding Religion: Society and Culture

Africa and the African Diaspora: History, Religion, and Culture

RELI 20513
Africa and the African Diaspora: History, Religion, and Culture
RELI 30543
RELI 30863
Religion and Violence

## Military Science

Military science offers opportunities to develop confidence, self-esteem, and leadership and life skills to succeed in college and beyond. It is an academic curriculum that supplements a student's major and is designed to prepare qualified, high-potential students for service as commissioned officers in the U.S. Army and its Reserve components (the Army Reserve and Army National Guard).
The Military Science Program is composed of a two-year Basic Course, a twoyear Advanced Course, and a four-week Leadership Development and Assessment Course (LDAC) summer program. Non-scholarship students enrolling in only freshman- and sophomore-level classes incur no obligation to serve in the military after graduation.
Upon completion of the requirements for the baccalaureate or master's degree and military science training requirements, students are commissioned as second lieutenants.
Four-year, three-year and two-year programs are offered. Each program includes the option for qualified students to benefit from a tuition and fees scholarship, and TCU offers room and board grants for qualified ROTC scholarship winners.

## Four-Year Program

The four-year program is divided into two portions, each consisting of four classes normally taken in sequence. The first is the Basic Course, which is usually completed during the freshman and sophomore years. The second portion of the four-year program is called the Advanced Course; it is normally completed during the junior and senior years. To enroll in the Advanced Course, students must:

- Successfully complete the Basic Course (or be given equivalent credit by the professor of military science);
- Be of good moral character;
- Have a minimum of two years remaining as a full-time student;
. Have a minimum GPA of 2.0 and;
- Be physically qualified.

A paid and highly adventurous four-week training session (LDAC) between the junior and senior years is a critically important part of the Advanced Course. All Advanced Course students (both scholarship and nonscholarship) receive a monthly cash allowance while participating (full-time) in on-campus instruction. This allowance can be collected up to 10 months each year.

## Two-Year Program

The two-year program is designed for students who either transfer into TCU or elect to begin pursuing a commission in the fall of their junior year. It includes a paid four-week summer training session between the sophomore and junior years and the Advanced Course described under the four-year program. Application for the two-year program is normally made during the second semester of the sophomore year. However, the two-year program is also open to juniors and seniors planning attendance at graduate school. The monthly cash allowance for students in the two-year program is the same as for other students in the Advanced Course. Numerous full tuition and fees scholarships are available for qualified two-year program applicants.

## Military Science Scholarships

Four-year, three-year and two-year scholarships are available to qualified applicants. Scholarships are full tuition. Scholarships can be applied toward tuition and mandatory fees, and provide $\$ 1,200$ per year for books. The scholarship also provides a cash stipend for each month the student participates in full-time on-campus instruction (limited to 10 months each year). The stipend amount varies by class year, ranging from $\$ 300$ for freshman to $\$ 500$ for seniors.

## Four-Year Scholarships

High school students wishing to compete for a four-year scholarship should apply during the summer between their junior and senior years. Outstanding candidates can be notified of their selection as early as November of their senior year. Students who wait until their senior year to apply must apply early. Completed applications must be received at the evaluation center before January 10 of the student's senior year in high school.

## Three-Year Scholarships

Freshman students enrolled at TCU or students planning to transfer into TCU at the beginning of their sophomore year may apply for three-year scholarships. Students applying for the three-year scholarship must have at least 27 semester hours credit at the beginning of the sophomore year and meet the other specified eligibility criteria.

## Two-Year Scholarships

Any student, presently enrolled or planning to transfer to TCU, who will have 54 semester hours completed by the beginning of the next fall semester may apply for a two-year scholarship. To validate their scholarships, recipients are required to satisfactorily complete a paid four-week summer training session prior to entering school in the fall semester.

## Nursing Scholarships

The Army ROTC provides four and a half-, four-, three- and two-year scholarships for students interested in becoming officers in the U.S. Army Nurse Corps. Application forms and information about these scholarships may be obtained by calling 817.257.7455, or writing:

## Department of Military Science

Texas Christian University
TCU Box 298910
Fort Worth 76129

## Tuition Assistance

The Office of Financial Aid and Scholarships can provide further information.

## Military Science Curriculum

The curriculum consists of the Basic Course and the Advanced Course described previously under the Four-Year Program and further described below.

The Basic Course should include MILS 10041, MILS 10081, MILS 20042 and MILS 20092. Leadership Lab is required for all courses listed. The Advanced Course should include MILS 30053, MILS 30063, MILS N40053 and MILS 40063.

## Waivers

Part or all of the Basic Course may be waived for veterans with acceptable active duty service. Students transferring from a military academy or military junior college may also receive a waiver for the Basic Course.
Pass/No-Credit Option
Military science classes may not be taken on the Pass/No-Credit basis.

## Military Science Graduate Studies

Upon application, Military Science graduates may be granted a delay before entering active duty for a period of two or three years from the date of their commission. Authorized purposes are attending Seminary, medical school or law school. In some cases, the delay may exceed three years. A number of salaried and fully funded graduate programs are also available to top academic performers and medical school applicants who complete the ROTC curriculum.

## Military Science Leadership Laboratory

Every Military Science student is required to participate in the weekly Leadership Lab in addition to the scheduled class periods. The lab meets every Thursday, 3:30-5:30 p.m., during the semester and provides leadership training, military skills and tactical training, and drill and ceremonies instruction. Leadership experience is gained by students managing, leading and teaching other students within the framework of the Cadet Battalion. All leadership positions are filled by upper-class cadets who are responsible for planning and executing each lab period under the guidance of seasoned Army officers and noncommissioned officers.

## Modern Language Studies

Majors are available in modern language studies with specializations in German and French. Minors are available in French, German and Italian. Language study is also available in Chinese. Classical Greek and Hebrew are taught under the auspices of the Department of Religion.

## Placement

Students with academic or life experience in a foreign language are urged to enroll at a level appropriate to their skills. In order to encourage students to enroll in a first course appropriate to their ability, TCU offers the following incentive-based placement policy:
Students whose first language class at TCU is beyond the first semester level may earn additional language credit (if credit has not already been awarded for transfer, CLEP or AP work) as follows:

- If the first foreign language class is at the second semester level and a grade of " B -" or higher is earned, as a reward for superior work, three semester hours credit will also be awarded for the first-semester course.
- If the first foreign language class is at the third semester level and a grade of " B -" or higher is earned, as a reward for superior work, six semester hours credit will also be awarded for the first and second semester courses.
- If the first foreign language class is at the fourth semester level and a grade of " B -" or higher is earned, as a reward for superior work, nine semester hours credit will also be awarded for the first, second and third semester courses.
- If the first foreign language class is beyond the fourth semester level (numbered 30000 or above) and a grade of " B -" or higher is earned, as a reward for superior work, nine semester hours credit will also be awarded for the second, third and fourth semester courses.
If the student takes a foreign language class at a level beyond the first one and earns a " C " or " D ," no additional credit will be awarded, but the student will be deemed to have satisfied the foreign language requirement of the University Core Requirements consistent with the level of the course passed. For example, if a student's first foreign language class at TCU is at the fourth semester level (20063), and the student earns a " $C$ " as the final grade, the student will not receive additional credit, but will have satisfied the foreign language requirement at the sophomore level.
To determine proper placement level, students should consult with an adviser in the Department of Modern Language Studies and take the computerized CAPE examination, available through the department.
Additional credit may also be earned by means of exams administered by the College Board (AP or CLEP). Consult the TCU Credit by Exam booklet, available through the Office of Admission, for details. Note: Students entering the program at a certain level may not receive credit for coursework taken below that level.
Lower division courses taught in the target language are not open to heritage and native speakers. For upper-level courses, see individual course listings for specific limitations.


## Resident Study Abroad

The Department of Modern Language Studies strongly supports study abroad. Department members lead summer study programs to France, Germany, Italy and J apan. Semester-long study abroad programs are available through TCU's Center for International Studies. For additional
information, consult the department chair and the foreign study adviser. A maximum of nine credit hours transferred from study abroad programs may be counted towards the required language courses within the Modern Language Studies major or towards any departmental minor. Students may, however, apply additional study abroad credits to required interdisciplinary courses within the major.

## Modern Language Studies, BA Requirements

The BA with a major in modern language studies requires 30 semester hours in a combination of modern language courses and area studies courses. Each student forms a program of study in consultation with a faculty adviser in the Department of Modern Language Studies. Students may concentrate in German or French.

## General Requirements

To earn a major in modern language studies, students must complete a total of 30 hours in language courses and interdisciplinary courses from other departments. Students must complete 15-18 hours in their language of specialization at the 30000 level or above. In order for these courses to count toward the major, they must be taught in the relevant language.
In addition, students must complete 12-15 hours of courses that are thematically related to their language of specialization. These courses may be chosen from the list of approved courses in each language field, but others may also be counted, with the approval of the major adviser. These courses must come from a minimum of two other departments. One German course taught in English (for example, GRMN 20133 - Berlin: A City in Film) may be counted among the 12-15 hours of thematically related courses for the German major.

## German Specialization Courses

$15-18$ hours of German at the 30000 level or above, plus $12-15$ hours to be selected from:
COMM 30253 Intercultural Communication 3
ECON 30453 Economics of the European Union 3
GEOG 30533 Geography of Western Europe 3
HIST 10213 The World Expanded: Europe 1348-1789
HIST $10223 \quad$ Modernization and its Discontents: Europe 1789 to the Present
HIST 20213

HIST 20223

HIST 30203
HIST 30253
HIST 30303

HIST 30363
HIST 30323
HIST 30333
HIST 30970

MOLA 30023
PHIL 40223
PHIL 40233

PHIL 30373
POSC 33XX3
POSC 35XX3
RELI 30333
RELI 40700

ARHI 10043

The World Expanded: Europe 1348-1789 (Honors)
Honors Modernization and its Discontents:

## Europe 1789 to the Present

The Renaissance
3
3

History of Modern Philosophy 3
History of Continental Philosophy in the 19th 3
and 20th Centuries
Existential Philosophy
Any course in International Politics
Any course in Comparative Politics
Christian Tradition: Reformation to Modernity
Religion in Geographical Context

## French Specialization Courses

COMM 30253
ECON 30453
GEOG 30533
HIST 10213
HIST 10223
HIST 20213

HIST 20223

HIST 30203
HIST 30253
HIST 30303

HIST 30323
HIST 30333
HIST 30343

HIST 30373

HIST 30970
HNRS 20213
MOLA 30023
PHIL 40223
PHIL 40233

PHIL 30373
POSC 33XX3
POSC 35XX3
RELI 30333
RELI 40700

ARHI 10043
ARHI 20103

ARHI 20103
17th and 18th Century European Art
ARHI 20603
Art History on Site
ARHI 30193
NorthernRenaissance Painting: Van Eyck Bruegel
ARHI 30333
Modern Art I: Romantic Classicism to Impressionism
ANTH 20643
MUSI 10053
MUSI 10063
Language and Culture
Survey of Music

MUSI 20613
World Music

MUSI 30613
MUSI 30623
MUSI 50413
MUSI 50473
THEA 31103
THEA 31113

History of Western Music I
History of Western Music II
History of Western Music III
Survey of Opera Literature
Survey of Song Literature
Theatre History I
Theatre History II
Others with approval

15-18 hours of French at the 30000 level or above, to include at least one 40000 level course, plus $12-15$ hours to be selected from:

Intercultural Communication
(Honors)
Honors Modernization and its Discontents: Europe 1789 to the Present

The Renaissance
Popular Culture in Early Modern Europe
The Age of Great Transformation: Europe, 18151870
Peace or Pause? Europe, 1919-1945
A Whole New World: Europe since 1845
The French Revolution: from Subjects to Citizens
European Thought and Culture, 1800 to the Present

Topical Studies in History
Language, Communication and Cultural Identity
Introduction to Linguistics
History of Modern Philosophy

Any course in International Politics
Any course in Comparative Politics
Christian Tradition: Reformation to Modernity
Religion in Geographical Context

Introduction to Art History
17th and 18th Century European Art

ARHI 20603
ARHI 30333
Modern Art I: Romantic Classicism to Impressionism
ARHI 30343
ARHI 30353
ANTH 20643
MUSI 10053
MUSI 10063
MUSI 20613
MUSI 30613
MUSI 30623
MUSI 50413
MUSI 50473
THEA 31103
THEA 31113
Art History on Site

Van Gogh to Dali: Modern Art II
Picasso: Artist of the Century 3
Language and Culture
Survey of Music 3
World Music
History of Western Music I
History of Western Music II 3
History of Western Music III 3
Survey of Opera Literature 3
Survey of Song Literature 3
Theatre History I 3

Theatre History II

## Chinese Minor

The Chinese minor requires a minimum of 18 credits in Chinese, including 15 hours of language study and the culture course CHIN 30113. A maximum of 6 credit hours transferred from study abroad programs may be counted toward the minor.

## French Minor

The French minor requires a minimum of 18 semester hours, exclusive of courses on the 10000 level, and including at least one 40000-level course.

## German Minor

The German minor requires a minimum of 18 semester hours, exclusive of courses on the 10000 level. GRMN 30053-30063 are prerequisites to all higher-numbered courses. All courses in the language sequence except GRMN 10153 require as prerequisite either satisfactory completion of the previous semester or the appropriate score on the CLEP Test, AP exam, GCAPE placement test, or permission. Only one German course taught in English (for example, GRMN 20973 Honors: The Afterlife of the Classical Greek Tradition) may be counted toward the minor.

## Italian Minor

A minimum of 18 semester hours in Italian, exclusive of courses on the 10000 level. No more than one Italian course taught in English may be counted toward the minor. A maximum of nine credit hours transferred from study abroad programs may be counted toward the minor.

## French Teacher Certification

[^6]| FREN 10153 | First Semester College French |
| :---: | :---: |
| FREN 10163 | Second Semester College French |
| FREN 20053 | Third Semester College French |
| FREN 20063 | Fourth Semester College French |
| FREN 30053 |  |
| FREN 30063 | Readings in Selected French Genres |
| Select six hours from the following: |  |
| FREN 30033 | Phonetics |
| FREN 30043 | Advanced Conversation |
| FREN 40073 | Studies in French Literature I |
| FREN 40083 | Studies in French Literature II |
| FREN 40093 |  |
| FREN 30153 | French Culture and Civilization I |
| FREN 30163 | French Culture and Civilization II |
| FREN 30253 | Contemporary France through the Media |
| FREN 40123 | Seminar in French Studies |
| FREN 40163 |  |
| FREN 40173 | Advanced French Composition |
| FREN 40970 | Directed Study |
| FREN 50033 (when available) | The Teaching of Modern Foreign Languages |
| For more informatio certification in Fre | n regarding elementary and secondary teacher ch, see the College of Education section. (p. 75) |
| Subtotal: 18-24 |  |

## Modern Language Studies Course Subcategories

## Chinese

CHIN 10153
CHIN 10163
CHIN 20053
CHIN 20063
CHIN 30053
CHIN 30063

## French

FREN 10033
FREN 10043
FREN 10053
FREN 10063
FREN 10153
FREN 10163
FREN 20053
FREN 20063
FREN 30003
FREN 30033
FREN 30043
FREN 30073
FREN 30063
FREN 30143

FREN 30153
French Culture and Civilization I
FREN 30163
FREN 30173

FREN 30176

FREN 30183
FREN 30253
FREN 40003
FREN 40013
FREN 40073
FREN 40083
FREN 40123
FREN 40143
FREN 40163
FREN 40173
FREN 40183
FREN 40970

FREN 50033
German
GRMN 10053
GRMN 10063
GRMN 10153
GRMN 10163
GRMN 10173
GRMN 20053
GRMN 20063
GRMN 20123
GRMN 20133
GRMN 20973

GRMN 20983

GRMN 30013
GRMN 30053
GRMN 30063
GRMN 30173

GRMN 30193
GRMN 40023
GRMN 40163
GRMN 40970

GRMN 50033
Italian
ITAL 10153
ITAL 10163
ITAL 20053
ITAL 20063
ITAL 20123
ITAL 30053
ITAL 30063
ITAL 30083
French Culture and Civilization II
France Today: Citizenship, Identity, and Nationalism

French Culture and Civilization: Study Abroad in

|  | Story |  |
| :--- | :--- | ---: |
| ITAL 30123 | 19th Century Italian Literature | 3 |
| ITAL 30623 | Topics in Italian Cinema | 3 |
| ITAL 30970 | Independent Study in Italian | $1.00-$ |
|  |  | 6.00 |
| ITAL 40103 | Boccaccio's Decameron | 3 |
| ITAL 40623 | Gender in Italian Cinema | 3 |
| Japanese |  |  |
| JAPN 10153 | First Semester College Japanese | 3 |
| JAPN 10163 | Second Semester College Japanese | 3 |
| JAPN 20053 | Third Semester College Japanese | 3 |
| JAPN 20063 | Fourth Semester College Japanese | 3 |
| JAPN 20990 | International Residential Study | $1.00-$ |
|  |  | 20.00 |
| JAPN 30113 | Japanese Culture and Civilization | 3 |
| JAPN 30123 | Japanese for Daily Use | 3 |
| JAPN 40970 | Directed Study:Japanese | $1.00-$ |
|  |  | 20.00 |

## Philosophy

Philosophy is available as a major on the BA and BS degrees and as a minor on both the BA and BS degrees. Philosophy is the systematic study of fundamental life issues. It deals with the application of logical reasoning to topics such as human nature, ethics, mind and knowledge. Students who study philosophy have the opportunity to acquire superior skills of logical analysis, argumentation, and written and oral expression. Although approaching these issues with the rigors of the philosophical method is both new and challenging to beginning students, most of those who study philosophy usually find the experience both interesting and rewarding. They also take with them numerous lessons from their studies that enable them to live in a way that is both more successful and fulfilling.

## Honors College

Philosophy majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in PHIL 30003 during their junior year and PHIL 40000 the fall semester of their senior year. (PHIL 30003 may be included in the 24 semester hours required for the major, but PHIL 40000 may not.)

## Philosophy, BA <br> Requirements

The BA with a major in philosophy requires 24 semester hours in philosophy with at least 6 in topical studies, 6 in historical studies and 3 in logical studies. At least 12 hours must be at the 40000 level or above. An accompanying minor should be chosen in consultation with the adviser for the Department of Philosophy.
PHIL 10003 must be completed prior to taking any other philosophy course except for those in logical studies. After completion of PHIL 10003, it is generally required that students take one or more 30000-level courses, where more detailed and rigorous treatment of specific areas as well as initial instruction in philosophical writing is provided. Successful completion of courses at the 30000 level should prepare students for 40000 -level courses, most of which (except for logical studies) satisfy the TCU Core Curriculum (p. 45) writing emphasis requirement.

## Philosophy, BS

Requirements
The BS with a major in philosophy requires 30 semester hours in philosophy, including:

- $\quad 12$ hours in topical studies
- 6 hours in historical studies
- 3 hours in logical studies

Twenty-one or more of the 30 semester hours should be at the 30000 level or higher. Twelve or more of the 30 semester hours should be at the 40000 level.
Also required is a minor (or major) in economics, political science (with POSC 20093 - Scope and Methods of Political Science) or a program in the College of Science and Engineering. (There is room, in principle, for other minors to count, but permission is required from the chair of the Department of Philosophy.)

## Philosophy Minor

The minor in philosophy requires 18 semester hours in philosophy, including:

- 3 or more semester hours in Historical Studies
- 3 or more semester hours in Logical Studies
- 3 or more semester hours in Topical Studies at the 40000 level

Twelve or more of the 18 semester hours must be at the 30000 level or higher.

## Philosophy Course Subcategories

## Courses of Instruction

PHIL 10533
Freshman Seminar in Philosophy

## Topical Studies

PHIL 10003
Philosophy One
PHIL 10103 Mind, Meaning and Morality 3
PHIL 10113 Mind, Meaning and Morality II 3
PHIL 20213 Philosophy and Film 3
PHIL 20303 Moral Problems 3
PHIL 20313 Death 3
PHIL 20323 Bioethics 3
PHIL 20333
PHIL 30003
PHIL 30303
PHIL 30323
PHIL 30333
PHIL 30343
PHIL 30353
PHIL 30373
PHIL 30383
PHIL 30393
PHIL 30413
PHIL 30423
PHIL 30433
PHIL 30443
PHIL 30493
PHIL 30970

PHIL 40000

PHIL 40203
PHIL 40303
PHIL 40323
PHIL 40333
PHIL 40343
PHIL 40353

Environmental Philosophy 3
Junior Honors Seminar 3
Ethical Theory 3
Philosophy of Religion 3
Asian Philosophy 3
Sex, Society, and Ethics 3
Political Philosophy 3
Existential Philosophy 3
Philosophy of Psychology 3
Philosophy of Mind 3
Introduction to Philosophy of Law 3
Introduction to Epistemology 3
Introduction to the Philosophy of Science 3
Free Will and Moral Responsibility 3
Philosophy of Cognitive Science 3
Philosophical Studies 1.00-
20.00

Senior Honors Research Paper $1.00-$ 20.00

Seminar in Metaphysics 3
Seminar in Value Theory 3
Advanced Issues in Philosophy of Science 3
Philosophy of Law and Economics 3
Advanced Issues in Philosophy of Law 3
Seminar in Political Philosophy 3

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| PHIL 40373 | Art and the Aesthetic | 3 |
| :--- | :--- | ---: |
| PHIL 40383 | Advanced Topics in Human Nature | 3 |
| PHIL 40403 | Advanced Issues in Epistemology | 3 |
| PHIL 50970 | Directed Studies in Philosophy | $1.00-$ |
|  |  | 20.00 |
| Historical Studies |  |  |
| PHIL 40213 | Ancient Philosophy | 3 |
| PHIL 40220 | 20th Century Philosophy | $1.00-$ |
|  |  | 6.00 |
| PHIL 40223 | History of Modern Philosophy | 3 |
| PHIL 40233 | History of Continental Philosophy in the 19th | 3 |
| PHIL 40243 | And 20th Centuries |  |
| PHIL 40253 | Seminar in History of Philosophy | 3 |
| PHIL 40263 | Socrates and the Socratic Tradition | 3 |
| Logical Studies |  | 3 |
| PHIL 20103 | Critical Reasoning | 3 |
| PHIL 30133 | Symbolic Logic l | 3 |
| PHIL 30143 | Symbolic Logic II | 3 |
| PHIL 40103 | Seminar in Logic | 3 |

## Political Science

Political science is available as a major and a minor on both the BA and BS degrees. The Department of Political Science offers students for course concentration in the following seven sub-fields:

- American Politics
- Political Theory
- International Politics
- Comparative Politics
- Public Law
- Research Methods
- Public Affairs InternshipsHonors College

Political science majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in POSC 30003their junior year and POSC 40003 during the fall semester of their senior year.

## Political Science Honor Society

The department sponsors the Beta Lambda Chapter of Pi Sigma Alpha, national honor society in political science. Membership requires completion of a minimum of 10 semester hours of political science (at least 6 in regular classroom courses on TCU's campus and at least 3 advanced, i.e., 30000 level or above), at least a 3.0 GPA in political science courses and at least a 3.5 GPA overall. Applicants need not be a political science major or minor.

## Washington Internship Program

TCU is affiliated with the Washington Center, which provides placements, supervision and housing for students who seek a professional experience in a public or private organization in the nation's capital. Students selected for the program must have a minimum GPA of 3.0 and must return to TCU for at least one semester after the internship. Students apply each fall, a year in advance of their internship, and must attend a non-credit preparatory seminar in the spring. Up to 15 hours of credit may be earned through this program, which is multidisciplinary and available to students in any major field.

## Political Science, BA

## Requirements

The BA with a major in political science requires 30 hours of political science courses passed with a grade of "C-" or better and a maximum of 13 hours below the 30000 level.

| A maximum of 6 hours, may be applied toward major requirements |  |  |
| :--- | :--- | ---: |
| POSC 31990 | International Residential Study | $1.00-$ |
|  |  | 20.00 |
| POSC 33023 | International Organizations Research | 3 |
| POSC 34073 | Moot Court | 3 |
| POSC 40003 | Senior Honors in Political Science | 3 |
| POSC 40910 | Washington Internships | $1.00-$ |
|  |  | 12.00 |
| POSC 40960 | Civic Literacy Internships | 3 |
| POSC 40970 | Independent Study in Political Science | $1.00-$ |
|  |  | 20.00 |

Any topics courses may be repeated provided the specific subject matter changes. The three-hour seminar taken in conjunction with the Washington Center Internship Program may be counted in addition to six hours of internship.
Students intending to do graduate work in international or comparative fields are encouraged to continue foreign language study beyond the 20000 level. A minor is required; any minor approved for the BA degree is acceptable.

Specific requirements are as follows: Political Science BA, 30 hours 1. 3 hours of:

POSC 20203 Introduction to Political Theory 3
2. Any two of the following: $\mathbf{6}$ hours

POSC 20093 Scope and Methods of Political Science 3

POSC 20123 Introduction to American Politics 3

POSC $20144 \quad$ Practicing American and Texas Politics 4

POSC 20303 International Politics 3
POSC 20403 Introduction to Public Law 3
POSC 20503 Introduction to Comparative Politics 3

## 3. POSC 32XX3 (Political Theory): 3 hours

4. Any five 30000-level or above course: 15 hours

## 5. Any Political science course (an elective): 3 hours <br> Political Science, BS

## Requirements

The BS with a major in political science requires 30 semester hours of political science courses passed with a grade of " C -" or better and a maximum of 13 hours below the 30000 level.

| A maximum of 6 hours, may be applied toward major requirements |  |  |
| :--- | :--- | ---: |
| POSC 31990 | International Residential Study | $1.00-$ |
|  |  | 20.00 |
| POSC 33023 | International Organizations Research | 3 |
| POSC 34073 | Moot Court | 3 |
| POSC 40003 | Senior Honors in Political Science | 3 |
| POSC 40910 | Washington Internships | $1.00-$ |
|  |  | 12.00 |
| POSC 40960 | Civic Literacy Internships | 3 |
| POSC 40970 | Independent Study in Political Science | $1.00-$ |
|  |  | 20.00 |

Any topics courses may be repeated provided the specific subject matter changes. The three-hour seminar taken in conjunction with the Washington Center Internship Program may be counted in addition to six hours of internship.

Students intending to do graduate work in the social sciences or business are encouraged to pursue the BS degree. This program also is recommended for students wishing to work in government or politics. Any topics courses may be repeated provided the specific subject matter changes. Students intending to do graduate work in international or comparative fields are encouraged to study relevant foreign languages. A minor is required; any minor approved for the BS degree is acceptable.
Specific requirements are as follows: Political Science BS, $\mathbf{3 0}$ hours

1. 3 hours of:

POSC 20093 Scope and Methods of Political Science
2.

POSC 20123 Introduction to American Politics
OR
POSC 20144 Practicing American and Texas Politics
Students cannot receive credit for both: 3 hours
3. One of the following: $\mathbf{3}$ hours

POSC 20203 Introduction to Political Theory
POSC 20303 International Politics 3
POSC 20403 Introduction to Public Law 3
POSC 20503 Introduction to Comparative Politics
4. POSC 39xx3 (Political Science Methods): 3 hours
5. POSC 31XX3 (American Politics): 3 hours
6. Any four 30000-level or above courses: $\mathbf{1 2}$ hours
7. Any Political Science course (an elective): $\mathbf{3}$ hours
8. Associated Requirements: 6 hours

ECON 10233 Introductory Macroeconomics

## One of the following four:3 hours <br> MATH 10283 Applied Calculus 3

MATH 10043 Elementary Statistics 3
MATH 10524 Calculus I 4
INSC 20153 Statistical Analysis 3
(A grade of "C-" or better is required in each of the associated requirements)

## Political Science with Emphasis in International Relations, BA

## Requirements

The BA in political science with emphasis in international relations requires 30 hours of political science courses passed with a grade of " C -" or better and a maximum of 13 hours below the 30000 level.

| A maximum of 6 hours, may be applied toward major requirements |  |  |
| :--- | :--- | ---: |
| POSC 31990 | International Residential Study | $1.00-$ |
|  |  | 20.00 |
| POSC 33023 | International Organizations Research | 3 |
| POSC 34073 | Moot Court | 3 |
| POSC 40003 | Senior Honors in Political Science | 3 |
| POSC 40910 | Washington Internships | $1.00-$ |
|  |  | 12.00 |
| POSC 40960 | Civic Literacy Internships | 3 |
| POSC 40970 | Independent Study in Political Science | $1.00-$ |
|  |  | 20.00 |

Any topics courses may be repeated provided the specific subject matter changes. The three-hour seminar taken in conjunction with the Washington Center Internship Program may be counted in addition to six hours of internship.

The department strongly encourages participation in an international educational experience, in a setting where the student's language of study is used.
Specific requirements are as follows: Political Science BA, $\mathbf{3 0}$ hours

## 1.3 hours of:

POSC 20203 Introduction to Political Theory
2. One of the following: $\mathbf{3}$ hours

POSC 20303 International Politics
POSC 20503 Introduction to Comparative Politics
3. One additional 20000 level POSC course: $\mathbf{3}$ hours
4. One of the following: $\mathbf{3}$ hours

POSC 39XX3 POSC 39xx3
POSC 32XX3 POSC 32xx3

## 5. POSC 32XX3 (Comparative Politics): 3 hours

6. POSC33XX3 (International Relations): 3 hours
7. Any three 30000 level or above courses: 9 hours
8. Any Political science course (an elective): 3 hours

Interdisciplinary Minor

## 18 hours

An Asian Studies or Post-Colonial Studies minor would fulfill the Interdisciplinary requirements for this degree plan.
Otherwise, the interdisciplinary minor, available only in conjunction with the BA in political science with an emphasis in international relations, consists of 18 semester hours selected from the following groups:

- Upper-division foreign language courses: 6 hours
- Upper-division international economics: 3 hours
- An additional 9 hours from a selection of international or cross-cultural studies courses.No more than 6 hours in any single discipline may count toward the minor.
For the interdisciplinary minor, the requirement of grade "C-" or better applies same as with the political science major.


## Political Science Minor


#### Abstract

A political science minor requires 18 semester hours in political science passed with a grade of "C-" or better. No more than three semester hours may be earned at the 10000 level and no more than 10 semester hours may be earned below the 30000 level. Students must take either POSC 20093 or POSC 20203. Any "topics" course may be repeated provided the specific subject matter changes. No more than six hours of internship credit may be counted. The three-hour seminar taken in conjunction with the Washington Center Internship Program may be counted in addition to six hours of internship.


## Political Science Teaching Certification

Students interested in teaching political science/government at the secondary or middle school level must acquire a secondary and middle school social studies certificate. Interested students should consult with an adviser in the College of Education regarding specific certification requirements.

## Political Science Course Subcategories

## Political Science as a Discipline

POSC $10093 \quad$ Introduction to Political Science 3

POSC 10433 Freshman Seminar in Political Science 3
POSC $30003 \quad 3$
POSC 40001 Research Tutorial 1
POSC 40003 Senior Honors in Political Science 3

POSC $40093 \quad$ Distinction Program
American Government and Politics

| POSC 10133 | American and Texas Government | 3 |
| :--- | :--- | :--- |
| POSC 20123 | Introduction to American Politics | 3 |
| POSC 20144 | Practicing American and Texas Politics | 4 |
| POSC 31003 | Topics in American Politics | 3 |
| POSC 31113 | Campaigns and Elections | 3 |
| POSC 31123 | Public Opinion | 3 |
| POSC 31143 | Political Psychology | 3 |
| POSC 31213 | Congress | 3 |
| POSC 31223 | Presidential Leadership | 3 |
| POSC 31323 | Media and Politics | 3 |
| POSC 31233 | Congress and the Presidents | 3 |
| POSC 31313 | Parties and Interest Groups | 3 |
| POSC 31413 | Public Policy | 3 |
| POSC 31423 | Health Care Policy | 3 |
| POSC 31433 |  |  |
| POSC 31443 | Human Trafficking in the United States: Public | 3 |
| POSC 31513 | Policy and Political Discourse | 3 |
| POSC 31523 | Women and Politics | 3 |
| POSC 31533 | The Civil Rights Movement in America | 3 |
| POSC 31613 | Texas Politics in Comparative Perspective | 3 |
| POSC 31623 | Urban Politics | 3 |
| POSC 31713 | Freedom, Order and Equality in American Politics | 3 |
| POSC 31803 | Transnational Human Trafficking | 3 |

## Political Theory

POSC 20203 Introduction to Political Theory
POSC 32003
POSC 32013
POSC 32023
POSC 32033
POSC 32043
POSC 32053
POSC 32113

## International Politics

POSC 20303 International Politics 3
POSC 33003 Topics in International Politics 3
POSC $33013 \quad$ United Nations Institutions and Processes
POSC 33023 International Organizations Research
POSC $33033 \quad$ Conflict and Negotiation
POSC $33103 \quad$ Feminist International Relations Theory
POSC $33113 \quad$ Globalization and Political Economy
POSC 33123 Globalization
POSC 33133 Energy and Global Geostrategy
POSC 33203 Political Economy of Human Trafficking
POSC $33503 \quad$ Contemporary U.S. Foreign Policy
POSC $33513 \quad$ United States Foreign Policy Making
POSC 33523
POSC 33533
POSC 33603

POSC 33623
POSC 33633
POSC 33703
Public Law
POSC 20403
POSC 34003
POSC 34013
POSC 34023
POSC 34033
POSC 34043
POSC 34053
POSC 34063
POSC 34073
POSC 34083
POSC 34093

## Comparative Politics

POSC 20503 Introduction to Comparative Politics 3
POSC 35003 Topics in Comparative Politics 3
POSC 35013 Comparative Democratic Systems 3
POSC 35023 Comparative Social Movements 3
POSC 35033 Islam and Politics 3
POSC $35043 \quad$ Politics of Developing Nations 3
POSC 35503 The Politics and the Culture of the Middle East and 3 North Africa
POSC 35603
Japanese Politics and Society Through Film 3
POSC 35613 The Politics of Japan 3
POSC 35623 Politics of China 3
POSC $35633 \quad$ Contemporary Issues in China 3
POSC 35643 Entrepreneurship in China 3
POSC $35703 \quad$ Politics of Western Europe 3
POSC $35713 \quad$ Politics of the European Union 3
POSC $35723 \quad$ Political Life in Central Europe 3
POSC 35803 Latin America: The Challenge of Democratic 3
Consolidation
Political Science Methodology
POSC 20093 Scope and Methods of Political Science 3
POSC 39003 Topics in Political Science Methods 3
POSC 39013
POSC 39023 Game Theory in International Relations
POSC 39033
Foreign Policy Analysis
POSC 39043
POSC 39053 Experimental Methods in Political Science
Internship and Independent Study

| POSC 40910 | Washington Internships | $1.00-$ |
| :--- | :--- | ---: |
|  |  | 12.00 |
| POSC 40950 | Internship in Political Science | $1.00-$ |
|  |  | 3.00 |
| POSC 40960 | Civic Literacy Internships | 3 |
| POSC 40970 | Independent Study in Political Science | $1.00-$ |
|  |  | 20.00 |

## Religion

Religion is available as a major on the BA degree and as a minor on the BA, BS and BBA degrees.
The meaning of human existence in relation to ultimate reality has been a concern of all cultures past and present. Any adequate understanding of human culture must take seriously the phenomenon of religion. The academic study of religion, therefore, is a central part of a liberal arts education, at home among the disciplines called the humanities. The Department of Religion provides an informed understanding of various aspects of religious traditions. More broadly, it supports the University's commitment to multiculturalism and education from a global perspective through study of the cultural diversity apparent in the world's religious traditions. Interdisciplinary and foreign studies contribute to the development of such awareness, and the department encourages students to explore those possibilities.
Courses in the department approach religious traditions historically, textually, aesthetically, philosophically and comparatively, and consider the role of religion in society, culture and individual life. These courses introduce students to various methods and issues in the study of religion; familiarize them with the beliefs and practices of various religious traditions; develop their critical thinking, reading and writing skills; and encourage them to explore and evaluate their own culturally conditioned self-understandings and ultimate commitments. Students will find the multidimensional study of religion to be fertile ground for developing habits of mind that are excellent foundations for professional life. Those planning for seminary, graduate study in religion or other disciplines, or church-related vocations will be well prepared by department courses and well supported by faculty advisement.

## Writing Proficiency

The development of writing proficiency is a vital component of the educational process. Both majors and minors are encouraged to utilize faculty assistance and the resources of the Writing Center to achieve that goal.

## Honors College

Religion majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in RELI 30003 during their junior year, and RELI 40003 during the fall semester of their senior year. Note: RELI 30003 substitutes in the major for the required Senior Seminar, RELI 40603.

## Religion, BA

## The BA with a major in religion requires 30 semester hours, distributed as follows:

1. Six hours in each of three broad course groups ( 18 total hours)

- Communities (historical or phenomenological accounts of religious communities, separately or comparatively);
- Texts and Ideas (religious texts and discourse; religion in word and thought; religious thinking in historical context); and
- Society and Culture (religion as it intersects with historical social practices, material cultures, and social constructions).

1. A three-hour capstone Seminar - RELI 40603 or, if pursuing departmental honors, RELI 30003
2. Nine additional elective hours of religion

Additionally, the following requirements must be met within the 30 hours:

- At least three hours must be taken at the 10000 level, and no more than six hours may be taken at that level.
- Three hours must be taken in a specifically designated Sophomore Seminar.
- At least 18 hours must be taken at the 30000 level or above.


## Religion Minor

The minor in religion requires 18 semester hours with at least one course from each of the three broad course groups: Communities, Texts and Ideas, and Society and Culture. Minors are required to take at least one 10000-level course. No more than two 10000-level courses will count toward the minor. At least nine of the 18 hours must be at the 30000 or 40000 level.

## Religion Course Subcategories

## Communities

RELI 10023
RELI 20523

RELI 20703
RELI 30323
RELI 30333
RELI 30413
RELI 30453
RELI 30513
RELI 30523
RELI 30533
RELI 30543
RELI 30553
RELI 30563
RELI 40313

## Texts and Ideas

RELI 10033
RELI 20123
RELI 20443
RELI 20643
RELI 20903
RELI 30113
RELI 30123
RELI 30133
RELI 30143
RELI 30153
RELI 30183

RELI 30303
RELI 30473
RELI 30633
RELI 30643
RELI 30733
RELI 30753
RELI 30813
RELI 30823
RELI 30833
RELI 40130
RELI 50130

Understanding Religion: Communities
Sophomore Seminar: Finding the Founders: Lives of Confucius, the Buddha, and Jesus
Leadership in Ministry
Christian Tradition: Emergence to the Renaissance
Christian Tradition: Reformation to Modernity
Contemporary Catholicism
Sects and Cults in American Religion
Hindu Religious Perspectives
East Asian Religious Perspectives
Buddhism: Thought and Practice
Islam
African Religions
Judaism
The History of Religion in America

Understanding Religion: Texts and Ideas
New Testament Literature and Life
Faith and Ethical Leadership
Sophomore Seminar: Thinking About Christian Faith
Sophomore Seminar: Religion and Literature
Jesus and the Gospels
Paul and the Early Church
Religion and the Search for Meaning in the Old Testament
Unlocking the Mysteries of the Dead Sea Scrolls 3
How to Read the Bible: Story and Politics 3
Revelation and Rhetoric: Biblical Prophets and Prophecy
Christian Ethics
Womanist Religious Thought
Philosophy of Religion
God in Modern Thought
Mysticism
The Many Faces of Krishna
Black Religion and Black Literature
Jesus in Fiction and Film
Theology and Literature
Issues in Biblical Interpretation
Seminar in Biblical Studies

## Society and Culture

RELI $10043 \quad$ Understanding Religion: Society and Culture 3
RELI 20503 Africa and the African Diaspora: History, Religion, and Culture
RELI 20513

RELI 20533

RELI 20573

Africa and the African Diaspora: History, Religion, and Culture
Sophomore Seminar: Life After Death, Comparative Perspectives
Defining the Nation: China and India in Crisis

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| RELI 3034 | Black Religion in United States |
| :---: | :---: |
| RELI 30353 | The History of Evangelicalism in the US |
| RELI 30463 | Being Latina/o and Religious in the U.S. |
| RELI 30483 | Digital Religion: God, the Soul and Morality after the Digital Revolution |
| RELI 30493 | Latina/o Religion, Law and Identity |
| RELI 30583 | Religion, Money, and Value(s) |
| RELI 30673 | Anthropology and Religion |
| RELI 30683 | Sociology of Religion |
| RELI 30723 | Religion and Science |
| RELI 30743 | Religion, Art and Visual Culture |
| RELI 30763 | Archaeology of the Biblical World: Syria-Palestine and TransJ ordan, 1550-332 BCE |
| RELI 30783 | Religion and Environmental Ethics |
| RELI 30803 | Religion and News Media |
| RELI 30843 | Latina Feminist Religious Thought |
| RELI 30853 | Women in American Religion |
| RELI 30863 | Religion and Violence |
| RELI 30873 | Islam in America |
| RELI 40143 | Love and Sex in the Biblical World |
| RELI 40213 | Religion, Art and Postmodernism: The Death of God and the End of Art |
| RELI 40613 | Constructive Global Ethics |
| RELI 40713 | Women, Race and Earth: Environmental Justice |
| RELI 40733 | Church and State Relations in America |


| Other |  |  |
| :--- | :--- | ---: |
| RELI 30003 | Honors Seminar in Religion | 3 |
| REL 40603 | Senior Seminar | 3 |
| RELI 30970 | Directed Study: Religion | $1.00-$ |
|  |  | 6.00 |
| RELI 40003 | Senior Honors Research Paper | 3 |
| REL 40700 | Religion in Geographical Context | $1.00-$ |
|  |  | 6.00 |
| RELI 40900 | Projects in Religion | $1.00-$ |
|  |  | 20.00 |
| RELI 50970 | Directed Study in Religion | $1.00-$ |
|  |  | 20.00 |

## Sociology

Sociology is available as a major on the BA and BS degrees and as a minor on both the BA and BS degrees.

## CLEP

The Department of Sociology and Anthropology approves the awarding of three semester hours of credit for a score of 55 on the CLEP Subject Exam in Introductory Sociology, equivalent to SOCI 20213.

## Honors College

Sociology majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in SOCl 30003 during their junior year and SOCI 40003 during the fall semester of their senior year.
Sociology Honor Society
The department sponsors Lambda Chapter of Alpha Kappa Delta, International Sociology Honor Society.

Or other departmental study abroad offerings.
Other sociology courses that are applied, service and/or experiential learning based may be approved to fulfill this requirement.

## Cultural Studies: 3 hours from the following courses that provide sociological analyses of culture:

SOCI 20073
SOCI 20083
SOCI 30323
Cultural Criminology

SOCI 30423
Media, Self and Society
SOCI 30463
Popular Culture
SOCI 30483
Death and Dying: Sociological Viewpoints
SOCI 30523
Self and Society Through Film
SOCI 30543
Unveiled: The Sociology of Weddings
SOCI 30653
Sociology of Food
SOCI 30783 Sociology of the Body
SOCI 40443
Media Images of Drug and Alcohol Abuse
Other departmentally approved courses may fulfill this requirement.
III. Sociology Electives ( 9 hours)

## Sociology Minor

The minor in sociology requires 18 semester hours, including SOCI 20213.

## Sociology Teacher Certification <br> Requirements

## Sociology teacher certification requires $\mathbf{2 4}$ semester hours, including

SOCI 20213
Introductory Sociology
SOCI 30383 Research Methods in Sociology
SOCI 30833
Sociological Theory

## Spanish and Hispanic Studies

Spanish and Hispanic Studies is available as a major and a minor on the BA degree.

## Placement

Students have several options for finding the appropriate level at which they should start their language studies at TCU. Various means of determining proper placement, as well as obtaining credit for previous language study, are outlined below.

1. To determine proper placement level, students should consult the level descriptions on the department's website and take the computerized CAPE examination. Details concerning the CAPE placement exam are provided to incoming students prior to orientation and registration. To access, click on TCU CAPE. (Students must type in lower case letters: Password: frogs1 [ends with the digit 1.])
2. Students with academic or life experience in a foreign language are urged to enroll at a level appropriate to their skills. As an incentive for students to enroll at their actual level of ability, TCU offers the opportunity to earn advanced placement credits through one of two ways:

- By means of exams administered by the College Board (AP or CLEP).

Suggested placement for students with AP credit is as follows:

| TCU Equivalent | Credit | Placement |
| :--- | :--- | :--- |
| 10103,10203 | 6 hr | 20103 |
| $10103,10203,20103,20203$ | 12 hr | $31103,31203,31403$ |
| $10103,10203,20103,20203$ | 12 hr | $31103,31203,31403$ |

By entering at an appropriate level in accordance with the guideline provided below. (For more detail, please consult the Department web
site at www.Span.tcu.edu .Whenever uncertain, students should consult with an adviser in the Department of Spanish and Hispanic Studies):
SPAN 10103: for students who have never studied Spanish.
SPAN 10203: for students who have minimal formal study and very limited knowledge of Spanish grammar and culture.
SPAN 20103: for students who know basic Spanish grammar and need to learn more complex structures and practice writing.
SPAN 20203: for students who have a good grasp of Spanish grammar but are not quite ready for advanced language courses.
SPAN 31103, SPAN 31203, SPAN 31403: for students who are ready to begin at an advanced level. This is also the entry point into the Spanish major.

## Earning Advanced Placement Credits According to Entrance Level

Students whose first foreign language class at TCU is beyond the firstsemester level may earn additional language credit (if credit has not already been awarded for transfer, CLEP, or AP work) as follows:

- If the first foreign language class is at the second semester level (SPAN 10203) and a grade of "B-" or higher is earned, three semester hours credit will also be awarded for the first semester course. That is, the student will earn a total of six hours of credits for taking a three-credit course.
- If the first foreign language class is at the third semester level (SPAN 20103) and a grade of "B-" or higher is earned, six semester hours credit will also be awarded for the first and second semester courses. That is, the student will earn a total of nine hours of credits for taking a threecredit course.
- If the first foreign language class is at the fourth semester level (SPAN 20203) and a grade of "B-" or higher is earned, nine semester hours credit will also be awarded for the first, second and third semester courses. That is, the student will earn a total of 12 hours of credits for taking a three-credit course.
- If the first foreign language class is above SPAN 20203 and a grade of "B" or higher is earned, nine semester hours credit will also be awarded for the second, third and fourth semester courses. That is, the student will earn a total of 12 hours of credits for taking a three-credit course.
Notes: Spanish for Beginners 1 is strictly designed and reserved for students with no previous study of the language.
Students entering the program at a certain level may not receive credit for coursework taken below that level.


## Native and Heritage Speakers

A native speaker is considered to be someone who completed his or her primary and secondary education in a Spanish-speaking country. A heritage speaker is someone who was primarily educated in U.S. schools, but speaks Spanish in the home and with friends and co-workers and is quite fluent.
Native or heritage speakers should consider enrolling in SPAN 32403 or SPAN 32603. Native or heritage speakers want either grammar or writing skill development may consider enrolling in SPAN 31203 or SPAN 31403. Native or heritage speakers are not eligible to enroll in Spanish 31103.

## Sigma Delta Pi Honor Society

The department annually recognizes its outstanding students by inviting them to join Sigma Delta Pi, the national honor society for Spanish scholars.

## Spanish and Hispanic Studies, BA <br> The BA with a major in Spanish and Hispanic Studies consists of 33 credit hours, as follows:

## Required courses:

| SPAN 31103 | Oral Communication in Spanish | 3 |
| :--- | :--- | :--- |
| SPAN 31203 | Writing in Spanish | 3 |
| SPAN 31403 | Advanced Spanish Grammar | 3 |
| *Heritage speakers will not receive credit for Spanish 31103 (Oral |  |  |
| Communication); they must select another course at the 30000 level and |  |  |
| above. A heritage speaker is someone who was primarily educated in U.S. |  |  |

SPAN 31403 Advanced Spanish Grammar 3
*Heritage speakers will not receive credit for Spanish 31103 (Oral Comma icaton), hey mise schools but who speaks Spanish in the home and with friends and co-
workers and is fluent. Special permission by the department chair is required for any deviation from this policy.
**Native Speakers will not receive credit for Spanish 31103 (Oral Communication), 31203 (Writing) and 31403 (Advanced Grammar); they must select another course at the 30000 level and above. A native speaker is considered to be someone who completed his or her primary and secondary education in a Spanish-speaking country. Special permission by the department chair is required for any deviation from this policy.

## One of the following:

| SPAN 32003 | Culture of Spain | 3 |
| :--- | :--- | :--- |
| SPAN 32103 | Culture of Latin America | 3 |
| SPAN 32203 | Popular Cultures of Spanish-speaking Countries | 3 |

Any Two of the following:
SPAN 32503 Panorama of Spanish Literature 1 (Pre-1800)
SPAN 32603 Panorama of Spanish Literature 2 (Post-1800)
SPAN 32703 Panorama of Latin American Literature 1 (Pre1820)

SPAN 32803
Panorama of Latin American Literature 2 (Post

Four upper-level Spanish electives, two of which must be 40000level literature courses

SPAN 43203 Senior Seminar 3
***SPAN 43303 Hispanic Topics in English does not count toward the major or minor.
****SPAN 43103 Senior Honors Thesis may be used as an elective, but honors students must still take two 40000-level literature courses.

## Policy on Grades

Courses taken Pass/No-Credit and courses in which the student earns below a "C" will not count toward the major.

## Study Abroad

Study abroad is strongly recommended for all majors of Spanish and Hispanic Studies. In addition to the enormous improvement students will gain in their speaking ability, the international experience will enhance their career opportunities and cross-cultural competence. Fifteen credits of the Spanish and Hispanic Studies major may be earned in study abroad programs. If the student earns six of those credits while on a TCU-sponsored summer program, then the student may still apply nine credits to the major from a semester-long program.
For students in a yearlong program, 21 credits of the Spanish and Hispanic Studies major may be earned in study abroad programs. If the student earns six of those credits while on a TCU-sponsored summer program, then the student may still apply 15 credits to the major from a semester-long program.
To receive credit, the student must meet with the Spanish and Hispanic Studies department's study abroad adviser as well as the Center for International Studies prior to departure to obtain approval for coursework abroad to transfer to TCU.

## Spanish and Hispanic Studies Minor Programs

The Department of Spanish and Hispanic Studies offers three minor programs: the Regular Minor, Spanish for Health Professions (SHP) and Spanish for Business Professions (SBP). Students must choose one of the three, and none is available to those whose major is Spanish and Hispanic Studies.
Heritage Speakers will not receive credit for Spanish 31103 (Oral Communication); they must select another course at the 30000 level and above. A heritage speaker is someone who was primarily educated in U.S. schools but who speaks Spanish in the home and with friends and coworkers and is fluent. Special permission by the department chair is required for any deviation from this policy.
Native speakers will not receive credit for Spanish 31103 (Oral Communication), 31203 (Writing) and 31403 (Advanced Grammar); they must select another course at the 30000 level and above. A native speaker is considered to be someone who completed his or her primary and secondary
education in a Spanish-speaking country. Special permission by the department chair is required for any deviation from this policy.

## Spanish and Hispanic Studies Minor

The Spanish minor consists of 21 credits at the 20103 level or above.

Any course taught in Spanish at the 30000 or 40000 level may be taken as an elective.
No course taught in English may be taken to fulfill the minor requirements

## Spanish for the Health Professions Minor

The minor in Spanish for the Health Professions is designed to provide
students (especially those in nursing) the ability to communicate in Spanish
in the area of health care. The minor engages the student with the necessary
mechanics of the language and propels him or her into two courses
designed especially for students in the health professions. Opportunities are
offered for electives to boost oral communication and knowledge of
Spanish-speaking communities in the United States and beyond. Options
also are available for off-campus service learning and study abroad.
The minor in Spanish for the Health Professions consists of $\mathbf{2 1}$
credits at the $\mathbf{2 0 1 0 3}$ level and above. Two courses are required:
SPAN 31503

SPAN 42503 $\quad$| Spanish for Health Professions I |
| :--- |
| Spanish for the Health Professions 2 |

Any course taught in Spanish at the 30000 or 40000 level may be taken as an elective.
No course taught in English may be taken to fulfill the minor requirement

## Spanish for Business Professions Minor (SBP)

The minor in Spanish for Business Professions is designed to provide students (especially those in the Business School) the ability to communicate in Spanish in the area of business. The minor engages the student with the necessary mechanics of the language and propels him or her into two courses designed especially for students in the business professions. Opportunities are offered for electives to boost oral communication and knowledge of Spanish-speaking communities in the United States and beyond. Options will be developed for off-campus service learning and study abroad.

The SBP minor consists of 21 credits at the 20103 level and above. Two courses are required:
SPAN 31603
Spanish for Business Professions I
3

SPAN 42603 Spanish for Business Professions 2
3

Any course taught in Spanish at the 30000 or 40000 level may be taken as an elective.

No course taught in English may be taken to fulfill the minor requirements.
Study abroad is recommended for all SBP students. Besides the enormous improvement they will gain in speaking ability, the international experience will enhance their career opportunities and cross-cultural competence. Once the program is established, the Department of Spanish and Hispanic Studies will work with the Neeley School of Business to integrate a business dimension into the department's existing study abroad programs. Similarly, internship and service learning opportunities will be identified.

Up to 9 of the 21 required credits may be taken at an approved study abroad site. To receive credit, the student must meet with advisers from the Neeley School of Business, the Spanish and Hispanic Studies Department, and the Center for International Studies prior to departure to obtain approval for coursework abroad to transfer to TCU.

## Suggested Course Sequence

## Freshman year

## Fall

## SPAN 20103 <br> Sophomore year <br> Fall

Intermediate Spanish 1

Elective

## Spring

Elective

## Junior year

Fall
SPAN 31603
Spanish for Business Professions I
Spring
SPAN 42603
Spanish for Business Professions 2
Senior year
Fall
Elective
Students with no previous knowledge of Spanish are strongly encouraged to enroll in the 8-week intensive grammar series:
Freshman year
Fall
SPAN 10113
Intensive Spanish for Beginners 1
SPAN 10213
Intensive Spanish for Beginners 2

## Spring

SPAN 20113
Intensive Intermediate Spanish 1
SPAN 20213
Intensive Intermediate Spanish 2

## Native and Heritage Speakers

Native and heritage speakers will not receive credit for Spanish 31103 (Oral Communication in Spanish); they should select SPAN 31203 or another course at the 30000 level or above. A native speaker is considered to be someone whose primary or secondary education took place in a Spanishspeaking country. A heritage speaker is someone who was primarily educated in U.S. schools but who speaks Spanish in the home and with friends and co-workers.

## Policy on Grades

Courses taken pass/no-credit and courses in which the student earns below a " C " will not count toward the Spanish minors.

## Study Abroad

Study abroad is recommended for all minors of Spanish for the Health Professions. In addition to enormous improvement in their speaking ability, students will enhance their career opportunities and cross-cultural competence through the international experience. Up to 9 of the 21 required credits may be taken at an approved study abroad site. To receive credit, students must meet with advisers from the Harris College of Nursing \& Health Sciences, the Department of Spanish and Hispanic Studies, and the Center for International Studies prior to departure to obtain approval for coursework abroad to transfer to TCU.

## Spanish Secondary Teacher Certification

Students seeking certification for teaching in Spanish at the secondary school level should be advised by the secondary certification adviser of the College of Education. The College of Education offers post-baccalaureate certification to TCU graduates. Students need 24 semester hours in Spanish and the education courses required for an educational studies minor with certification. See www.catalog.tcu.edu/undergraduate. Students seeking

Spanish teaching certification (elementary through high school) must successfully complete the Languages Other Than English (LOTE) Spanish certification exam. Candidates seeking Spanish certification must also successfully complete the Pedagogy and Professional Responsibilities EC-12 exam.
Individuals seeking teaching certification with an EC-6 bilingual specialization must successfully complete the Bilingual Target Language Proficiency Test (BTLPT) in order to be awarded a Bilingual Supplemental Teaching Certificate. EC-6 bilingual certification candidates must also successfully complete the EC-6 Generalist and the Pedagogy and Professional Responsibilities state examinations. Students seeking bilingual teaching certificate must submit a language assessment from the Department of Spanish and Hispanic Studies when applying to the Teacher Education Program.

## Urban Studies

Urban Studies is an interdisciplinary program of the AddRan College of Liberal Arts. Students must complete 18 hours of credit to earn the Urban Studies minor. Course offerings are drawn from multiple disciplines across the university, including geography, history, political science, sociology, criminal justice, economics, and others.

The Urban Studies minor is intended for any undergraduate student seeking to develop a multi-disciplinary exploration of cities, looking into the organization of urban space, the varied and multiple dimensions of urban life, and the many challenges presented by the rapid pace of urban change in the $21^{\text {st }}$ century.

Students interested in the Urban Studies minor should contact the program advisor, Dr. Sean Crotty, at sean.crotty@tcu.edu.

## Urban Studies Minor

## The urban studies minor requires 18 credit hours, selected from at least three disciplines with a maximum of 9 hours from any one discipline, to include:

## A minimum of 6 hours to be selected from the following core courses: <br> ECON 30473 Regional and Urban Economics 3 <br> GEOG 30713 Urban Geography 3 <br> HIST 30803 U.S. Urban History 3 <br> POSC $31623 \quad$ Urban Politics

A minimum of 3 hours with a service learning, internship or independent research component. These courses should include but are not be restricted to:
CRJU 40963 Internship in Criminal Justice 3

GEOG 40323 Urban and Business Applications of Geographic 3 Information Systems
HIST 30813
Oral History Field Research Seminar
POSC 40960
SOCI 30213
Civic Literacy Internships
SOCI 30213 Applied Sociology 3
SPAN 31803 Service-Learning in the Latino Community 3

## 9 additional hours of relevant coursework from the list of approved Urban Studies courses or approved by the Urban Studies adviser, to be completed subject to the distributional requirements.

No course may be applied to both a student's major and minor requirements. If one of the above courses is required for a student's major, the student may substitute another approved course in the minor. The student would not be required to complete a second Internship or service learning course.

## Urban Studies Approved Courses

## Other relevant courses may be applied to the minor with the approval of the associate dean of AddRan College.

ANTH 30623
Urban Anthropology
ANTH 30663
Food Justice
CRJU 30323
CRJU 30853
Cultural Criminology

CRJU 30903
Multiculturalism in the Criminal Justice System

CRJU 30963
Japan: Environment, Technology, and

ECON 30473
ENGL 30153
Regional and Urban Economics
Nature Writing in Nature
ENGL 30203
ENGL 30693
U.S. Multi-Ethnic Literature

ENGL 30973
ENGL 40553
Studies in Nineteenth-Century American Literature
GEOG 30313 Introducation to Geographic Information Systems
GEOG 30743
Applied Geography
GEOG 40323
Urban and Business Applications of Geographic

GEOL 50523
GRMN 20123
Introduction to Geographic Information Systems

GRMN 30173
HIST 30383
HIST 30583
Living in London
HIST 30613
History of Working People in America
HIST 30803
HIST 30813
U.S. Urban History

HIST 40653

POSC 20144
Oral History Field Research Seminar

POSC 30103
POSC 30303
POSC 40960
Civic Literacy Internships
SOCI 20223
SOCI 30213
Social Problems

Applied Sociology
Sustainability: Environmental, Social \& Economic Issues
SPAN 20403
SPAN 31803
The Hispanic City

## Writing

Writing is available as a major on the BA degree and a minor on both the BA and $B S$ degrees.
Honors College

Writing majors who plan to pursue Departmental Honors must be members of the Honors College and enroll in ENGL 30003 in their junior year and ENGL 40003 in the fall semester of their senior year.

## Writing, BA

Each student forms a program of study in consultation with a faculty adviser in English.

## General Requirements

To earn the BA with a major in writing, students must complete 33 hours in Writing or English (exclusive of ENGL 10803, ENGL 10833, ENGL 20803 and ENGL 20833). Of these, at least 24 hours must be in upper-division WRIT or ENGL courses ( 30000 level and above). No more than 9 hours of lowerdivision credit may be applied to the major.
All writing majors are required to take WRIT 38063 (Writing Major Seminar) after they have attained junior standing and completed 9 hours in WRIT or ENGL courses (exclusive of ENGL 10803, ENGL 10833, ENGL 20803 and ENGL 20833).

ENGL 30970 and ENGL 50970, courses in special topics that change from semester to semester, usually satisfy one or more of the requirements for majors. Consult the department or check the department website, www.eng.tcu.edu.

## Specific Requirements

To earn a major in writing, students must complete at least 3 of the 33 hours in Digital Intensive courses (see subcategory for courses (p. 141) or consult the department). Most of these courses can be used to satisfy one of the distribution requirements listed below in categories $1,2,3,6$ or 8 .

1. 3 hours from the Creative Writing subcategory (p. 141)
2. 3 hours from the Rhetoric and Culture subcategory (p. 141)
3. 3 hours from the Design and Editing subcategory (p. 141)
4. 3 hours from the Internship subcategory (p. 141) (WRIT 30391 is a single credit, e.g., students must take WRIT 30391 three times to satisfy this requirement)
5. 3 hours of Writing Major Seminar (WRIT 38063)
6. 6 elective hours of any courses in sections 1 through 3 above (student must take two additional electives in 1 or 2 or 3 )
7. 6 upper-division hours of any ENGL literary and language courses not listed above
8. 6 elective hours of any ENGL or WRIT courses

## Writing Minor

The minor in writing requires 18 semester hours in Writing or English (exclusive of ENGL 10803, ENGL 10833, ENGL 20803 and ENGL 20833). Of these, 12 hours must be in upper-division courses.
To earn a minor in writing, students must also complete at least 3 of the 18 hours in Digital Intensive courses (see subcategory for courses (p. 141) or consult the department). Most of these courses may be used to satisfy one of the distribution requirements listed below in categories 1,2,3 and 4. These distribution requirements apply:

1. 3 hours from the Creative Writing subcategory (p. 141)
2. 3 hours from the Rhetoric and Culture subcategory (p. 141)
3. 3 hours from the Design and Editing subcategory (p. 141)
4. 9 hours of electives from any courses listed in sections 1 through 3 above or any upper-division WRIT or ENGL courses

## Creative Writing Minor

The minor in creative writing requires 18 semester hours in Writing or English (exclusive of ENGL 10803 and ENGL 20803). Of these, 12 hours must be in upper-division courses.
Students who major in English or Writing may count no more than 6 hours of creative writing toward their major. These distribution requirements apply:

1. ENGL 10203/WRIT 10203 or ENGL 20103
2. 9 hours of upper-division creative writing workshops with one at the 40000 level or higher
3. 6 hours of ENGL or WRIT electives

## Writing Course Subcategories

## Creative Writing

WRIT 10203 Introduction to Creative Writing
WRIT 20103 Reading as a Writer
WRIT 30233 Creative Nonfiction Workshop I
WRIT 30343 Fiction Writing Workshop I
WRIT 30353 Poetry Writing Workshop I
WRIT 30363
WRIT 30373
WRIT 40133
WRIT 40203
WRIT 40213
WRIT 40223
ENGL 50233

## Rhetoric and Culture

WRIT 20313 Power and Protest 3
WRIT 20333 Language, Technology, and Society 3
WRIT 30203 Urban Rhetorics 3
WRIT 30213 Advanced Composition:Writing Genres 3
WRIT 30243 Rhetorical Practices in Culture 3
WRIT 30253 Rhetorical Traditions 3
WRIT 30273 Argument and Persuasion 3
WRIT 30283 Cyberliteracy 3
WRIT 30293 Non-Human Rhetoric and Representation 3
WRIT 30663 Women's Rhetorics 3
ENGL 30803 Theories of Cinema 3
WRIT 40253 Propaganda Analysis and Persuasion 3
WRIT 40333 Language, Rhetoric and Culture 3
WRIT 40373 The Rhetoric of Revolution 3
ENGL 50243 Teaching Writing 3
ENGL 50253 Classical Rhetoric 3

## Design and Editing

WRIT 20303 Writing Games 3
WRIT 30223 Technical Writing and Information Design 3
WRIT 30263 Style 3
WRIT $30813 \quad$ Books and the History of Print Culture 3
WRIT 40163 Multimedia Authoring: Image and Hypertext 3
WRIT 40233 Writing for Publication 3
WRIT 40243 Professional Writing 3
WRIT 40263 Multimedia Authoring: Animation and Film 3
WRIT 40283 Editing and Publishing 3
WRIT 40363 Multimedia Authoring: Mobile Apps and eBooks 3

## Internship

WRIT $30391 \quad$ Publication Production 1
WRIT $40273 \quad 3$

## Digitally Intensive

WRIT 20303 Writing Games 3
WRIT 20333 Language, Technology, and Society 3
WRIT 30203 Urban Rhetorics 3
WRIT 30223 Technical Writing and Information Design 3

| WRIT 30283 | Cyberliteracy | 3 |
| :--- | :--- | :--- |
| WRIT 30363 | Digital Creative Writing | 3 |
| WRIT 30391 | Publication Production | 1 |
| WRIT 40163 | Multimedia Authoring: Image and Hypertext | 3 |
| WRIT 40233 | Writing for Publication | 3 |
| WRIT 40243 | Professional Writing | 3 |
| WRIT 40263 | Multimedia Authoring: Animation and Film | 3 |
| WRIT 40283 | Editing and Publishing | 3 |
| WRIT 40363 | Multimedia Authoring: Mobile Apps and eBooks | 3 |

## Literary and Language Studies

Any upper-division ENGL course not specifically listed in another subcategory for the Writing major.
Seminars and Directed Studies
ENGL 30003 Junior Honors Seminar 3
ENGL 30970 Directed Studies in English 1.00-
ENGL 40003 Senior Honors Seminar 3
ENGL 40831 Senior Seminar 1
ENGL 50970
WRIT 30013 Distinction Program: Thesis I 3

## Harris College of Nursing and Health Sciences

## Nursing and Health Science Program of Study

TCU has a long history of offering courses and degrees that contribute to the health and well-being of the community. Harris College of Nursing \& Health Sciences enhances that tradition by uniting Nursing, the School of Nurse Anesthesia, the Davies School of Communication Sciences and Disorders, Kinesiology and Social Work - in an integrated unit. The degree programs offered by Harris College build on a strong liberal arts foundation and prepare graduates to practice in complex and varied professional settings. Many of the courses offered in Harris College allow students to learn through practice in professional and clinical settings encountering multiple and diverse disciplines, practitioners and clients. In both classroom and practice environments, students develop skills essential to finding information, using technology and solving problems.
By integrating clinical practice, professional and community service, and research activities, Harris College faculty demonstrate their commitment to academic excellence and leadership. They create an atmosphere where learning is a part of the lives of all members of the Harris College community. Faculty are committed to providing individual attention to students in order for them to achieve and grow, and are actively involved in teaching research and work closely with students in laboratory and clinical experiences at both undergraduate and graduate levels. Faculty members also serve as advisers providing career and professional guidance.

## Mission

The mission of Harris College is to enhance the human condition by preparing graduates who think and practice as ethical leaders, and by advancing knowledge of health and human development within the global community. Faculty fulfills this mission by offering a dynamic curriculum that is responsive to the local and global communities. Students are prepared for a variety of professional roles, including clinical and generalist practice, teaching, or further study in graduate programs. Faculty provides exemplary education in the context of the highest standards, preparing students to enter careers that will benefit society.

## Harris Associates

The Harris Associates are a group of select students that assist in promoting Harris College through various leadership activities. Students at all levels are recommended by Harris College faculty and administration to serve.

## Harris Fellows

The Harris Fellows program provides unique experiences, academic focused programming and leadership opportunities for academically successfully, high achieving students within Harris College. Harris Fellows students are nominated by faculty and have a 3.5 minimum GPA.

## Harris College Degree and Majors

Harris College of Nursing \& Health Sciences offers the following degrees and majors:

- Bachelor of Science in Nursing (BSN)
- Bachelor of Social Work (BSW)
- Bachelor of Science in Athletic Training (BSAT)
- Bachelor of Science (BS) with majors in:

Habilitation of the Deaf and Hard of Hearing
Speech-Language Pathology
Health and Fitness
Movement Science
Physical Education
Physical Education with Strength and Conditioning
Sport Psychology

## Curriculum

Students seeking the Bachelor of Science degree must fulfill all University degree requirements described in this catalog. This includes completion of the minimum number of credit hours, typically 124 , specified by their majors in the following categories:

Core Curriculum (CC): 39-63 credit hours

- Essential Competencies: 12 credit hours plus six hours writing Emphasis
- Human Experiences and Endeavors: 27 credit hours
- Heritage, Mission, Vision and Values: 18 credit hours that may overlay with other elements of a student's degree requirements
Curriculum Requirements of the Major: variable credit hours


## Multiple Majors

Students with a first major in Harris College may declare an additional major on the BS degree. Approval by the department and college of both majors is necessary. The degree awarded will be that of the first major. All degree requirements for each major must be satisfied, including all TCU Core Curriculum requirements associated with any major.

## Transfer Credit

Students must receive approval of courses they wish to take at another college or university following admission to TCU. Students should gain course recommendations from department advisers, seek approval of the department chair or director, and then seek approval from the Office of the Dean of Harris College. No more than a total of 12 semester hours, except those earned in an approved study abroad program, may be transferred from other schools, after admission to TCU. No credit may be transferred from a community college once 54 cumulative semester hours have been earned.

## Degree Plan and Notification of Intent to Graduate

Students must request a degree plan in the Office of the Dean of Harris College, typically after completing 60 hours. After a degree is awarded, no further work may be applied to the degree. Students must also file an Intent to Graduate in the Office of the Dean at the beginning of the last year of coursework.

## Academic Advisement

Students are responsible for meeting degree requirements of the major. It is essential that students understand their degree plans and maintain communication with their departments. Students are strongly encouraged to meet with a departmental adviser on a regular basis for the purpose of reviewing progress toward the degree.

## Harris College Minors

The Harris College of Nursing \& Health Sciences offers the following minors:

- Habilitation of the Deaf (COSD with an emphasis in Speech Pathology or Habilitation of the Deaf)
- Speech-Language Pathology (COSD)
- Health (KINE)
- Fitness (KINE)
- Movement Science (KINE)
- Physical Education (KINE)
- Social Work (SOWO)


## Interdisciplinary Healthy Aging Minor Coursework

Students wishing to earn the Interdisciplinary Healthy Aging Minor are required to take 18 hours of coursework. Courses must be taken from three different departments, which may include the department of the student's major. The minor is comprised of three required courses totaling nine hours and three elective courses totaling nine hours. The required and elective courses are listed below.

## Required Courses (9 hours)

SOCI $30643 \quad 3$
sowo 40513
Directed Study

Approaches to Healthy Aging
3
3

| Elective Courses (select 9 hours from the courses below) |  |  |
| :--- | :--- | ---: |
| KINE 40780 | Special Problems in Kinesiology | $1.00-$ |
|  |  | 20.00 |
| NURS 10303 | Human Development | 3 |
| NURS 30503 | ISsues in Women's Health | 3 |
| NURS 30543 | Family Health Nursing | 3 |
| SOWO 30543 | Family Health Nursing | 3 |
| POSC 30103 |  |  |
| SOCI 30223 | Contemporary Topics in Sociology | 3 |
| PSYC 40950 | Contemporary Topics in Psychology | $1-3$ |
| SOCI 30483 | Death and Dying: Sociological Viewpoints | 3 |
| SOWO 30853 | Human Behavior and Social Environment II | 3 |
| SOWO 40543 | Social Work with Older Adults | 3 |
| SOWO 40563 | Death and Dying | 3 |

## Davies School of Communication Sciences and Disorders

## Communication Sciences and Disorders (COSD) Degrees

Available on the Bachelor of Science (BS) degree with a major in habilitation of the deaf and hard of hearing (DHH) or speech-language pathology.

## Honors College

COSD majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in COSD 30003 during their junior year and COSD 40003 during their senior year.

## Pass/No-Credit Option

No courses in either major or associated areas may be taken on a pass/nocredit basis. Other courses taken on a pass/no-credit basis will be limited to two courses (eight hours maximum.)

## Habilitation of the Deaf and Hard of Hearing BS

## The BS with a major in habilitation of the deaf and hard of hearing requires 124 semester hours as follows:

## 1. Core Curriculum: 39-63 hours

Must include the following courses:
BIOL $10003 \quad$ Contemporary Issues in Biology 3
GEOG 10003 World Regional Geography 3
POSC 10133 American and Texas Government 3
HIST 10603 United States History:A Survey to 1877
HIST $10613 \quad 3$
2. Habilitation of the DHH: 49 semester hours

COSD 10343 Basic Sign Language 3
COSD 20303 Speech and HearingScience
COSD 20333 Phonetics
COSD 20343 Intermediate Sign Language 3
COSD 30303 Anatomy and Physiology of the Speech and 3
Hearing Mechanisms
COSD 30334 Language Development in Children 4
COSD 30343 Aural Rehabilitation 3
COSD 30353 Teaching Elementary School Subjects to DHH 3

| COSD 30363 | Audiology | 3 |
| :--- | :--- | ---: |
| COSD 30383 | American Sign Language I | 3 |
| COSD 40323 | Advanced Language Development for DHH | 3 |
| COSD 40333 | Teaching Spoken Language to Persons with | 3 |
|  | Hearing Loss |  |
| COSD 40340 | Clinical Practicum in Teaching DHH Students I | $1.00-$ |
|  |  | 6.00 |
| COSD 40350 | Clinical Practicum in Teaching DHH Students II | $1.00-$ |
|  |  | 20.00 |
| COSD 40383 | American Sign Language II | 3 |

3. College of Education: $\mathbf{3 4}$ semester hours (includes student teaching)

## 4. Associated Requirements: 13 semester hours ( 9 within the major) In addition to the academic credit distribution, students must meet the following requirements:

1. Must have a " C " or better in COSD, College of Education and the state required courses of GEOG 10003, POSC 10133, HIST 10603 and 10613.
2. Prior to serving as junior clinicians in a clinical setting, students must present satisfactory evidence of acceptable results from a criminal background check arranged by the Davies School of Communication Sciences and Disorders. Background checks must be completed within the 30 days prior to the start of that academic semester.
3. Complete 75 hours of clinical practice, at least two semesters of COSD 40340 and one semester of COSD 40350.
4. TCU cumulative GPA of at least 2.75 and a 2.75 GPA in COSD courses before enrolling in COSD 40340.

- Students must be recommended for enrollment in COSD 40350 by COSD faculty. Recommendation is based on fulfillment of expectations specified in the clinic handbook and on:
- Performance in COSD coursework;
- Previous clinical experience and performance; and
- Fluency in sign language as judged by course instructor.

5. Students must be successfully admitted into the College of Education.

## Suggested Courses for the Freshman Year

| Fall | Semester Hours |
| :--- | :--- |
| Oral Communication | 3 |
| Written Communication | 3 |
| Natural Science (BIOL 10003) | 3 |
| History (HIST 10603) | 3 |
| Humanities | 3 |
| Total | 15 |
| Spring | Semester Hours |
| Natural Science (non-biology) | 3 |
| Fine Arts (FNRT 20903) | 3 |
| History (HIST 10613) | 3 |
| Math | 3 |
| Humanities | 3 |
| Total | 15 |

## Speech-Language Pathology BS <br> The BS with a major in speech-language pathology requires 124 semester hours as follows:

## 1. TCU Core Curriculum: 39-63 semester hours

- Must include MATH 10043
- Must include BIOL
- Must include PHYS or CHEM

2. Speech-Language Pathology: 43 semester hours; must include:

COSD 10303 Survey of Communication Disorders 3
COSD 20303 Speech and HearingScience
COSD $20324 \quad$ Clinical Methods in Speech-Language 4 Pathology
COSD 20303 Speech and HearingScience
COSD 20333
Phonetics
COSD 20363 Evidence-Based Practice in Communication 3 Sciences and Disorders
COSD 20503
Anatomy and Physiology of the Speech and
Hearing Mechanisms
COSD 30324
Speech Sound Disorders
COSD 30334 Language Development in Children 4
COSD 30343
COSD 30363
COSD 30373
Aural Rehabilitation

Language Disorders in Children
COSD 40300
Clinical Practicum in Speech-Language3

Pathology I
COSD 40353
COSD 50300
Neurological Substrates of Communication and Swallowing
Clinical Practicum in Speech-Language $\quad 1.00-$
Pathology II

## 3. Related Area Electives: $\mathbf{1 8}$ semester hours

- All related area electives must be approved by the student's academic adviser.

4. Supporting Areas: 6 semester hours
5. Electives: 7-19 semester hours

In addition to the academic credit distribution, students must meet the following requirements:

1. Have a "C" or better in all COSD courses and in MATH 10043, one biological science course, one physical science course and one social/behavioral science course.
2. Complete at least 25 hours of supervised clinical observation prior to enrolling in COSD 40300.
3. Prior to serving as senior clinicians in a clinical setting, present satisfactory evidence of acceptable results from a criminal background check arranged by the Davies School of Communication Sciences and Disorders. Background checks must be completed within the 30 days prior to the start of that academic semester.
4. Complete 20 hours of clinical practice, in COSD 40300 and COSD 50300.
5. Have a TCU cumulative GPA of at least 3.00 , a cumulative 3.00 GPA in COSD courses, a grade of "C" or above in all COSD coursework, MATH 10043, one physical science course, one social/behavioral science course and biological sciences before enrolling in COSD 40300 and COSD 50300.
6. Be recommended for enrollment in COSD 40300 and COSD 50300 by COSD faculty; recommendation is based on fulfillment of expectations specified in the clinic handbook and on:

- Performance in COSD coursework;
- Previous clinical experience and performance.

Note: This should be viewed as a pre-professional degree. Students selecting this major will need to continue studies at the graduate level in order to meet standards for licensure as a speech-language pathologist and for certification by the American Speech-Language-Hearing Association (ASHA). The graduate program in speech-language pathology at TCU is accredited by the ASHA'S Council on Academic Accreditation. Admission to the program is competitive and based on applicant qualifications.

## Suggested Courses for the Freshman Year

## Fall

COSD 10303
Written Communication
Natural Science
MATH 10043
Humanities
Total

## Spring

COSD 20303
Natural Science
Social Science
Humanities
Fine Arts
Psychology
Total

## Communication Disorders Minor

## A minor requires $\mathbf{1 8}$ hours and may include an emphasis in habilitation of the deaf (COSD) and or speech language pathology (COMS).

## Minor in Habilitation of the Deaf and Hard of Hearing (COMD) requires:

COSD 10303
Survey of Communication Disorders

COSD 20343 Intermediate Sign Language 3
COSD 30383 American Sign Language I 3
COSD 40383
American Sign Language II
Plus an additional course approved by a COSD faculty adviser

## Minor in Speech Language Pathology (COMS) requires:

COSD 10303 Survey of Communication Disorders 3
COSD 10343 Basic Sign Language
A minimum of 6 hours must be at the 30000 level or above.
A grade of "C" or higher must be obtained in all COSD courses to count towards the minor or as a prerequisite for subsequent courses.

## Kinesiology

The Department of Kinesiology offers programs of study designed to provide students with the educational background necessary for the pursuit of careers in a variety of movement-based professions. The Bachelor of Science degree is offered with majors in:

- health and fitness
- movement science
- physical education
- physical education with strength and conditioning
- sport psychology

The Bachelor of Science in Athletic Training (BSAT) degree is offered to majors in athletic training. The Commission on Accreditation of Athletic Training Education (CAATE) accredits the BSAT.
In addition, the department offers minors in movement science, health, physical education and fitness. The department also offers a variety of activity (PEAC) courses.
The curriculum for each major comprises the following components:
I. Kinesiology core courses common to all majors ( 14 hours)
II. Foundation courses specific to each major ( $18-37$ hours)
III. Emphasis courses ( 6 -18 hours)
IV. Associated requirements intended to supplement the departmental courses (11-27 hours)
In addition to the major requirements, students must take core curriculum and elective courses to accumulate a minimum of 124 hours for the Bachelor of Science degree. The department emphasizes learning experiences beyond the classroom environment. Students are required and/or encouraged to participate in research, internships, clinical experiences and special projects that are arranged through academic advisers.

## Departmental Policies

- Pass/No-Credit. No kinesiology core, foundations, emphasis or associated requirements courses may be taken on a P/NC basis.
- Grades and GPA. Students pursuing the movement science, health and fitness and sport psychology majors must earn a minimum of a "C-" in all courses within the kinesiology core, foundations, emphasis and associated requirements areas of their major. In addition, in order to graduate with the BS degree (excludes the BSAT), students must earn a minimum of a 2.5 GPA for all courses satisfying the kinesiology core foundations and emphasis areas of their major.
- Progression Policy. Once students pursuing a major in the Kinesiology Department have earned 54 hours toward the bachelor of science degree, to enroll in KINE or HLTH courses at the 30000 level or higher, they must have a minimum 2.5 cumulative GPA.


## Health and Fitness, BS

The health and fitness option provides the educational foundation required for pursuit of fitness-related careers. Students gain an understanding of the exercise prescription and assessment of general and athletic populations. In addition, students learn the planning, organization and administration of fitness and athletic conditioning programs and facilities.

## Requirements

## 1. Core Curriculum (core hours depending on the number of coupled courses): (39-63 hours)

2. Major: Health and Fitness ( 50 hours)

Kinesiology Core Courses (14 hours)
KINE $10101 \quad$ Introduction to Kinesiology 1
KINE 10603 Anatomical Kinesiology 3
KINE 30403 Motor Behavior 3
KINE 30623 Biomechanics 3
KINE 30634 Exercise Physiology 4

## Foundation Courses ( $\mathbf{2 7}$ hours)

HLTH 30233 Sport and Exercise Pharmacology
HLTH 30423 Nutrition and Physical Activity
HLTH 40203
Study of Human Disease
KINE $20313 \quad$ Foundations of Sport Injuries
KINE 30523 Exercise Assessment and Prescription

KINE $30713 \quad$ Psychology of Sport 3

KINE 30733
OR
Exercise Psychology
KINE $30833 \quad$ Physical Activity and Disability 3

KINE $40513 \quad$ Principles of Strength and Conditioning 3
KINE 40903 Senior Internship 3
Emphasis Courses (choose 9 hours)
HLTH 30203 Health and Stress Management 3
KINE 30843 Neuromuscular Pathophysiology 3

## Strength and Conditioning

KINE 30343 Theory of Coaching 3
KINE $40543 \quad$ Advanced Strength and Conditioning 3
3. Associated Requirements ( 17 hours)

BIOL 20204 Anatomy and Physiology 4
BIOL 20214 Anatomy and Physiology 4
MANA $30153 \quad$ Organizational Management 3
MATH 10043 Elementary Statistics 3
PSYC 10213 General Psychology 3

## 4. Electives as needed to complete ( $\mathbf{1 2 4}$ hours)

## Movement Science, BS

The movement science option provides students with the educational background required for a variety of movement-based professions. Students who select this major often continue their education in graduate programs in kinesiology or physical therapy. Students are advised to consult with their adviser as early as possible in order to coordinate elective courses with specific interests.

## Requirements

1. Core Curriculum (core hours depending on the number of coupled courses): (39-63 hours)
2. Major: Movement Science (41 hours)

Kinesiology Core Courses ( 14 hours)
KINE 10101 Introduction to Kinesiology 1
KINE 10603 Anatomical Kinesiology 3
KINE 30403 Motor Behavior 3
KINE 30623 Biomechanics 3
KINE 30634 Exercise Physiology 4
Foundation Courses ( $\mathbf{1 5}$ hours)
KINE 30423 Motor Development 3

KINE $30713 \quad$ Psychology of Sport 3

KINE 30733 Exercise Psychology 3

KINE 30843 Neuromuscular Pathophysiology 3
KINE 40103 Seminar in Kinesiology 3
KINE $40903 \quad$ Senior Internship 3
Emphasis Courses (choose 12 hours)
HLTH 30233 Sport and Exercise Pharmacology 3
HLTH 30423 Nutrition and Physical Activity 3

| HLTH 40203 | Study of Human Disease | 3 |
| :--- | :--- | :--- |
| KINE 20313 | Foundations of Sport Injuries | 3 |
| KINE 30523 | Exercise Assessment and Prescription | 3 |
| KINE 30833 | Physical Activity and Disability | 3 |
| KINE 40793 | Senior Research in Kinesiology | 3 |
| 3. Associated Requirements (27 hours) |  |  |
| BIOL 20204 | Anatomy and Physiology | 4 |
| BIOL 20214 | Anatomy and Physiology | 4 |
| CHEM 10113 | General Chemistry I | 3 |
| CHEM 10125 | General Chemistry II with Laboratory | 5 |
| MATH 10043 | Elementary Statistics | 3 |
| MATH 10054 | Precalculus with Trigonometry | 4 |
| PHYS 10154 | General Physics I with Laboratory | 4 |

4. Electives as needed to complete (124 hours)

## Physical Education, BS

The physical education option provides the educational preparation for a career in the teaching profession. Students earn a degree that prepares them to teach physical education in grades K-12. The addition of the strength and conditioning emphasis provides the knowledge and skills necessary to become a strength and conditioning coach. In order to earn a teaching certification, students must comply with the requirements described in the College of Education section (p. 67) of the catalog. Specific requirements involve criteria for admission and retention to the teacher education program and admission to student teaching.

## Requirements

1. Core Curriculum (core hours depending on the number of coupled courses): (39-63 hours)
2. Major: Physical Education (41 hours)

Kinesiology Core (14 hours)

| KINE 10101 | Introduction to Kinesiology | 1 |
| :--- | :--- | :--- |
| KINE 10603 | Anatomical Kinesiology | 3 |
| KINE 30403 | Motor Behavior | 3 |
| KINE 30623 | Biomechanics | 3 |
| KINE 30634 | Exercise Physiology | 4 |
| Foundation Courses (24 hours) |  |  |
| KINE 20313 | Foundations of Sport Injuries | 3 |
| KINE 20403 | Physical Education for Elementary School Children | 3 |
| KINE 30343 | Theory of Coaching | 3 |
| KINE 30833 | Physical Activity and Disability | 3 |
| KINE 40313 | Individual and Dual Sports | 3 |
| KINE 40623 | Physical Education for Secondary School Youth | 3 |
| KINE 40633 | Teaching Outdoor Education in the Secondary | 3 |

Emphasis Courses (choose 6 hours)
KINE $30713 \quad$ Psychology of Sport 3
KINE 30733 Exercise Psychology 3
KINE 30423 Motor Development 3

## 3. Associated Requirements ( $\mathbf{2 5}$ hours)

EDUC 20003 Critical Investigation:Teaching and Learning 3
EDUC $30001 \quad$ Professional Practice Seminar 1
EDUC 30013 Professional Roles and Responsibilities 3

EDUC 30123
EDUC 30143
EDUC 30603
EDUC 40213
EDUC 40966
Educational Psychology

## 4. Electives as needed to complete ( 124 hours)

## Physical Education with Strength and Conditioning BS

The physical education portion of this option provides students with the educational preparation for a career in the teaching profession. Students earn a degree that enable them to teach physical education in grades K-12. The addition of the strength and conditioning emphasis adds the knowledge and skills necessary to become a strength and conditioning coach. To earn a teaching certification, students must meet and comply with the requirements described in the "Teacher Education Program" section of this bulletin. Specific requirements involve criteria for admission and retention to the teacher education program, and admission to student teaching.

## Requirements

## 1. Core Curriculum (core hours depending on the number of coupled courses): (39-63 hours) <br> 2. Major: Physical Education with Strength and Conditioning (53 hours) <br> Kinesiology Core (14 hours)

KINE $10101 \quad$ Introduction to Kinesiology 1
KINE 10603 Anatomical Kinesiology 3
KINE 30403 Motor Behavior 3
KINE 30623 Biomechanics 3
KINE 30634 Exercise Physiology 4

## Foundation Courses (24 hours)

KINE $20313 \quad$ Foundations of Sport Injuries 3
KINE $20403 \quad$ Physical Education for Elementary School Children 3
KINE 30343 Theory of Coaching 3
KINE 30423 Motor Development 3
KINE $30833 \quad$ Physical Activity and Disability 3
KINE 40313 Individual and Dual Sports 3
KINE 40623 Physical Education for Secondary School Youth 3
KINE 40633 Teaching Outdoor Education in the Secondary 3
School
Emphasis Courses (choose 15 hours)
KINE $30713 \quad$ Psychology of Sport 3
KINE 30733 Exercise Psychology 3
KINE 30523 Exercise Assessment and Prescription 3
KINE $40513 \quad$ Principles of Strength and Conditioning 3
KINE $40543 \quad$ Advanced Strength and Conditioning 3
HLTH $30423 \quad$ Nutrition and Physical Activity 3
3. Associated Requirements ( $\mathbf{2 5}$ hours)

EDUC 20003 Critical Investigation:Teaching and Learning 3
EDUC 30013 Professional Roles and Responsibilities 3
EDUC 30123 Educational Psychology 3
EDUC 30143 Child and Adolescent Development 3
EDUC 30603 Study of Exceptional Students 3
EDUC 30001 Professional Practice Seminar 1

## 4. Electives as required (124 hours)

## Sport Psychology, BS

The sport psychology major provides students with the educational background to pursue a graduate degree in sport psychology, exercise psychology or sport sociology. This major prepares students for academic positions or sport and exercise psychology consulting.

## Requirements

## 1. Core Curriculum (core hours depending on the number of coupled courses): (39-63 hours)

2. Major: Sports Psychology (47 hours)

Kinesiology Core ( $\mathbf{1 4}$ hours)

| KINE 10101 | Introduction to Kinesiology | 1 |
| :--- | :--- | :--- |
| KINE 10603 | Anatomical Kinesiology | 3 |
| KINE 30403 | Motor Behavior | 3 |
| KINE 30623 | Biomechanics | 3 |
| KINE 30634 | Exercise Physiology | 4 |

## Foundation Courses ( 18 hours)

KINE 30713 Psychology of Sport
KINE 30723 Sociology of Sport 3
KINE 30733 Exercise Psychology 3
KINE $30833 \quad$ Physical Activity and Disability 3
KINE 40103 Seminar in Kinesiology
HLTH 30203 Health and Stress Management
Emphasis Courses (choose $\mathbf{1 5}$ hours)
KINE $20313 \quad$ Foundations of Sport Injuries 3
KINE 30423 Motor Development 3
KINE 30343 Theory of Coaching 3
KINE 40313 Individual and Dual Sports 3
KINE $40513 \quad$ Principles of Strength and Conditioning 3
KINE $40793 \quad$ Senior Research in Kinesiology 3
KINE 40903 Senior Internship 3
$\begin{array}{ll}\text { 3. Associated Requirements (21 hours) } \\ \text { MATH } 10043 & \text { Elementary Statistics }\end{array}$
PSYC 10213 General Psychology 3
PSYC 30343 Social Psychology 3
PSYC 30363 Abnormal Psychology 3
PSYC $30443 \quad$ Psychology of Personality 3
SOCI 20213 Introductory Sociology 3
SOCI $30743 \quad$ Gender and Society 3

## 4. Electives as required to complete ( $\mathbf{1 2 4}$ hours)

## Athletic Training, BS

The Bachelor of Science in Athletic Training (BSAT) prepares graduates to sit for the Board of Certification (national certification) Examination and/or the Texas Advisory Board State License Examination. The BSAT is accredited by the Commission on Accreditation of Athletic Training Education (CAATE.)
Certified athletic trainers are educated in the prevention, recognition, management and rehabilitation of injuries that result from physical activity. Athletic training is recognized by the American Medical Association as an allied health care profession. Students who desire to work as an athletic
trainer in the high school setting should consider a double major in physical education.

## Admission Requirements

Admission to the Athletic Training Education Program (ATEP) is competitive and requires the student to complete an application separate from the TCU undergraduate admission application. Admission to the program is limited (approximately 10-12 students per year). Students are admitted on a rolling basis once they have been accepted to TCU. Applicants are encouraged to submit their application to the Athletic Training Education Program at the same time they submit their application to the TCU admissions office.
To be considered for admission into the ATEP students must submit:

- TCU letter of acceptance;
- Completed ATEP application;
- Two letters of recommendation;
- Copy of all academic transcripts (high school and college, if applicable);
- Copy of current First Aid and CPR/AED certification cards; and
- An interview may be required for some candidates prior to admission. Interviews will be scheduled by the ATEP if necessary.
Transfer students are evaluated on a case-by-case basis and should contact the Program Director prior to application.
Upon admission, students are required to have a physical exam by the TCU
ATEP Medical Director; show documentation of immunization for hepatitis B, measles, mumps, rubella, tetanus and diphtheria; varicella (or documentation of history of the chicken pox); show proof of a current TB skin test; and attest that they meet the technical standards established by the program.
Visit www.tcuathletictraining.tcu.edu to download a copy of the application and technical standards or visit the athletic training education office (Rickel 172) in TCU's Department of Kinesiology.


## Requirements

1. Core Curriculum (core hours depending on the number of coupled courses): (39-63 hours)
2. Athletic Training Major (71 hours)

## Kinesiology Core (14 hours)

KINE $10101 \quad$ Introduction to Kinesiology 1
KINE 10603 Anatomical Kinesiology 3
KINE 30403 Motor Behavior 3
KINE 30623 Biomechanics 3
KINE $30634 \quad$ Exercise Physiology 4
Foundation Courses (37 hours)
KINE $10102 \quad$ Foundations of Athletic Training 2
KINE $10202 \quad$ Perspectives in Athletic Training 2
KINE $20102 \quad$ Clinical Education I 2
KINE $20202 \quad$ Clinical Education II 2
KINE $20303 \quad$ Care and Prevention of Athletic Injuries 3
KINE $30102 \quad$ Clinical Education III 2
KINE $30202 \quad$ Clinical Education IV 2
KINE 30303 Orthopedic Assessment I 3
KINE $30313 \quad$ Orthopedic Assessment II 3
KINE 30603 General Pathology and Applied Pharmacology 3
KINE $40102 \quad$ Clinical Education V 2
KINE $40202 \quad$ Clinical Education VI 2
KINE $40301 \quad$ Senior Seminar in Athletic Training 1
KINE $40303 \quad$ Organization and Administration in Athletic 3
KINE 40523 Therapeutic Modalities 3
KINE $40533 \quad$ Therapeutic Exercise 3

## Emphasis Courses (choose 12 hours)

| HLTH 20203 | Health and Wellness Concepts | 3 |
| :--- | :--- | :--- |
| HLTH 30233 | Sport and Exercise Pharmacology | 3 |
| KINE 20313 | Foundations of Sport Injuries | 3 |
| KINE 30713 | Psychology of Sport | 3 |
| KINE 30803 | Adapted Physical Activity | 3 |
| KINE 30833 | Physical Activity and Disability | 3 |

3. Associated Requirements (11 hours)

BIOL 20204 Anatomy and Physiology
BIOL 20214 Anatomy and Physiology
MATH 10043
Elementary Statistics
NTDT 20403 Nutrition

## 4. Electives as needed to complete ( 124 hours)

## Retention Policy

Requirements for Retention. To be retained in the Athletic Training Program, students must maintain a 2.75 or better cumulative GPA, earn a 2.75 or higher semester GPA, earn a "C" or better in all courses required to complete the major, complete the clinical proficiencies assigned for the semester, and be in good standing academically with the University and comply with University and program policies. Failure to meet the requirements for retention could delay the student's clinical education progress and ultimately the student's date of graduation.
Probation. Probation will serve as a warning to students that their progress in the program is not satisfactory. Students will be placed on probation if one or more of the requirements for retention are not met in a given semester. Students receiving a deficient grade in a course required for the major must repeat the course the next time the course is offered during the regular academic year (fall or spring semesters). Students may elect to repeat the course in the summer, provided the course is not offered during the respective academic year and is repeated in the summer immediately following the academic year in which the deficient grade was received. Tutor sessions (if available) for a repeat course will be required during the semester the course is repeated. Students not currently on probation, who do not meet the cumulative GPA requirement, will be limited to 20 hours per week in the athletic training room, will be required to complete 10 hours of study hall per week, and may not travel to away competitions. Students not meeting semester GPA requirements will be limited to 25 hours per week in the athletic training room and will be required to complete five hours of study hall per week. Students receiving a deficient grade in a course required for the major will be limited to 25 hours per week in the athletic training room and will be required to complete five hours of study hall per week during the semester in which the course is repeated. Students will be removed from probation if the requirements for retention are satisfied at the completion of the semester.
Suspension. Students not meeting the cumulative GPA requirement for a second semester (consecutive or non-consecutive) and/or receiving a deficient grade in a course required for the major upon retaking the course may be suspended from the program. Students on suspension will not be given a clinical assignment and will be required to complete weekly study hall hours and tutor sessions as assigned by the program director. Students will be removed from suspension if the requirements for retention are satisfied at the completion of the semester. Students removed from suspension may be required to complete weekly study hall hours as assigned by the program director for a minimum of one additional semester.
Dismissal from the Program. Students who have not met the requirements for retention following a semester on suspension will be considered for dismissal from the program. Other circumstances (e.g, sacrificing patient confidentiality, not adhering to program policies and procedures) may result in a student being considered for immediate dismissal and will be handled on a case-by-case basis.
The program director, in consultation with the chair of the Department of Kinesiology and the program faculty/staff, will make decisions regarding the dismissal of a student from the program. The program director will meet with the student to discuss the decision and reason(s) for dismissal. A letter will be placed in the student's file. A copy will be sent to the student and the chair of the Department of Kinesiology. Students shall not continue in the athletic training major (ATTR) and will be required to file a change of major form with the dean's office. Students must return all clothing issued to them as a result of their involvement in the Athletic Training Program. Failure to return
clothing in a timely manner will result in a hold being placed on the student's TCU account.

## Kinesiology Minors

The Department of Kinesiology offers academic minors in movement science, health, physical education and fitness. The minors offered by the department may not be taken by students majoring in any one of the five majors offered by the department.

## Movement Science Minor

| The minor in movement science requires $\mathbf{1 9}$ hours as follows: |  |  |
| :--- | :--- | :--- |
| KINE 10603 | Anatomical Kinesiology | 3 |
| KINE 30403 | Motor Behavior | 3 |
| KINE 30423 | Motor Development | 3 |
| KINE 30623 | Biomechanics | 3 |
| KINE 30634 | Exercise Physiology | 4 |

Elective Courses (choose 3 hours)
KINE 30523 Exercise Assessment and Prescription 3
KINE 30713 Psychology of Sport 3
KINE $30833 \quad$ Physical Activity and Disability 3

## Health Minor

The minor in health requires 18 or 19 hours as follows:
HLTH 20203 Health and Wellness Concepts 3
HLTH 30233 Sport and Exercise Pharmacology 3
HLTH 30203 Health and Stress Management 3
HLTH $30423 \quad$ Nutrition and Physical Activity 3

## Choose two of the following:

HLTH 30213 Health Aspects of Human Sexuality 3
HLTH 40203 Study of Human Disease 3
KINE 30634 Exercise Physiology 4
KINE 30733 Exercise Psychology 3
HLTH 30213 Recommended for students entering the teacher preparation field.
HLTH 40203 Recommended for students entering medical or allied health fields.

## Physical Education Minor

This minor is designed for individuals who want to teach physical education as a second teaching field. This minor alone will not suffice for certification. To obtain Texas teacher certification, students must hold or achieve a bachelor's degree in another teaching field and have completed the 31 additional course hours in the Teacher Education Program of the University. Students must also have successfully completed the appropriate state certification exams for the subject and grade level they wish to teach.
The minor in physical education requires $\mathbf{1 8}$ hours as follows:
KINE 10603
Anatomical Kinesiology
KINE $20403 \quad$ Physical Education for Elementary School Children

KINE 30803 Adapted Physical Activity
OR
KINE 30833
Physical Activity and Disability

KINE 40623
Physical Education for Secondary School Youth

## Choose two of the following:

| KINE 30423 | Motor Development | 3 |
| :--- | :--- | :--- |
| KINE 30623 | Biomechanics | 3 |
| KINE 30634 | Exercise Physiology | 4 |
| HLTH 30423 | Nutrition and Physical Activity | 3 |

## Fitness Minor

## The minor in fitness requires 19 hours as follows: <br> KINE 10603 Anatomical Kinesiology 3

KINE 30523 Exercise Assessment and Prescription 3
KINE 30634 Exercise Physiology 4
KINE $40513 \quad$ Principles of Strength and Conditioning 3

## Choose 6 additional hours:

KINE $20303 \quad$ Care and Prevention of Athletic Injuries
KINE 30343
Theory of Coaching
KINE 40543 Advanced Strength and Conditioning

## Nursing

The Harris College, Nursing, enabled by a trust fund established by the late Dr. Charles Houston Harris, was organized as an academic unit of TCU in 1946. The nursing program is accredited by the Texas Board of Nursing (BON), P.O. Box 430, Austin, TX 78767-0430; 512.305.7400. Graduates are eligible to sit for the examination for licensure as a registered nurse (R.N.) in Texas or any other state in the United States. Successful completion of the National Council Licensure Examination (NCLEX) in one state qualifies graduates to apply for licensure in any other state. Harris College, Nursing, achieved national accreditation in 1952 and has remained accredited since that time. In addition to the BON accreditation, the program is accredited by the Commission on Collegiate Nursing Education (CCNE), One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120; 202.887.6791.

In compliance with the policy of the Texas Board of Nursing (BON), all applicants are informed that completion of the BSN degree offered through Harris College does not guarantee eligibility for the registered nurse licensure examination. Professional character is necessary for an individual to conform to the requirements of the Nurse Practice Act. Individuals should seek special advising prior to enrolling in any professional nursing program in Texas if they have a personal history involving conditions that may endanger the health and safety of a person. Such conditions include but are not limited to a felony conviction involving acts likely to affect professional practice; a misdemeanor conviction involving moral turpitude; or physical or mental disability/illness, including prior or continued drug or alcohol abuse that influences the ability to practice professional nursing. (Texas Board of Nursing, excerpts from the Rules and Regulations Relating to Professional Nurse Education, Licensure, Peer Assistance and Practice, Texas Administrative Code, Title 22, Part 11, Chapters 215 and 217). Clinical facilities in the DallasFort Worth area require criminal background checks and drug screenings of students. A positive drug screen or criminal background may prevent the student from practicum course enrollment or completion. Further licensure information is available at:
Office of the Director, Division of Undergraduate Studies
Harris College, Nursing
Texas Christian University
TCU Box 298620
Fort Worth, TX 76129
In compliance with the Americans with Disabilities Act (ADA), a description of the abilities required for admission to and completion of the BSN curriculum is available upon request from the director of nursing.

## Nursing Program of Study

## Mission

The TCU Nursing Program endorses the University's mission and vision while upholding academic and practice environments that foster excellence in professional nursing. The mission of the program is to promote health by
liberally educating ethical nurse leaders who provide competent, evidencebased care, and by advancing scholarship that informs the discipline and practice of nursing. The program is dedicated to professional nursing education based on a foundation of liberal arts, sciences and humanities and to the promotion of an environment that encourages lifelong learning. TCU Nursing strives to enhance the human condition by preparing graduates who think and practice as ethical leaders, and by advancing knowledge of health and human development within the global community. The program is designed to meet the needs of those seeking the Bachelor of Science in Nursing degree.

## Philosophy

The faculty of TCU Nursing affirms that individuals are holistic beings who possess inherent worth. The faculty believes that the education of the professional nurse should prepare a graduate who exhibits qualities of mind and character that are necessary to live a fulfilling life, act in the public interest locally and globally, and promote health and the nursing profession. The teaching/learning process is multidimensional and interactive, involving affective, cognitive and psychomotor changes. A liberal educational foundation assists persons to think critically and to seek improvement in themselves, the profession and society. A liberal education provides the basis for the development of core competencies and knowledge of professional nursing. TCU Nursing embraces the professional values of altruism, autonomy, human dignity, integrity and social justice. Nursing practice, conduct and relationships are guided by professional standards and the ANA Code of Ethics for Nurses. Sound clinical judgments characterize the practice of the professional nurse in providing safe, humanistic care of individuals, families and groups in and across diverse environments.
Portions of the above are based on the Essentials of Baccalaureate Education for Professional Nursing Practice, published by the American Association of Colleges of Nursing (2008), Washington, D.C.

## Program Goals

- Support the University's mission, vision, core values and goals
- Prepare graduates who are competent to meet the unique, multiple and complex human health needs of a global society
- Promote values and behaviors that encourage respect for diversity, acknowledge human worth and dignity, and support professional nursing practice
- Foster an appreciation for the necessity of learning, thinking critically, and continuing to grow personally and professionally
- Contribute to the nursing profession and society by engaging in scholarship, leadership and service


## Nursing Degrees

TCU offers the Bachelor of Science in Nursing (BSN).

## Nursing Major Admission

Each student must complete the criminal background check as required by the Texas Board of Nursing (BON) and submit proof of eligibility to take the NCLEX. Only three pieces of documentation are accepted:

1. Blue postcard from the BON stating that the criminal background check is clear
2. Declaratory order outcome letter stating that the student is eligible to take NCLEX
3. An eligibility order from the BON

## TCU Continuing Students (entered TCU as a freshman; major-nursing)

Continuing TCU nursing majors should submit an intent to enroll in first nursing courses by Oct. 1 for the spring semester and Feb. 1 for the fall semester.

## Change of Major Students (entered TCU as a freshman; major other than nursing)

A TCU student may change to the nursing major if he or she has completed one semester of coursework at TCU and has a 2.5 TCU cumulative GPA. It is strongly recommended that the change of major be completed as soon as possible, but at least one semester prior to the first semester of nursing courses. Change of major requests must be completed by Feb. 1 for the spring semester. Students who enter nursing after the first semester of their freshman year will be on a $41 / 2$ year plan of study.

## Transfer Students (out of high school at least one full semester and attempted college or university work elsewhere for credit)

Transfer applicants use Nursing CAS (Centralized Application Service for Nursing Programs). The deadline for application for initial entry into nursing
courses by transfer students is Feb. 1 for the fall semester. Admission Assessment (A2) scores are required with the application. Transfer applicants are advised to contact TCU Nursing as early as possible in the application process.
The number of transfer students admitted to nursing courses is determined by the availability of faculty, facilities and the number of qualified continuing TCU students. Selection of transfer students for initial entry into nursing courses is based on indicators of the applicant's likelihood of success in the program and in professional practice.
Transfer students may not pursue a nursing major at TCU if they have been enrolled in another nursing program and were not in good standing upon exit or are not admissible to the previous program(s). All transfer student applicants who have been previously enrolled in a nursing program must submit a letter from the dean or director of that program indicating eligibility status for readmission.

## Additional Bachelor Degrees

A student with a previous undergraduate degree from TCU must meet the same enrollment requirements as other TCU students. A student with a bachelor's degree from another university is considered a transfer student.

## Accelerated BSN for Non-Nurse College Graduates

TCU Nursing offers an accelerated BSN track. Applicants with a bachelor's degree must have a GPA of 3.0 or higher in their first degree or their science prerequisites. Applicants without a bachelor's degree must have a GPA of 3.5 or higher in their current coursework or science prerequisites. Pathophysiology is a prerequisite for entry into the accelerated nursing track. The 16 -month course of study is full time with coursework beginning in August of each year. Admission is competitive based on academic record, entrance exam scores and completion of all prerequisite courses and core curriculum. Students must also comply with other admission requirements listed above. Those interested should contact TCU Nursing for admission requirements unique to this program.

## Nursing Re-enrollment

A student who has been a nursing major and leaves TCU must apply for reenrollment after an absence of a full fall or spring semester. If the student meets enrollment criteria, the Office of the Registrar will contact TCU Nursing to receive approval for the student to re-enroll as a nursing major. The student must meet the requirements for graduation based on the published TCU catalog at the time of re-entry into the nursing major. Re-entering students may be required to pass comprehensive mastery exam(s). Reenrollment is dependent on clinical space availability in practicum courses.

## Nursing Major Progression Policies (after enrollment in practicum)

Students must have a TCU cumulative GPA of 2.5 to progress to the next semester of practicum coursework.
Students may repeat one nursing course if less than a "C" or a no-credit (NC) grade is earned.
Students are discontinued from the major if grades of "C-", "D," "F" or "NC" are earned in two or more nursing courses (excluding NURS 10303).
Students may be discontinued from the nursing major if their academic, practicum or personal performance is determined to be inconsistent with professional responsibility and accountability. In rare instances, the safety of patients may necessitate removing a student from a practicum and/or the nursing program. Faculty members are responsible for recommending this action to the director of undergraduate student and clinical affairs when indicated.
As a minimum requirement for participating in a practicum, a student's performance must be in compliance with Nursing Scope and Standards of Practice published by the ANA, and the Texas Board of Nursing Rules and Regulations, including "not accepting an assignment when one's physical or emotional condition prevents the safe and effective delivery of care." When in the opinion of the instructor a student is not prepared for the educational activity or is in violation of these rules for any reason- including but not limited to, impairment by reasons of alcohol and/or drug abuse- the student is dismissed from practicum for the day. The instructor may recommend further action to the director of undergraduate student and clinical affairs.

## Requirements for Graduation

For the Bachelor of Science in Nursing, a student must have:

- 2.0 cumulative GPA for all coursework completed at TCU
- Completed 124 credits including all nursing courses required for the major with grades of "C" or higher or "P"


## - Completed all core curriculum requirements

## Multiple Majors

Nursing students, with the approval of appropriate academic deans, may pursue an additional major concurrent with nursing. Such students must declare nursing as the first major and complete all degree requirements for both nursing and the additional major. Students interested in this option are encouraged to meet with advisers from both majors to develop an academic plan.

## Computer Requirement

For all computer-based assessments, students are required to bring a Windows or Apple laptop that meets the software requirements of www.examsoft.com and TCU's learning management system.

## Fees and Other Expenses

Each clinical course carries a laboratory fee. Fees are charged for testing and academic resources per semester. All students planning licensure as a registered nurse in Texas are required to submit the required fee directly to the Board of Nursing and to the national company, which administers the test during the last semester of nursing coursework. Purchase of uniforms at the TCU bookstore is required. Professional liability insurance is required each year the student is enrolled in practicum coursework. Students are responsible for the cost of the urine drug screen and the criminal background check.

## Transportation

Limited city bus service is available for transportation to some practicum facilities. Plans should be made for the use of a car beginning with the first practicum nursing course.

## Employment

Students may be employed on or off campus, as opportunities are available and the course load and schedule permits. Work schedules should allow sufficient time for study. Because nursing is a demanding academic major, students are cautioned to carefully balance the number of work hours with course requirements. Students employed in clinical agencies may not wear the name tag or Harris College patch during such employment. Students who are employed in a clinical setting must not sign their names as nursing students.

## Health Professions Learning Center

The Health Professions Learning Center in the Annie Richardson Bass Building is available to nursing students to enhance independent learning and as a simulation and basic care lab for mastering clinical skills. In the Learning Center, students become active participants in an environment that facilitates both individual and small-group learning situations.

## Testing Program

Students are required throughout the program to complete computer-based standardized achievement tests. Results of these tests provide a basis for review of individual achievement as well as program effectiveness.

## Honors College

Nursing majors who plan to pursue departmental honors must be members of the Honors College and are advised carefully for such achievement. TCU Nursing supports and encourages participation in the Honors College.

## Nursing Scholarships and Grants

A variety of scholarships and grants are available. Applications are made through the Office of Scholarships and Financial Aid.

## Nursing Student Group

The Texas Nursing Student Association and the National Student Nurses' Association provide an opportunity to participate in local, state and national affairs. These organizations are concerned with the role of the nursing student, the role of the nurse in the community, and the future of nursing. Meetings take place throughout the semester, and regional meetings may be attended each semester. Participation is strongly encouraged.

## Sigma Theta Tau International

Since 1970 the Beta Alpha Chapter of the International Honor Society for Nursing, Sigma Theta Tau, has selected members on the basis of academic merit. Qualified students are invited to join during their junior or senior years.

## Nursing, BS

Requirements

## Students must meet the following requirements to enroll in the first semester of nursing coursework.

- The following prerequisites must be completed with a grade of "C" or higher before entering the first nursing courses.

| BIOL 20204 | Anatomy and Physiology | 4 |
| :--- | :--- | :--- |
| BIOL 20214 | Anatomy and Physiology | 4 |
| BIOL 20234 | Basic Microbiology | 4 |
| NURS 10303 | Human Development | 3 |
| PSYC 10213 | General Psychology | 3 |
| SOCI 20213 | Introductory Sociology | 3 |
| MATH 10043 | Elementary Statistics | 3 |
| NTDT 20403 | Nutrition | 3 |

- Enrollment in all nursing courses limited to the nursing major requires at least a 2.5 TCU cumulative GPA. Students who are repeatedly unable to achieve or maintain a 2.5 GPA prior to enrollment in nursing courses will be discontinued from the major.
- Current American Heart Association cardiopulmonary resuscitation (CPR) for health care providers card. (Online CPR courses do not meet this requirement.)
- Documentation of required immunizations (contact TCU Nursing for list).
- CPR, TB tests or other immunization documentation that will expire during a semester must be updated and documentation submitted to the nursing office by the start of the semester.
- No more than 12 credit hours of core curriculum that have not been completed.
- Completion of Admission Assessment (A2) (contact TCU Nursing to schedule; transfer students must submit scores with application).
- Documentation of health insurance.
- Drug screen and criminal background check as required by health care agencies and BON.
- Transfer students must take 6 credit hours of non-nursing courses at TCU, one of which must be a CA.

Current cardiopulmonary resuscitation (CPR) for health care providers card. (Online CPR courses do not meet this requirement.) Documentation of required immunizations (contact Harris College, Nursing, for list).

No more than 18 credit hours of core curriculum that have not been completed.

Completion of Admission Assessment (A2) (contact Harris College, Nursing, to schedule; transfer students must submit scores with application).

Documentation of health insurance.
Drug screen and criminal background check as required by health care agencies.

Transfer students must take two non-nursing courses at TCU, one of which must be a CA, GA or CSV.

Enrollment in all nursing courses limited to the nursing major requires at least a 2.5 TCU cumulative GPA. Students who are repeatedly unable to achieve or maintain a 2.5 GPA prior to enrollment in practicum courses will be discontinued from the major.

Current cardiopulmonary resuscitation (CPR) for health care providers card. (Online CPR courses do not meet this requirement.)

Documentation of required immunizations (contact Harris College, Nursing, for list).

No more than 18 credit hours of core curriculum that have not been completed.

Completion of Admission Assessment (A2) (contact Harris College, Nursing, to schedule; transfer students must submit scores with application). Documentation of health insurance.

- Drug screen and criminal background check as required by health care agencies.

Transfer students must take two non-nursing courses at TCU, one of which must be a CA, GA or CSV.

## Nursing Curriculum Plan

TCU Nursing, has an innovative curriculum designed to prepare graduates to work in a wide variety of agencies, clinics, home care agencies, and other community facilities in addition to hospitals and extended-care facilities. Emphasis in classrooms and patient care settings is on the development of critical thinking, clinical reasoning and decision-making. Students are expected to assume considerable responsibility for their own learning. They are expected to become increasingly independent in the exercise of clinical judgment and in application of nursing process to a variety of nursing problems and situations.
Nursing courses constitute approximately one-half of the four-year program. The sequence of nursing courses provides learning experiences in all major practice areas and in a variety of institutions and agencies in and around the Fort Worth-Dallas Metroplex.

## Typical Schedule

Schedules for TCU Core Curriculum courses may vary for individual students.

## Freshman Year

## Semester 1

| BIOL 20204 | Anatomy and Physiology | 4 |
| :--- | :--- | :--- |
| ENGL 10803 | Introductory Composition: Writing as Inquiry | 3 |
|  | Fine Arts Elective |  |
| OCO | Oral Communication |  |
| PSYC 10213 | General Psychology | 3 |

Subtotal: 16

## Semester 2

BIOL 20214 Anatomy and Physiology 4
NTDT 20403 Nutrition 3
SOCI 20213 Introductory Sociology 3
HT
Historical Traditions
Humanities Elective
Subtotal: 16

## Sophomore Year

## Semester 1

BIOL 20234 Basic Microbiology 4
ENGL 20803 Intermediate Composition: Writing Argument 3
MATH 10043 Elementary Statistics 3
RT Religious Traditions
NURS 10303 Human Development
3
Subtotal: 16

## Semester 2

NURS 20043 Professional Role I: Member of the Profession 3
NURS 20263 Health Assessment:Concepts 3
NURS 20271 Health Assessment:Lab 1
NURS 20363 Pathophysiology 3
Literary Traditions/Humanities
Elective
Subtotal: 16
Choice of elective will depend on other choices made within the HMVV and HEE

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## Junior Year

Summer work in non-nursing courses is recommended prior to junior year

## Semester 1

NURS 30163 Pharmacotherapeutics 3
NURS 30263 Foundations of Nursing Care: Concepts 3
NURS $30182 \quad$ Foundations of Nursing Care: Clinical 2
NURS 30171 Foundations of Nursing Care: Lab 1
NURS 30243 Professional Role II: Member of the Healthcare Team

Free Elective
Subtotal: 15
Semester 2

| NURS 30563 | Care of Adults with Health Alterations I: Concepts | 3 |
| :--- | :--- | ---: |
| NURS 30582 | Adults with Health Alterations I: Clinical | 2 |
| NURS 30663 | Behavioral Health Nursing: Concepts | 3 |
| NURS 30681 | Behavioral Health Nursing: Clinical <br> NURS 30633 | Professional Role III: Member of the Research and <br> Evidence Based Practice Community |
| NURS 30671 | Clinical Reasoning and Simulation I <br> Elective | 1 |

Subtotal: 15

## Senior Year

Semester 1

| NURS 40563 | Care of Adults with Health Alterations II: Concepts | 3 |
| :--- | :--- | :--- |
| NURS 40582 | Adults with Health Alterations II: Clinical | 2 |
| NURS 40663 | Maternal, Child and Family Nursing Concepts | 3 |
| NURS 40682 | Maternal, Child and Family Nursing: Clinical | 2 |
| NURS 40672 | Clinical Reasoning and Simulation II | 2 |

## Subtotal: 15

## Semester 2

| NURS 40763 | Leadership in Nursing Practice: Concepts | 3 |
| :--- | :--- | :---: |
| NURS 40782 | Transition into Practice: Clinical | 2 |
| NURS 40863 | Population Health Nursing: Concepts | 3 |
| NURS 40883 | Population Health and Leadership: Clinical | 3 |
| NURS 40871 | Clinical Reasonig and Simulation III | 1 |
|  | Elective |  |

Subtotal: 15
Subtotal: 124

## Social Work

Social work is one of the human service professions. Social workers help individuals, groups or communities solve or relieve life problems using a variety of professional skills. The educational program integrates liberal arts courses with preparation for professional practice. The primary objective of the department is to prepare students as generalists for entry to beginning social work practice. An additional objective is to prepare students for admission to graduate schools of social work (eligible for advanced standing in most master's degree programs).
The curriculum includes content in social welfare policy and services, human behavior and the social environment, social work practice, research and field education. It focuses on values and ethics, populations at risk and diversity. Concurrent with their academic work, students are provided service-learning opportunities in several classes. During the senior year, students complete a concurrent placement ( 12 academic hours) of field education (internship) in two semesters in a public or private social agency selected in accord with the
student's area of social work interest and educational needs.) Graduation with a BSW requires a "C" or better in all social work courses.
The Department of Social Work and the social work major (not the minor) are fully accredited at the baccalaureate level by the Council on Social Work Education (CSWE).
TCU's Department of Social Work does not discriminate on the basis of age, gender, race, color, ethnicity, national origin, handicap, veteran status, political beliefs or sexual orientation.

## Gatekeeping

The social work profession has the legal and ethical responsibility to protect both society and the profession by assessing students' readiness to work with clients. This gatekeeping responsibility is outlined in the BSW Handbook and is based on adherence to the NASW Code of Ethics. The faculty discusses students' professional development and readiness to interact with clients in the Junior Evaluation conference, which reinforces the gatekeeping process.

## Admission to BSW Field Education

Students may declare the social work major at any time. Admission to advanced standing in the Department of Social Work and field education requires that students:

- Have attained junior status;
- Have a 2.25 or higher overall GPA;
- Complete or be enrolled in SOWO 10833, SOWO 30803, SOWO 30833, SOWO 30843, SOWO 30853, SOWO 30863 and SOWO 30883.
- Have a 2.5 GPA in social work and a "C" or better in all SOWO courses; and
- Make written application and receive faculty approval based on the application and a student-faculty conference (Junior Evaluation) to evaluate readiness for field education. Field Education may be postponed or denied if the faculty finds the student insufficiently prepared or lacking required knowledge, skills or values.


## Honors College

Social Work majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in SOWO 30003 during the spring semester of their junior year and SOWO 40003 during the fall semester of their senior year.
Interdisciplinary Studies
Students may undertake an interdisciplinary program with a double major in Social Work and another major, even when different degrees are involved (BA and BS). Programs such as Social Work and Religion Studies, Social Work and Psychology, and others require faculty advisers in both fields to coordinate course and degree planning.

## Transfer Credit

Most core curriculum and related coursework from accredited universities will transfer. However, all courses used to satisfy the cultural awareness, global awareness, or citizenship and social values components of the TCU Core Curriculum must be taken at TCU. Social work courses from CSWEaccredited social work programs will be accepted toward the social work degree.

## Study Abroad

Students are encouraged to study abroad. The Department of Social Work expects that students take SOWO 30833 and 30883 in the spring semester prior to their internship year at TCU, so they should schedule study abroad accordingly.

## Social Work Honor Society

The department sponsors the lota Xi chapter of Phi Alpha, the national Social Work Honor Society. Membership is open to students who achieve a 3.0 overall GPA and a 3.25 GPA in social work.

## Social Work Licensing

As a requirement of the program, all students will sit for the Texas State Licensing Examination prior to graduation. BSW students take the licensure exam in their final semester and can be licensed as LBSWs in Texas. Licensing may be transferable to other states. Additional information can be found about licensure at the Texas Department of State Health Services website at: http://www.dshs.state.tx.us/socialwork/.

## Student Association of Social Workers (SASW)

The Student Association of Social Workers (SASW) is a recognized organization of the University with membership open to all TCU students who are interested in social work. SASW offers an opportunity for BSW, MSW
and other students to get involved in activities around campus and in the community. The organization began in the spring of 1978 in order to:

- Promote knowledge about social work at TCU
- Facilitate communication among students and between students and faculty
- Provide mutual support among students
- Promote social action and community service


## Social Work, BSW

The Bachelor of Social Work (BSW) degree is available. Social work is also available as a double major on the BS or BA degrees and as a minor on most degrees.

## Requirements for the BSW total 124 semester hours

## Include:

| BIOL 10003 | Contemporary Issues in Biology | 3 |
| :--- | :--- | :--- |
| MATH 10043 | Elementary Statistics | 3 |
| PSYC 10213 | General Psychology | 3 |

The following $\mathbf{1 2}$ hours are considered foundation courses and should be taken according to course prerequisites and requirements:
Foundation Courses 12 semester hours:

| SOWO 10833 | Introduction to Social Work | 3 |
| :--- | :--- | :--- |
| SOWO 30803 | Professional Communication in Social Work | 3 |
| SOWO 30863 | Social Welfare Policy | 3 |
| SOCl 20213 | Introductory Sociology | 3 |
|  | OR | 3 |


| Social Work Courses 27 semester hours: |  |  |
| :--- | :--- | :--- |
| SOWO 30833 | Macro Social Work Practice | 3 |
| SOWO 30843 | Human Behavior and Social Environment I | 3 |
| SOWO 30853 | Human Behavior and Social Environment II | 3 |
| SOWO 30883 | Micro Social Work Practice | 3 |
| SOWO 40813 | Research Methods in Social Work | 3 |
| SOWO 40886 | Field Education I | 6 |
| SOWO 40896 | Field Education II | 6 |

## Twelve hours chosen from SOWO electives, at least one from each of the following areas:

Diversity and Cultural Awareness

| SOWO 30513 | Social Work and Civil Rights | 3 |
| :--- | :--- | ---: |
| SOWO 30563 | Social Work and the Media | 3 |
| SOWO 30583 | Social Work and Diversity | 3 |
| SOWO 30580 | International Community Service (Mexico) | $3.00-$ |
|  |  | 9.00 |
| SOWO 30593 | Rights and Responsibilities of Citizens in the <br>  <br>  <br>  <br>  Global World | 3 |

## Methods of Practice

| SOWO 40423 | Ethics in Social Work Practice | 3 |
| :--- | :--- | :--- |
| SOWO 40453 | Social Work Practice with Diverse Populations | 3 |
| SOWO 40463 | Social Work with Groups and Families | 3 |
| SOWO 40543 | Social Work with Older Adults | 3 |

## Field of Practice

SOWO 30523 Addictions 3
SOWO 30533 Social Work in the Criminal Justice System ..... 3
SOWO 30543 Family Health Nursing ..... 3
SOWO 30553 Social Work with Adolescents ..... 3
SOWO 30573 Child Welfare ..... 3
SOWO 40513 Approaches to Healthy Aging ..... 3
SOWO 40523 Law and Social Work ..... 3
SOWO 40563 Death and Dying ..... 3

The following options may fit any of the above areas depending on content. The BSW program director will determine under which topic area each fits.

| SOWO 10533 | Freshman Seminar in Social Work | 3 |
| :--- | :--- | ---: |
| SOWO 30003 | Honors Tutorial in Social Work | 3 |
| SOWO 40003 | Senior Honors Research Project | 3 |
| SOWO 40510 | Directed Study in Social Work | $1.00-$ |
|  |  | 20.00 |
| SOWO 40520 | Contemporary Topics in Social Work | 3 |

## Social Work Minor

## Requirements

| A minor in social work requires $\mathbf{1 8}$ hours of SOWO courses, <br> including |  |  |
| :--- | :--- | :--- |
| SOWO 10833 | Introduction to Social Work | 3 |
| SOWO 30863 | Social Welfare Policy | 3 |
| SOWO 30843 | Human Behavior and Social Environment I <br> SOWO 30853 | 3 |

Additional courses are to be selected from the social work curriculum, excluding SOWO 40886 and SOWO 40896.
A grade of " C " or better is required in all social work courses for the minor.

## College of Science \& Engineering

## Science \& Engineering Program of Study

The College of Science \& Engineering supports the mission of TCU and:

- Integrates the research and undergraduate teaching missions;
- Prepares graduates for careers and further study in science, mathematics and engineering;
- Assists in the preparation of highly qualified $\mathrm{K}-12$ mathematics and science teachers; and
- Provides experiences for all TCU students that will facilitate their becoming and continuing to be scientifically and mathematically literate citizens.
The college offers the Bachelor of Science degree with majors in 18 fields of study and the Bachelor of Arts degree with majors in 7 fields. Minors are available in 19 fields.
The college is responsible for the Pre-Health Professions programs (predentistry, pre-medicine, pre-veterinary medicine).
College of Science \& Engineering faculty are committed to teaching and are actively engaged in scholarly activity that contributes to their profession and informs their teaching on all levels. Opportunities for participation in research exist in every department and program of the college. Many faculty members involve undergraduates in their research programs. These students often work jointly with graduate students and postdoctoral associates in departments where graduate programs exist. To assist in these activities, the college houses SERC (Science and Engineering Research Center) to serve as a gateway of support for undergraduate research activities.


## Multiple Majors

Students with a first major in the College of Science \& Engineering may declare an additional major in lieu of or in addition to a minor on either a BA or BS degree. The additional major may be selected from the College of Science \& Engineering's list of approved majors or may be selected from majors available in other TCU schools and colleges. Students seeking an additional major in a school or college other than the College of Science \& Engineering must have the approval of the dean of the college and the dean of the additional major.
Students with a first major in another TCU school or college may select additional majors from those available in the College of Science \& Engineering with the approval of the dean of the first major and the dean of the College of Science \& Engineering.
The degree awarded will be that appropriate to the major designated as the first major. All degree requirements for each major must be satisfied. These include TCU Core Curriculum requirements and all associated requirements.
Courses applied to the requirements of one major may only be applied to the associated requirements of another major.

## Transfer Credit

Students wishing to take courses at another college or university following their admission to TCU must receive approval of such courses through the office of the dean of the College of Science and Engineering before enrolling in them.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations in the Bachelor's Degree section of the University requirements. See the department of the major for any additional restrictions.
Up to (but no more than) 3 hours earned in elective courses that are offered only on a pass/no-credit basis may be applied to meet major or minor requirements within the College of Science and Engineering. Additional hours in such courses may be used as free electives or for majors or minors in other colleges (as permitted by those colleges).

## College of Science \& Engineering Organization

The College of Science \& Engineering is organized into eight departments and one school.

## Departments

Biology

Chemistry \& Biochemistry
Computer Science
Engineering
Mathematics
Nutritional Sciences
Physics \& Astronomy
Psychology
The School of Geology, Energy \& the Environment (SGEE)
Sid W. Richardson houses the departmental offices of chemistry, environmental science, geology, physics and astronomy and the Institute for Environmental Studies. Biology and psychology are in Winton-Scott Hall. Nutritional sciences is in the Annie Richardson Bass Building. College administrative offices, departmental offices for computer science, engineering and mathematics are located in the Tucker Technology Building.

## Interdepartmental Programs

Child Development (Psychology)
Neuroscience (Psychology)
Pre-Health Professions

## College of Science \& Engineering Degrees

The College of Science \& Engineering administers programs that lead to the following baccalaureate degrees:
The Bachelor of Arts degree with majors in:

- Biology
- Chemistry
- Child Development (Psychology)
- Geology
- Mathematics
- Physics
- Psychology

The Bachelor of Science degree with majors in:

- Applied Geoscience (SGEE)
- Astronomy and Physics
- Biochemistry
- Biology
- Chemistry
- Child Development (Psychology)
- Computer Information Technology (Computer Science)
- Computer Science
- Dietetics (Nutritional Sciences)
- Engineering
- Environmental Science (SGEE)
- Food Management (Nutritional Sciences)
- Geology (SGEE)
- Mathematics
- Neuroscience (Psychology)
- Nutrition (Nutritional Sciences)
- Physics
- Psychology

The Bachelor of Combined Science

## College of Science \& Engineering Minors

The College of Science \& Engineering offers minors in:

- Applied Physics
- Astronomy
- Biology
- Chemistry
- Child Development (Psychology)
- Combined Science
- Computer Information Technology
- Computer Science
- Data Science
- Energy Technology and Management (SGEE)
- Environmental Science (SGEE)
- Geology (SGEE)
- Health Care Ethics
- Mathematics
- Nutrition
- Physics
- Psychology
- Psychology of Leadership
- Sustainability (SGEE)

Minors for students majoring in the College of Science \& Engineering are also accepted from AddRan College of Liberal Arts, College of Fine Arts, Bob Schieffer College of Communication, College of Education, M.J. Neeley School of Business (General Business) and Harris College of Nursing \& Health Sciences.
Only associated requirements of the major may be applied to the requirements of a minor. Courses applied to the requirements of one minor may not be applied to the requirements of another minor.

## College of Science \& Engineering, BA

Students pursuing a program leading to a Bachelor of Arts degree must complete a minimum of 124 semester hours, 42 of which must be advanced ( 30000 level or above) from TCU, with a major and a minor selected from the approved list of majors and minors. The specific number of hours required for the major and minor are found in the appropriate section of this catalog.
In addition, students must complete the TCU Core Curriculum.

## Foreign Language Requirement

All students pursuing the Bachelor of Arts degree in the College of Science and Engineering must demonstrate competency in a foreign language equivalent to the completion of one of the following:
CHIN 20063 Intermediate Chinese II
FREN 20063 Fourth Semester College French
GRMN 20063
Intermediate German
GREE 20063
Fourth Semester College Greek (Hellenistic)
ITAL 20063
Fourth Semester College Italian
JAPN 20063
Fourth Semester College J apanese
Intermediate Spanish 2
SPAN 2021
Intensive Intermediate Spanish 2
This requirement may be satisfied by either satisfactory completion of coursework taken at or transferred to TCU or by presenting satisfactory scores on recognized standardized tests (i.e., AP, CLEP or SAT II). Required scores on standardized tests may be found in the Credit by Exam booklet available from the Office of Admission. For languages not currently taught at TCU, six semester hours at the sophomore level, transferred to TCU from another accredited institution, may be used to satisfy this requirement. Students may also provide evidence of competency in the non-English language by successfully completing one academic year in a secondary or
post-secondary institution in which the language of instruction is other than English, for which the student will receive 12 hours of credit.

## College of Science \& Engineering BS

Students pursuing a program leading to a Bachelor of Science degree must complete a minimum of 124 semester hours, 42 of which must be advanced (30000 level or above) from TCU, specified for their particular major. Specific requirements of each major are found in the appropriate section of this catalog. Where a minor is called for, it is to be selected with the assistance of the student's adviser from the list of approved minors.
In addition to the specific requirements, students must complete the TCU Core Curriculum.

## Applied Geoscience

The major in applied geoscience is administered by the School of Geology, Energy \& the Environment (SGEE) and is available on the BS degree. The degree combines geology, environmental science and geospatial technology; students completing it will analyze, manage and map earth resources, water and groundwater resources, soils and sediment, pollution/contaminants and conservation efforts with an understanding of today's environmental regulations. Students completing this degree will have the potential to pursue their Geoscientist-in-Training (GIT) license for the state of Texas and select from four different geoscience certificate options.

## Administration and Advising

Each student prepares an individual program of study (POS) designed, with an adviser, specifically for the student's background and goals.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36) in the Bachelor's Degree section of the University requirements.
Up to (but no more than) 3 hours earned in elective courses that are offered only on a pass/no-credit basis may be applied to meet major or minor requirements within the College of Science and Engineering. Additional hours in such courses may be used as free electives or for majors or minors in other colleges (as permitted by those colleges).

## Geoscience Fundamentals Exam

The Fundamentals of Geoscience (FG) exam is administered in the spring and fall by the Association of State Boards of Geology (ASBOG). SGEE students pursuing licensing as a professional geoscientist are advised to take the fundamentals exam immediately following graduation. More information is available from the Texas Board of Professional Geoscientists at https://tbpg.state.tx.us and ASBOG at www.asbog.org.

## Applied Geoscience, BS Requirements

The program of study requires a minimum of 36 hours, on a 126 -hour degree, consisting of:
Required Geology/Environmental Science courses: $\mathbf{3 6}$ hours
ENSC $10143 \quad$ Contemporary Environmental Issues 3
GEOL 10113 Understanding the Earth 3
ENSC 30363 Introduction to Geospatial Technology 3
GEOL 50523 Introduction to Geographic Information Systems 3
GEOL 30443 Earth Materials 3
GEOL 30413 Evolution of Plate Boundaries 3

GEOL 30423 Structural Geology 3
ENSC 50703 Environmental Compliance 3
Choose 1 (3hrs) From ENV LEADERSHIP GROUP:
ENSC 50793 Environmental Sustainability 3
ENSC 40193 Environmental Stewardship Seminar 3

## Choose 1 (3hrs) From GEOLOGY GROUP:

| GEOL 30573 | Stratigraphy |
| :--- | :--- |
| GEOL 40313 | Invertebrate Paleontology |
| GEOL 30243 | Sedimentology |
| GEOL 40970 | Special Problems |
| Choose 1 (3hrs) From LAND SURFACE GROUP: |  |
| GEOL 40493 | Geomorphology |
| GEOL 40393 | Soils in the Environment |
| Choose 1 (3hrs) | From WATER GROUP: |
| ENSC 50723 | Water and Wastewater Technology |
| GEOL 50493 | Physical Hydrology |
| ENSC 50763 | Groundwater Hydrology |
| ENSC 50403 | Rivers in the Landscape |
| Choose 1 (3hrs) | From FIELD RESEARCH GROUP: |
| ENSC 30403 | Field Methods |
| GEOL 50713 | Environmental Geology |
| ENSC 50613 | Chemical Analysis of Environmental Systems |
| ENSC 30453 | Wildlife Research Project |

Associated Requirements: 28-29 hours (required and elective)

Contemporary Issues in Biology OR

| BIOL 30613 | Natural History |
| :--- | :--- |
| CHEM 10113 | General Chemistry I |
| MATH 10043 | Elementary Statistics |
| MATH 10524 | Calculus I |
|  | OR |

MATH 10283 Applied Calculus 3

PHYS $10154 \quad$ General Physics I with Laboratory

## 12 additional hours of

Science, engineering, math or computer science electives selected with regard to the interest of the student as approved by the adviser.

## Biology

Biology is available as a major or minor on both the BA and BS degrees.
The $B A$ is provided for the student who has a strong interest in the biological sciences but who desires a broader-based area of study or who is interested in pursuing multiple majors. The degree is appropriate for students interested in graduate or health-related professional schools but may require additional coursework to fulfill certain prerequisites. The BS degree offers an expanded study of the biological sciences and includes associated requirements that provide a broader knowledge of the physical sciences. Required courses within the BS degree will meet many prerequisites of graduate and health-related professional schools.

## Prerequisites

BIOL 10501, 10503, 10511 and 10513 or the equivalent are prerequisites to all other courses in the department except BIOL 20204-20214, BIOL 20234, BIOL 30233, BIOL 30613 and BIOL 30803. Credit is not given for both BIOL 20234 and BIOL 30304.

## Honors College

Biology majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in BIOL 40001 during their junior year and BIOL 40033 during the fall semester of their senior year. They will be given an incomplete in BIOL 40033 during the end of the fall semester and will receive credit for the course in the spring after successfully completing a senior honors research project.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36) in the Bachelor's Degree section of the University requirements.

## Biology, BS

## Requirements

The program of study requires a minimum of 35 hours, on a 124-hour degree, consisting of:
Minimum of 35 hours of biology:
BIOL 10501 Introductory Biology Lab I 1
BIOL 10503 Introductory Biology I 3
BIOL 10511 Introductory Biology Lab II 1
BIOL 10513 Introductory Biology II 3
BIOL 30403 Ecology and the Environment 3
BIOL 30603 Cellular, Molecular, and Developmental Biology 3
21 additional hours in biology, including a minimum of three courses with laboratories.
A maximum of 6 hours in independent research courses is permitted within the 21 additional hours
BIOL 40033 Senior Honors Research in Biology 3
BIOL 40803 Biological Research and Writing 3
BIOL 40900 Independent Research in Biology 1

A maximum of 4 hours and one laboratory will be granted within the additional 21 hours for completion of both Anatomy and Physiology courses.

| BIOL 20204 | Anatomy and Physiology | 4 |
| :--- | :--- | :--- |
| BIOL 20214 | Anatomy and Physiology | 4 |

Biology majors are required to take the major's Field Test in Biology in their senior year.
Associated Requirements:

| CHEM 10113 | General Chemistry I | 3 |
| :--- | :--- | :--- |
| CHEM 10123 | General Chemistry II | 3 |
| CHEM 10122 | General Chemistry II Laboratory |  |
|  | OR | 3 |
| CHEM 20123 | Quantitative Analysis | 3 |
|  |  | 3 |
| CHEM 30123 | Organic Chemistry I | 3 |
| CHEM 30121 | Organic Chemistry I Laboratory | 4 |
| CHEM 30133 | Organic Chemistry II | 4 |
| PHYS 10154 | General Physics I with Laboratory | 3 |
| PHYS 10164 | General Physics II with Laboratory | 3 |
| MATH 10043 | Elementary Statistics | 4 |

Additional courses in mathematics, computer science or statistics are encouraged.

## Biology, BA

## Requirements

The program of study requires a minimum of 26 hours, on a 124 -hour degree, consisting of:
A minimum of $\mathbf{2 6}$ semester hours of biology:
BIOL 10501 Introductory Biology Lab I
BIOL 10503 Introductory Biology I 3

| BIOL 10511 | Introductory Biology Lab II | 1 |
| :--- | :--- | :--- |
| BIOL 10513 | Introductory Biology II | 3 |
| BIOL 30403 | Ecology and the Environment | 3 |
| BIOL 30603 | Cellular, Molecular, and Developmental Biology | 3 |

12 additional approved hours in biology, including a minimum of two courses with laboratories (excluding BIOL 40033, BIOL 40803, and BIOL 40900).

A maximum of 3 hours, of the 12 additional hours, will be allowed for any combination of the following courses:

| BIOL 40033 | Senior Honors Research in Biology | 3 |
| :--- | :--- | :---: |
| BIOL 40320 | Teaching of Introductory-Level Biology | $1-$ |
| BIOL 40330 | Teaching of Advanced Biology | 2 |
|  |  | $1-$ |
| BIOL 40803 | Biological Research and Writing | 8 |
| BIOL 40900 | Independent Research in Biology | 3 |
|  |  | $1-$ |
|  |  | 3 |

A maximum of 4 hours and one laboratory will be granted within the additional 12 hours for completion of both Anatomy and Physiology courses.

| BIOL 20204 | Anatomy and Physiology | 4 |
| :--- | :--- | :--- |
| BIOL 20214 | Anatomy and Physiology | 4 |

Biology majors are required to take the major's Field Test in Biology in their senior year.
Students without credit for a high school course in chemistry are encouraged to take two semesters of college chemistry. One year of high school or two semesters of college physics is also advised.

## Biology Minor

## Requirements

The program of study requires a minimum of 21 semester hours of biology, including a minimum of three upper-division ( 30000 or above) courses.
A maximum of 3 hours will be given for any combination of the following courses:
BIOL 40033 Senior Honors Research in Biology 3
BIOL 40320 Teaching of Introductory-Level Biology 1-

BIOL 40330 Teaching of Advanced Biology 1-

BIOL 40803
Biological Research and Writing
Independent Research in Biology
1

## Chemistry \& Biochemistry

Chemistry is available as a major or minor on the BA and BS degrees. Biochemistry is available as a major on the BS degree.

## Honors College

A student may obtain Departmental Honors in chemistry by successfully completing 6 hours of senior honors research (CHEM 40003 and 40013) or 3 hours of senior honors research plus three hours of study in a course approved by the department as one promoting the student's development as a research scholar. Such a course should be in addition to those normally required to achieve the baccalaureate degree. Requirements also include the writing of a Senior Honors Research paper, which is approved by an appropriate committee, and achieving of an overall GPA of 3.5 or greater.
Pass/No-Credit Option
See the Bachelor's Degree Definitions and Regulations (p. 36) in the Bachelor's Degree section of the University requirements.

## Chemistry, BS

## Requirements

The program of study requires a minimum of 38 hours, on a 124 -hour degree, consisting of:
A minimum of $\mathbf{3 8}$ hours of CHEM
CHEM 10113 General Chemistry I 3

CHEM 10123 General Chemistry II 3
CHEM 10122 General Chemistry II Laboratory 2
OR
CHEM 20123 Quantitative Analysis 3

CHEM 30123 Organic Chemistry I 3
CHEM 30133 Organic Chemistry II 3
CHEM $30121 \quad$ Organic Chemistry I Laboratory 1
CHEM 30143 Organic Qualitative Analysis 3
CHEM 40091 Senior Seminar 1
CHEM $40121 \quad$ Physical Chemistry I Lab 1
CHEM 40123 Physical Chemistry I 3
CHEM $40131 \quad$ Physical Chemistry II Lab 1
CHEM 40133 Physical Chemistry II 3
CHEM 50163 Advanced Inorganic Chemistry 3

CHEM 40172 Chemical Instrumentation 2

CHEM 50162 Advanced Inorganic Chemistry Laboratory

CHEM 40200 Undergraduate Research 1

OR
CHEM 40003 Senior Honors Research Project 3
CHEM 40013 Senior Honors Research Paper 3
And one additional advanced course selected from
CHEM 50282 Advanced Physical Chemistry 2
CHEM 50133 Biochemistry I 3
CHEM 50223 Advanced Organic Chemistry 3
Professional certification by the American Chemical Society requires the inclusion of
CHEM 20123 Quantitative Analysis 3

CHEM 40172 Chemical Instrumentation 2
CHEM 50162 Advanced Inorganic Chemistry Laboratory 2
CHEM 50133 Biochemistry I 3
CHEM $50282 \quad$ Advanced Physical Chemistry 2
Resulting in a minimum of 43 hours of chemistry.

## Associated Requirements:

| PHYS 10154 | General Physics I with Laboratory | 4 |
| :--- | :--- | :--- |
| PHYS 10164 | General Physics II with Laboratory | 4 |
|  | OR |  |
| PHYS 20474 | Physics I with Laboratory: Mechanics | 4 |
| PHYS 20484 | Physics II with Laboratory: Electromagnetism and <br> Optics | 4 |


| MATH 10524 | Calculus I | 4 |
| :--- | :--- | :--- |
| MATH 20524 | Calculus II | 4 |

MATH 30524 is recommended for CHEM 50282.

## Chemistry, BA

Requirements

| The program of study requires a minimum of 24 hours, on a 124 -hour degree, consisting of: |  |  |
| :---: | :---: | :---: |
| A minimum of 24 hours of CHEM |  |  |
| CHEM 10113 | General Chemistry I | 3 |
| CHEM 10123 | General Chemistry II | 3 |
| CHEM 10122 | General Chemistry II Laboratory | 2 |
|  | OR |  |
| CHEM 20123 | Quantitative Analysis | 3 |
| CHEM 30123 | Organic Chemistry I | 3 |
| CHEM 30121 | Organic Chemistry I Laboratory | 1 |
| CHEM 40091 | Senior Seminar | 1 |
| CHEM 40123 | Physical Chemistry I | 3 |
| CHEM 40121 | Physical Chemistry I Lab | 1 |
| Suitable electives chosen from upper-level courses (30000 or above) with the exclusion of |  |  |
| CHEM 40503 | Basic Biochemistry | 3 |
| CHEM 50111 | Laboratory Glassblowing | 1 |
| CHEM 50120 | Teaching of Chemistry | 1 - |

No more than two hours of research (CHEM 40200 or CHEM 40003-40013) may contribute to the 24 -hour minimum.

## Associated Requirement:

MATH 10524 Calculus
Any minor approved by the College of Science \& Engineering is acceptable. The BA degree in chemistry is devised for students with a general interest in the field who do not plan to pursue graduate studies in chemistry. Students planning a professional career in chemistry are strongly advised to satisfy the requirements of the BS degree.

## Biochemistry, BS <br> Requirements

The program of study requires a minimum of 38 hours, on a 124 hour degree, consisting of

| A minimum of $\mathbf{3 8}$ hours of CHEM |  |  |
| :--- | :--- | :--- |
| CHEM 10113 | General Chemistry I | 3 |
| CHEM 10123 | General Chemistry II | 3 |
| CHEM 10122 | General Chemistry II Laboratory | 2 |
|  | OR |  |
| CHEM 20123 | Quantitative Analysis | 3 |
|  |  | 3 |
| CHEM 30123 | Organic Chemistry I | 3 |
| CHEM 30133 | Organic Chemistry II | 1 |
| CHEM 30121 | Organic Chemistry I Laboratory | 3 |
| CHEM 30143 | Organic Qualitative Analysis | 3 |
| CHEM 40091 | Senior Seminar | 1 |
| CHEM 40123 | Physical Chemistry I | 3 |
| CHEM 40121 | Physical Chemistry I Lab | 1 |


| CHEM 40200 | Undergraduate Research | $1-$ |
| :--- | :--- | ---: |
|  | OR | 4 |
| CHEM 40003 | Senior Honors Research Project | 3 |
|  | AND |  |
| CHEM 40013 | Senior Honors Research Paper | 3 |
| CHEM 50163 | Advanced Inorganic Chemistry | 3 |
| CHEM 50502 | Biochemistry Laboratory | 2 |
| CHEM 50133 | Biochemistry I | 3 |
| CHEM 50143 | Biochemistry II | 3 |

Professional certification by the American Chemical Society
requires the inclusion of
CHEM 20123 Quantitative Analysis ..... 3
CHEM 40172 Chemical Instrumentation ..... 2
CHEM 40013 Senior Honors Research Paper ..... 3
CHEM 40131 Physical Chemistry II Lab ..... 1
CHEM 50162 Advanced Inorganic Chemistry Laboratory ..... 2
Resulting in a minimum of 46 hours of chemistry
Associated Requirements
BIOL 10501 Introductory Biology Lab I ..... 1
BIOL 10503 Introductory Biology I ..... 3
BIOL 10511 Introductory Biology Lab II ..... 1
BIOL 10513 Introductory Biology II ..... 3
BIOL 30603 Cellular, Molecular, and Developmental Biology ..... 3
And one of: (3 hours)
BIOL 40123 Genetics ..... 3
BIOL 40133 Molecular Biology of Eukaryotes ..... 3
BIOL 40403 Mammalian Physiology ..... 3
AND
PHYS 10154 General Physics I with Laboratory ..... 4
PHYS 10164 General Physics II with Laboratory ..... 4
OR
PHYS 20474 Physics I with Laboratory: Mechanics ..... 4
PHYS 20484Optics
MATH 10524 Calculus 1 ..... 4
ANDMATH $10043 \quad$ Elementary Statistics3
ORProbability3
Chemistry Minor
Requirements
The program of study requires a minimum of 18 semester hours to include:
Required Courses
CHEM 10113 General Chemistryl 3
CHEM 10123 General Chemistry II ..... 3
General Chemistry II Laboratory
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CHEM 20123
OR
Quantitative Analysis

CHEM 30121
Organic Chemistry I Laboratory
1
CHEM 30123
Organic Chemistry I

## Suitable electives chosen from

| CHEM 30133 | Organic Chemistry II | 3 |
| :--- | :--- | :--- |
| CHEM 30143 | Organic Qualitative Analysis | 3 |
| CHEM 40091 | Senior Seminar | 1 |
| CHEM 40123 | Physical Chemistry I | 3 |
| CHEM 40121 | Physical Chemistry I Lab | 1 |
| CHEM 50133 | Biochemistry I | 3 |
| CHEM 50163 | Advanced Inorganic Chemistry | 3 |

## Child Development

The child development major and minor is administered by the Department of Psychology.
Child development is available as a major and a minor on both the BA and BS degrees.
The child development major is a multidisciplinary program drawing upon the strengths of four colleges and nine disciplines:

- Child Development
- Communication Sciences and Disorders
- Sociology
- Criminal Justice and Anthropology
- Education
- Nutritional Sciences
- Nursing
- Psychology
- Social Work

Its interdisciplinary focus is designed for students who wish to go into jobs or areas of study in child development, such as children's mental health, preschools or Head Start, as well as provide comprehensive insight into the issues of child development. The major will also work well for students who wish to double major in areas such as psychology, social work, criminal justice, communication sciences and others. This major provides students who want to work with children in these disciplines an edge in their chosen field of study.
Students who wish to major in child development must have either a minor OR a second major and must apply to the program. Program requirements include a sophomore standing, a minimum 2.5 GPA, a criminal background check and a completed application. Applications are available at www.child.tcu.edu or in the Department of Psychology, Winton-Scott Hall Room 240.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36)in the Bachelor's Degree section of the University requirements.

## Child Development, BS

## Requirements

The program of study requires a minimum of 45 hours, on a 124-hour degree, consisting of:

## Required Courses (31 hours)

| CHDV 25053 | Children in the Global Community | 3 |
| :--- | :--- | :--- |
| CHDV 35053 | Professional Development in Careers with Children | 3 |
| CHDV 40993 | Senior Seminar in Child Development | 3 |
| CHDV 50433 | Vulnerable Child I:Theory | 3 |


| CHDV 50443 | Vulnerable Child II: Practice | 3 |
| :--- | :--- | :--- |
| CHDV 50533 | Case Studies in Child Development | 3 |
| COSD 30334 | Language Development in Children | 4 |
| NTDT 30113 | Infant and Child Nutrition | 3 |
| PSYC 30473 | Comparative Psychology | 3 |
| SOWO 30843 | Human Behavior and Social Environment I | 3 |

## Elective Courses ( $\mathbf{1 5}$ hours)

## Area A (choose one)

EDUC 30143 Child and Adolescent Development 3

PSYC $30323 \quad 3$

## Area B (choose one)

EDUC 50143 Theories of Human Development 3

NURS 10303 Human Development 3
PSYC 30313 Developmental Psychology 3
PSYC 40433 Advanced Developmental Psychology 3
PSYC 50563 Developmental Psychology 3
Students may not take both EDUC 30143 and EDUC 50143.

## Area C (choose three; courses must be from two different departments)

CHDV 40223 Fundamentals of Child Life Practice 3
CHDV 40263
Child Development Internship
Survey of Communication Disorders
COSD 10303
COSD 10343
Basic Sign Language
3
3
COSD 20333 Phonetics 3
COSD 30343 Aural Rehabilitation 3
COSD 50323 Counseling Special Populations and Their Families 3
CRJU 30453 Juvenile Justice 3
CRJU 30913 Social Psychology of Crime 3
EDEC 30103 Introduction to Early Childhood Education 3
EDSP 30603 Study of Exceptional Students 3
FNRT $20903 \quad$ Children, Creativity and the Fine Arts 3
PSYC 30363 Abnormal Psychology 3
PSYC $30483 \quad$ Human Neuropsychology 3
PSYC $30623 \quad$ Families and Child Adjustment 3
PSYC 30633 Social and Emotional Development 3
PSYC $40443 \quad$ Child Development in a Cultural Context 3
PSYC 40453 Behavior Disorders of Childhood 3
PSYC 40463 Applied Behavior Analysis 3
SOCI 30303 Marriage and the Family 3
SOCI 40463 Juvenile Delinquency 3
SOWO 30573 Child Welfare 3
SOWO 40413 Animal Assisted Therapy in Social Work 3
Independent Studies CHDV, COSD, EDUC, PSYC,
SOWO, SOCl or CRJU
Special Topics/Problems (CHDV, COSD, EDUC,
PSYC, SOWO, SOCl or CRJU)
A maximum of six hours of independent study may count toward BS major requirements.

## Associated Requirements

| BIOL 10003 | Contemporary Issues in Biology | 3 |
| :--- | :--- | :--- |
| MATH 10043 | Elementary Statistics | 3 |
| PSYC 10213 | General Psychology | 3 |


| PSYC 10514 | Principles of Behavior I |
| :--- | :--- |
|  | OR |
| PSYC 10524 | Principles of Behavior II |
| PSYC 30503 | Behavioral Research |
| SOCI 20213 | Introductory Sociology |
| SOWO 10833 | Introduction to Social Work |

## Child Development, BA

## Requirements

The program of study requires a minimum of 36 hours, on a 124-hour degree, consisting of:

## Required Courses (18 hours)

| CHDV 25053 | Children in the Global Community | 3 |
| :--- | :--- | :--- |
| CHDV 35053 | Professional Development in Careers with Children | 3 |
| CHDV 40993 | Senior Seminar in Child Development | 3 |
| CHDV 50433 | Vulnerable Child I: Theory | 3 |
| CHDV 50443 | Vulnerable Child II: Practice | 3 |
| CHDV 50533 | Case Studies in Child Development | 3 |

## Elective Courses (18 hours)

Area A (choose one)

| EDUC 30143 | Child and Adolescent Development | 3 |
| :--- | :--- | :--- |
| PSYC 30323 | Child Psychology | 3 |

## Area B (choose one)

EDUC 50143 Theories of Human Development 3
NURS 10303 Human Development 3
PSYC 30313 Developmental Psychology 3
PSYC 40433 Advanced Developmental Psychology 3
PSYC 50563 Developmental Psychology
Note: Students may not take both EDUC 30143 and EDUC 50143
Area C (choose three; courses must be from two different departments)
CHDV 40263
COSD 20333
Child Development Internship

COSD 30334
EDEC 30103
EDSP 30603
FNRT 20903 Children, Creativity and the Fine Arts
NTDT 30113
Infant and Child Nutrition
PSYC 30473
Comparative Psychology
PSYC 30483
PSYC 30633
SOCI 30303
Human Neuropsychology
Social and Emotional Development

SOWO 30843
Marriage and the Family

Area D (Choose one course)
CHDV 40223
Fundamentals of Child Life Practice
COSD 10343
COSD 20333
COSD 30343
Basic Sign Language

COSD 50323 Counseling Special Populations and Their Families
CRJU 30453
Juvenile Justice
CRJU 30913
Social Psychology of Crime

PSYC 30363
PSYC 30623
PSYC 40443
PSYC 40463
SOCI 40463
SOWO 30573
SOWO 40413
Animal Assisted Therapy in Social Work
Independent Studies CHDV, COSD, EDUC, PSYC, SOWO, SOCl or CRJU
Special Topics/Problems (CHDV, COSD, EDUC, PSYC, SOWO, SOCI or CRJU)
A maximum of six hours of independent study may count toward BA major requirements.
Associated Requirements

| BIOL 10003 | Contemporary Issues in Biology | 3 |
| :--- | :--- | :--- |
| MATH 10043 | Elementary Statistics | 3 |
| PSYC 10213 | General Psychology | 3 |
| PSYC 10514 | OR | 4 |
|  | Principles of Behavior I | 4 |
| PSYC 10524 | OR | 4 |
| PSYC 30503 | Behavioral Research | 3 |
| SOCI 20213 | Introductory Sociology | 3 |
| SOWO 10833 | Introduction to Social Work | 3 |

## Child Development Minor Requirements

The child development minor is a multidisciplinary program drawing upon the strengths of several colleges and disciplines.
Students wishing to earn the child development minor are required to take 18 hours of coursework. Courses must be selected from at least three different departments and may include the department of the student's major. No more than six hours may be taken from one department, and no more than three hours may be taken from Independent Studies and Special Topics courses combined. Case Studies in Child Development will be the only required course for students in the minor. Its interdisciplinary focus is designed to give students in the minor comprehensive insight into the issues of child development. Faculty are available within each of the departments to monitor availability and suitability of Special Topics courses and other special opportunities. Advising is available within the Child Development Program.
The program of study requires 18 semester hours:

## Required Course (3 hours)

CHDV $50533 \quad$ Case Studies in Child Development

## Elective Courses (15 hours)

Choose five courses; no more than six hours may be taken from any one department.
CHDV 25053 Children in the Global Community 3

CHDV $35053 \quad$ Professional Development in Careers with Children
CHDV 40263 Child Development Internship 3
CHDV 50433 Vulnerable Child I:Theory 3
CHDV 50443 Vulnerable Child II:Practice 3
COSD 10303 Survey of Communication Disorders 3
COSD 10343 Basic Sign Language 3

Language Development in Children
COSD 50323
CRJU 30453
CRJU 30913
EDEC 30103
EDUC 30143
EDUC 50143
FNRT 20903
NTDT 30113
NURS 10303
PSYC 30313
PSYC 30323
PSYC 30363
PSYC 30473
PSYC 30483
PSYC 30623
PSYC 30633
PSYC 40433
PSYC 40443
PSYC 40463
PSYC 50563
SOWO 30573
SOWO 30843
SOCI 30303
Counseling Special Populations and Their Families
Juvenile Justice
Social Psychology of Crime 3
Introduction to Early Childhood Education 3
Child and Adolescent Development 3
Theories of Human Development 3
Children, Creativity and the Fine Arts 3
Infant and Child Nutrition 3
Human Development 3
Developmental Psychology 3
Child Psychology 3
Abnormal Psychology 3
Comparative Psychology 3
Human Neuropsychology 3
Families and Child Adjustment 3
Social and Emotional Development 3
Advanced Developmental Psychology 3
Child Development in a Cultural Context 3
Applied Behavior Analysis 3
Developmental Psychology 3
Child Welfare 3
Human Behavior and Social Environment I 3
Marriage and the Family 3

Independent Studies CHDV, COSD, EDUC, PSYC, SOWO, SOCl or CRJU
Special Topics/Problems (CHDV, COSD, EDUC, PSYC, SOWO, SOCI or CRJU)
PSYC 40433 and NTDT 30113 are writing emphasis courses
A maximum of six hours of independent study may count toward major requirements; while a maximum of three hours of independent study/special topics may count toward minor requirements.
See department listings for descriptions. Approved list of courses is maintained in the psychology office, Winton-Scott Hall Room 240.

## Combined Science

Combined science is available as a minor on both the BA and BS degrees.

## Bachelor of Combined Science

A program leading to a Bachelor of Combined Science degree is available for students whose educational goals might not be realized by traditional majors within the College of Science and Engineering.

## Requirements

The program of study requires a minimum of 42 hours, on a 124-hour degree, consisting of:

1. At least 15 hours* in one department and 12 hours* in a second department in the College of Science \& Engineering.
2. At least 12 hours* of advanced level ( 30000 or above) coursework in the College of Science \& Engineering taken at TCU.
3. At least 42 hours* of coursework in the College of Science \& Engineering.
4. A GPA of at least 2.00 in coursework used to satisfy requirement \#3.
5. A total of 124 semester hours.
*Each course used in partial fulfillment of this requirement must be applicable to the major or associated requirements for one of the disciplines in the College of Science \& Engineering.

## Combined Science Minor

## Requirements for the minor follow one of two patterns:

The program of study requires 24 semester hours selected from the options below:

1. Three introductory sequences ( $6-8$ hours each) from different departments in the College of Science \& Engineering, plus 6-8 hours of upper level courses in one of these three departments, or
2. Two introductory sequences ( $6-8$ hours each) from different departments in the College of Science \& Engineering, plus 6-8 hours of upper level courses in each of these two departments.

## Computer Information Technology

Computer information technology is available as a major on the BS degree and as a minor on both the BA and BS degrees.

## Honors College

Computer science and computer information technology majors who are members of the Honors College and who have a minimum 3.5 GPA in the major may pursue Departmental Honors by enrolling in COSC 50970 during the fall of their senior year and preparing a senior honors project.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36) in the Bachelor's Degree section of the University requirements.
Up to (but no more than) 3 hours earned in elective courses that are offered only on a pass/no-credit basis may be applied to meet major or minor requirements within the College of Science \& Engineering. Additional hours in such courses may be used as free electives or for majors or minors in other colleges (as permitted by those colleges).

## Computer Information Technology Student Organizations <br> Association for Computing Machinery

The department sponsors a student chapter of the Association for Computing Machinery (ACM), an international organization for computer scientists.

## IEEE/CS

The department sponsors a student chapter of the Institute of Electrical and Electronics Engineers/Computer Society, an international organization for computer scientists.

## Upsilon Pi Epsilon

The department sponsors a chapter of Upsilon Pi Epsilon, the International Honor Society for the Computing Sciences.

## Computer Information Technology, BS Requirements

The program of study requires of 45 hours, on a 124-hour degree, consisting of:

## Core Courses

COSC 10403 Introduction to Programming 3
COSC 20203 Techniques in Programming 3
COSC 20803 Data Structures 3
COSC 30203 Computer System Fundamentals 3
COSC 30603 Database Systems 3
COSC $40053 \quad$ Computer and Network Security 3
CITE 30103 Unix/Linux System Administration 3
CITE 30133 Advanced System and Network Administration 3
CITE 30153 Interface Design and Scripting Fundamentals 3
CITE 30363 Web Technologies 3
CITE 40643 Issues in Project Management 3

| CITE 40993 | Senior Development Project |  |
| :---: | :---: | :---: |
|  | And 9 hours of approved COSC or CITE electives | 9 |
| No more than 3 hours of CITE 20970 may be counted toward these requirements. |  |  |
| Additional requirements include: |  |  |
| MATH 10043 | Elementary Statistics | 3 |
|  | OR |  |
| INSC 20153 | Statistical Analysis | 3 |
| MATH 20123 | Discrete Mathematics I | 3 |
| MATH 10283 | Applied Calculus | 3 |
|  | OR |  |
| MATH 10524 | Calculus I | 4 |
| A computer information technology major must have a minimum 2.2 GPA in combined computer science and computer information technology coursework to graduate. |  |  |
| Computer Information Technology Minor |  |  |
| Requirements |  |  |
| The program of study requires of $\mathbf{1 8}$ semester hours including: |  |  |
| COSC 10403 | Introduction to Programming | 3 |
| CITE 30103 | Unix/Linux System Administration | 3 |
| CITE 30133 | Advanced System and Network Administration | 3 |
|  | Additional 9 hours from CITE or COSC courses | 9 |
|  | CITE 10003 cannot be applied toward the minor |  |

## Computer Science

Computer science is available as a major on the BS degree and as a minor on the $B A$ and $B S$ degrees.

## Honors College

Computer science and computer information technology majors who are members of the Honors College and who have a minimum 3.5 GPA in the major may pursue Departmental Honors by enrolling in COSC 50970 during the fall of their senior year and preparing a Senior Honors Project.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36) in the Bachelor's Degree section of the University requirements.
Up to (but no more than) 3 hours earned in elective courses that are offered only on a pass/no-credit basis may be applied to meet major or minor requirements within the College of Science \& Engineering. Additional hours in such courses may be used as free electives or for majors or minors in other colleges (as permitted by those colleges).

## Computer Science Student Organizations

## Association for Computing Machinery

The department sponsors a student chapter of the Association for Computing Machinery (ACM), an international organization for computer scientists.

## IEEE/CS

The department sponsors a student chapter of the Institute of Electrical and Electronics Engineers/Computer Society, an international organization for computer scientists.

## Upsilon Pi Epsilon

The department sponsors a chapter of Upsilon Pi Epsilon, the International Honor Society for the Computing Sciences.

## Computer Science, BS Requirements

| The program of study requires a minimum of 45 hours, on a 124-hour |  |  |
| :--- | :--- | :--- |
| degree, consisting of: |  |  |
| Core Requirements |  |  |
| COSC 10403 | Introduction to Programming |  |
| COSC 20203 | Techniques in Programming | 3 |
| COSC 20803 | Data Structures | 3 |
| COSC 30203 | Computer System Fundamentals | 3 |
| COSC 30253 | Computer Organization | 3 |
| COSC 30353 | Microprocessor Based Digital Systems | 3 |
| COSC 30403 | Programming Language Concepts | 3 |
| COSC 30603 | Database Systems | 3 |
| COSC 40203 | Operating Systems | 3 |
| COSC 40403 | Analysis of Algorithms | 3 |
| COSC 40603 | Compiler Theory | 3 |
| COSC 40943 | Software Engineering | 3 |
| COSC 40993 | Senior Design Project | 3 |
| CITE 30103 | Unix/Linux System Administration | 3 |
|  | 6hours of approved computer science electives |  |
|  | shall be selected from courses at the 30000 level or |  |
|  | above | 3 |
| Associated Requirements: |  |  |
| 17 hours of mathematics |  |  |
| MATH 10524 | Calculus I | 4 |
| MATH 20123 | Discrete Mathematics I | 3 |
| MATH 30123 | Discrete Mathematics II | 3 |
| MATH 30224 | Linear Algebra | 3 |
| MATH 10043 | Elementary Statistics | 3 |
|  | OR | 3 |
| MATH 30803 | Probability | 3 |

## A two-semester science sequence (including laboratories) Plus two additional one-semester science courses.

All science courses must be selected from biology, chemistry, environmental science, geology or physics. Courses for non-science majors may not be counted in this category.
A computer science major must have a minimum 2.2 GPA in all computer science coursework to graduate.

## Computer Science Minor Requirements

| The program of study requires $\mathbf{1 8}$ semester hours including: |  |  |
| :--- | :--- | :--- |
| COSC 10403 | Introduction to Programming | 3 |
| COSC 20203 | Techniques in Programming | 3 |
| COSC 20803 | Data Structures | 3 |
| COSC 30203 | Computer System Fundamentals | 3 |
|  | 6 hours selected from COSC 30000 and 40000 level  <br>  courses |  |

## Data Science Minor

## Requirements

The program of study requires 18 semester hours including:
COSC 10403 Introduction to Programming
COSC 20203 Techniques in Programming 3
COSC 20803
COSC 30603
Data Structures

COSC 40023
Data Mining and Visualization

## One of: (3 hours)

COSC 40403 Analysis of Algorithms

COSC 40503 Artificial Intelligence 3
COSC 40703 High Performance and Parallel Computing

## Energy Technology \& Management Minor

This minor is intended for any major wishing to also minor in energy technology and management. It will help provide students with an understanding of the current/emerging technologies and management strategies associated with the energy business. The minor requires 18 credits from the programs and departments listed below. Nine credits must be upper level ( 30000 and above).
No more than two courses from any program or department listed below may count for this minor. No grade lower than "C" may be applied to the minor. Any course substitutions or exceptions must be approved by the program adviser of the Energy Institute.
Up to (but no more than) 3 hours earned in elective courses that are offered only on a pass/no-credit basis may be applied to meet major or minor requirements within the College of Science \& Engineering. Additional hours in such courses may be used as free electives or for majors or minors in other colleges (as permitted by those colleges).

## Requirements

The program of study requires 18 semester hours, with a grade of C or better, selected from the options below:

## Business

MANA 30653 Survey of Management 3
MANA 40653 Survey of Entrepreneurship 3
MARK $30653 \quad$ Principles of Marketing 3
MANA 30773 Entrepreneurship and Energy 3

## Computer Science

COSC 10503 Introduction to Programming for Engineering and Science

## Economics (only one from this group)

ECON 10223 Introductory Microeconomics
ECON 10233 Introductory Macroeconomics
Engineering
ENGR 10033 Engineering Design and Graphics 3
ENGR 40203 Engineering Economic Analysis 3
ENGR 40303 Petroleum Industry Overview 3
ENGR 30113 Energy in Society 3

## Environmental Science

ENSC 10143 Contemporary Environmental ISsues
ENSC 40193 Environmental Stewardship Seminar

ENSC 50703
Environmental Compliance
ENSC 50523
Introduction to Geographic Information Systems

## Geology

GEOL 10113 Understanding the Earth 3

GEOL 30233 Rock Cycle 3
GEOL 30363 Introduction to Geospatial Technology 3
GEOL 40970 Special Problems 3
GEOL 50563 From Prospect to Production 3
GEOL 50423 Petroleum Geology 3
GEOL 50523 Introduction to Geographic Information Systems

## Physics

PHYS 10503
Energy

## Energy Technology and Management

ENTM $40970 \quad$ Directed Studies in Energy Technology and 1Management

3
ENTM $40803 \quad$ Advanced Readings in Energy 3
ENTM 40903
Energy Internship

## Engineering

In developing a strong engineering program within a traditional liberal arts setting, the faculty and staff of the Department of Engineering, with input from other constituents, have established Program Educational Objectives.
In their careers, we expect TCU engineering graduates to:

1. Apply scientific and mathematical fundamentals in the professional practice of engineering or related fields
2. Use effective communications and team skills to lead in their professions and communities
3. Demonstrate integrity, responsibility and accountability in their personal and professional lives
4. Be motivated to engage in life-long learning and professional development
Engineering is available as a major on the BS degree with the choice of either an electrical or mechanical emphasis. All programs of study include a solid liberal arts component and a fundamental core of engineering courses that provide a strong interdisciplinary background in engineering. They conclude with a three-semester design sequence, which is common to students in both areas of emphasis. The Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
The programs of study are identical for the first three semesters with an emphasis choice required during the second year. A minimum total of 129 hours of TCU Core Curriculum, engineering and associated courses is required for the BS degree with a major in engineering. All programs are based on a strong background in mathematics and the basic sciences. Suggested four-year course sequences are available from the Department of Engineering.

## Focus on Energy Systems

A focus area on energy systems is available in both the electrical and mechanical engineering emphases. It provides the opportunity to contribute solutions to the global energy problem and is designed for students wishing to work in the energy sector. Students acquire specific technical skills in energy systems in addition to a strong background in engineering fundamentals. Minimum required credit hours for students in this area of study are 135.

## Honors College

Engineering majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in ENGR 30003 during their junior year and ENGR 40003 during their senior year.

## Transfer Students

Transfer applicants should refer to General Policies in the Admission section of this catalog for general admission requirements and deadlines. A degree plan is prepared for each transfer student during the student's first semester of enrollment at TCU. The application of previous coursework to an engineering degree at TCU is based upon equivalency of content with TCU
courses. Special approval is required to complete any engineering emphasis courses outside of TCU. A maximum of 15 semester hours of transfer credit may be applied to the engineering core. All engineering courses must be from programs with ABET accreditation, unless otherwise pre-approved. Contact the Department of Engineering for additional information on its transfer policy and procedures.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36) in the Bachelor's Degree section of the University requirements.
Up to (but no more than) three hours earned in elective courses which are offered only on a pass/no-credit basis may be applied to meet major or minor requirements within the College of Science and Engineering. Additional hours in such courses may be used as free electives or for majors or minors in other colleges (as permitted by those colleges).

## Engineering BS

## Requirements

The program of study requires a minimum of 67 hours, on a 129hour degree, consisting of:
ENGR 10032
Static Mechanics
ENGR 10033 Engineering Design and Graphics
ENGR 10402
Circuit Analysis and Design I
ENGR 20404
Circuit Analysis and Design II
ENGR 20603 Solid Mechanics I
ENGR 20613
Dynamics and Vibrations
ENGR 30014
Materials Science
ENGR 30444
Electronics
ENGR 30623
Control Systems I
ENGR 30704
Thermal Sciences I
ENGR 30903
Issues in Engineering Design
ENGR 40203
Engineering Economic Analysis .

ENGR 40484
Electromechanics
ENGR 40903
Systems Design I
ENGR 40913
Systems Design II
A minimum of 19 semester hours in an engineering emphasis

## The electrical emphasis requirements include

ENGR 20413 Circuit Analysis and Design III 3

ENGR 30454 Electronics II 4
ENGR 30503 Signals and Systems 3
ENGR 30543 Engineering Electromagnetics

The mechanical emphasis requirements include
ENGR 20623
Solid Mechanics II
ENGR 30634
Manufacturing I
ENGR 30714
Thermal Sciences II
ENGR 30861 Mechanical Systems Lab
ENGR 40861
Mechanical Systems Lab II
ENGR 40871
Thermal Systems Lab II
6 hours of approved elective courses
All electives must be approved by an engineering faculty adviser to ensure that each student's program of study meets both University and engineering accreditation criteria.

Associated Requirements:
MATH $10524 \quad$ Calculus I

MATH 20524
Calculus II

MATH 30524
MATH 30613
MATH 30853
Differential Equations
Statistics
PHYS 20474
PHYS 20484

CHEM 10113
Physics I with Laboratory: Mechanics
Physics II with Laboratory: Electromagnetism and
Optics

One of: (3 hours)
COSC 10403 Introduction to Programming
COSC 10503 Introduction to Programming for Engineering and Science
ENGR 10573
Applied Programming Matlab

## Focus on Energy Systems Requirements

| In addition to the other requirements for completion of their |  |
| :--- | :--- |
| degree, students in this focus area must complete |  |
| ENGR 40213 | Sustainable Energy |
| Any three of the following: | 3 |
| ENGR 40223 | Petroleum Reservoir Management |
| ENGR 40743 | Thermal Systems Design |
| GEOL 50563 | From Prospect to Production |
| GEOL 50423 | Petroleum Geology |
| GEOL 50523 | Introduction to Geographic Information Systems |
| ENSC 40193 | Environmental Stewardship Seminar |

With approval of the department chair, up to 6 credit hours may be earned by doing undergraduate research, and up to 3 credit hours may be earned in an industrial internship program. Two of the courses taken to the complete the requirements of this focus area may count as engineering electives.

## TCU Core Curriculum Electives

The humanities and social science components of engineering programs should exhibit both breadth and depth in the subject areas. The Department of Engineering provides a list of suggested TCU Core Curriculum elective options that address this issue. All University Core Curriculum electives must be selected with the advice and approval of an engineering academic adviser.

## Engineering Electives

The electrical and mechanical emphasis engineering electives must be selected to assure an adequate content for the total program. All engineering electives must be selected with the advice and approval of an engineering academic adviser.

## Engineering Student Organizations

Several engineering and computer science student organizations have been established at TCU for the purpose of promoting professional goals and interests, and to provide fellowship and recreation for the members. Student chapters of the Institute of Electrical and Electronics Engineers (IEEE), American Society of Mechanical Engineers (ASME), American Institute of Aeronautics and Astronautics (AIAA), Association of Computing Machinery (ACM) and Society of Women Engineers (SWE) are active on campus. These groups meet regularly to participate in plant tours or to entertain speakers on topics of current interest to engineering students. All engineering students are encouraged to join one of the student organizations and participate in campus activities, as well as the activities of the affiliated local professional engineering societies. Students may also choose to become student members of the Texas Society of Professional Engineers (TSPE) and participate in their local chapter activities.

## Fundamentals of Engineering Examination

The Fundamentals of Engineering (FE) Examination is administered twice each year by the National Council of Examiners for Engineering and Surveying (NCEES). Review sessions are offered by the engineering faculty during the fall semester. All engineering students are encouraged and advised to take the fundamentals examination prior to graduation.

## Environmental Sciences

Environmental sciences is available as a major on the BS degree through the School of Geology, Energy \& the Environment (SGEE) and a minor on the BA or BS degrees.

## Administration and Advising

Each student prepares an individual program of study (POS) designed specifically for the student's particular background and goals. The POS is prepared in consultation with the chair of the Department of Environmental Sciences and the student's adviser.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36) in the Bachelor's Degree section of the University requirements.
Up to (but no more than) 3 hours earned in elective courses that are offered only on a pass/no-credit basis may be applied to meet major or minor requirements within the College of Science \& Engineering. Additional hours in such courses may be used as free electives or for majors or minors in other colleges (as permitted by those colleges).

## Course Scheduling

Although taught regularly, not all required courses are scheduled every semester. Exceptions to the major requirements or to course prerequisites will not be made because of failure to complete coursework in a timely fashion. In particular, since they serve as prerequisites to many advanced courses, the foundation courses and associated requirements should be completed as early as possible in a student's academic career.

## Environmental Sciences BS

## Requirements

The program of study requires a minimum of 67 hours, on a 126 -hour degree, consisting of:

| Environmental Science Core (31-32 semester hours) |  |  |
| :---: | :---: | :---: |
| BIOL 10003 | Contemporary Issues in Biology | 3 |
|  | OR |  |
| BIOL 10503 | Introductory Biology I | 3 |
|  | AND |  |
| BIOL 10501 | Introductory Biology Lab I | 1 |
| BIOL 30403 | Ecology and the Environment | 3 |
| GEOL 10113 | Understanding the Earth | 3 |
| ENSC 10143 | Contemporary Environmental Issues | 3 |
| ENSC 30133 | Concepts in Environmental Science | 3 |
| ENSC 40001 | Scientific Presentations | 1 |

Choose 1 (3hrs) From ENV LEADERSHIP GROUP:
ENSC 40193 Environmental Stewardship Seminar
ENSC 50793 Environmental Sustainability
Choose 1 (3hrs) From LAND SURFACE GROUP:
GEOL 40493 Geomorphology 3
GEOL 40393 Soils in the Environment
Choose 1 (3hrs) From WATER GROUP:
ENSC 50403 Rivers in the Landscape
GEOL $50493 \quad$ Physical Hydrology
ENSC $50723 \quad$ Water and Wastewater Technology
Choose 1 (3hrs) From COMPLIANCE GROUP:
ENSC 50693 Natural Resources Compliance
ENSC 50703 Environmental Compliance

Choose 1 (3hrs) From FIELD RESEARCH GROUP:
ENSC 30403 Field Methods 3
ENSC 30453 Wildlife Research Project 3
ENSC $50613 \quad$ Chemical Analysis of Environmental Systems 3
Associated Requirements (36-37 semester hours)
CHEM 10113 General Chemistry I 3
CHEM 10123 General Chemistry II 3
CHEM 10122 General Chemistry II Laboratory 2
PHYS 10154 General Physics I with Laboratory 4
MATH 10043 Elementary Statistics 3
MATH 10524 Calculus I 4
OR
MATH 10283 Applied Calculus 3

## 18 additional hours of

Science, engineering, math or computer science electives with regard to the interest of the student as approved by the adviser.

## Environmental Sciences Minor <br> Requirements

The program of study requires a minimum of 18 hours including a minimum of three upper-division ( 30000 or above) courses.
Courses may be chosen from biology, geology or environmental sciences. No grade lower than C- may be applied to the minor.

## Geology

Geology is available as a major or minor on both the BA and BS degrees through the School of Geology, Energy \& the Environment (SGEE).

## Honors College

Geology majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in GEOL 30003 during their junior year and GEOL 40013 during the fall semester of their senior year.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36) in the Bachelor's Degree section of the University requirements.
Up to (but no more than) 3 hours earned in elective courses that are offered only on a pass/no-credit basis may be applied to meet major or minor requirements within the College of Science \& Engineering. Additional hours in such courses may be used as free electives or for majors or minors in other colleges (as permitted by those colleges).

## Course Scheduling

Although taught regularly, not all required courses are scheduled every semester. Exceptions to the major requirements or to course prerequisites will not be made because of failure to complete coursework in a timely fashion. In particular, since they serve as prerequisites to many advanced courses, the foundation courses and associated requirements should be completed as early as possible in a student's academic career.

## Geology Student Organizations <br> Sigma Gamma Epsilon

The department is a sponsor of Sigma Gamma Epsilon, the Honor Society for Research in the Earth Sciences.

## Geology, BS <br> Requirements

The program of study requires a minimum of 33 hours, on a 126 -hour degree, consisting of:

## Core Requirements

GEOL 10113 Understanding the Earth

| GEOL 30213 | Mineralogy |
| :--- | :--- |
| GEOL 30223 | Petrology |
| GEOL 30243 | Sedimentology |
| GEOL 30423 | Structural Geology |
| GEOL 30573 | Stratigraphy |
| GEOL 40313 | Invertebrate Paleontology |
| GEOL 40516 | Summer Field Course in Geology |
|  | 6 hours of approved elective courses |

Associated Requirements: 38-39 Hours
ENSC 10143 Contemporary Environmental Issues 3
MATH 10524 Calculus I 4

| PHYS 10154 | General Physics I with Laboratory |
| :--- | :--- |
| PHYS 10164 | General Physics II with Laboratory |
|  | OR |
| PHYS 20474 | Physics I with Laboratory: Mechanics |
| PHYS 20484 | Physics II with Laboratory: Electromagnetism and <br> Optics |


| CHEM 10113 | General Chemistry I |
| :--- | :--- |
| CHEM 10123 | General Chemistry II |
| CHEM 10122 | General Chemistry II Laboratory |
|  |  |
| MATH 20524 | Calculus II |
|  | OR |
| MATH 10043 | Elementary Statistics |
|  | OR |
| INSC 20153 | Statistical Analysis |


| One of: (3-4 hours) |  |
| :--- | :--- |
| MATH 10043 | Elementary Statistics |
| MATH 20524 | Calculus II |
| INSC 20153 | Statistical Analysis |

Electives: $\mathbf{1 2}$ hours of science electives, selected with regard to the interest of the student.
Students planning to pursue technical jobs or qualify for graduate work in geology are strongly advised to satisfy the requirements for the BS degree. geology are strongly advised to satisfy the requirements for the BS degree.
Some geology courses required for the BS degree require off-road field trips, particularly GEOL 40516, which requires a high degree of physical fitness and mobility.
Students planning to attend graduate school are strongly advised to take MATH 20524. <br> \section*{Geology, BA <br> \section*{Geology, BA <br> <br> Requirements} <br> <br> Requirements}

The program of study requires a minimum of 24 hours, on a 124 -hour degree, consisting of:

## Core Requirements

| GEOL 10113 | Understanding the Earth | 3 |
| :--- | :--- | :--- |
| GEOL 30213 | Mineralogy | 3 |
| GEOL 30223 | Petrology | 3 |
| GEOL 30243 | Sedimentology | 3 |
| GEOL 30423 | Structural Geology | 3 |
| GEOL 30573 | Stratigraphy | 3 |

ne of: (3-4 hours)

MATH 20524
Calculus II
INSC 20153

GEOL 40313
ENSC 10143
Invertebrate Paleontology

## Associated Requirements:

CHEM 10113 General Chemistry I 3
Some geology courses for the BA degree require off-road field trips.
Any minor approved for the BA degree is acceptable.
The BA degree with a major in geology is devised primarily for the student seeking a curriculum combining geology with another field of study.

## Geology Minor <br> Requirements

The minor in geology requires a total of 18 semester hours in geology of which 9 semester hours must be at the 30000 level or above. No grade lower than C- may be applied to the minor.

## Health Care Ethics Minor <br> Requirements

The program of study requires a minimum of 19 hours with courses to be taken from at least three different academic units, as follows:

## Required Courses (4 hours)

PHIL $10003 \quad$ Philosophy One 3

BIOL 40111 Topics in Medicine 1
Elective Courses (15 hours)
ANTH 30373 Medical Anthropology 3
ECON 30503 Health Economics 3
HIST 40803 History of Medicine and Public Health 3
PHIL 30313 Moral Problems
PHIL 30363 Bioethics
PHIL 40393 Ethical Theory
RELI 30723 Religion and Science 3
SOCI 20213 Introductory Sociology 3
SOCI $30223 \quad 3$
SOCI 30483 Death and Dying: Sociological Viewpoints 3
SOCI 30643 Sociology of Aging 3
SOCI $40523 \quad$ Health, Illness and Medicine 3
SOWO 40520 Contemporary Topics in Social Work 3

## Mathematics

Math is available as a major and a minor on both the BA and BS degrees.

- Factors that determine a student's placement include:
- High school credits presented;
- Scores achieved in the SAT, ACT or other appropriate examination;
- Performance in advanced placement examinations. Advanced placement, with credit, is available for MATH 10054, MATH 10524 and MATH 20524.
Students majoring in business ordinarily select from a MATH 10273/ MATH 10283 or a MATH 10054 / MATH 10524 sequence.
Credit will not be given for both MATH 10273 and MATH 10054.
Credit will not be given for both MATH 10283 and MATH 10524.


## Honors College

Mathematics majors who plan to pursue Departmental Honors must be members of the Honors College. A minimum 3.5 GPA in the major is required. Coursework must include at least three of MATH 40353, MATH 40663, MATH 50253, MATH 50323, MATH 50403, MATH 50503, MATH 50613, MATH 50623 and MATH 50703, or substitutes approved by the department.

Students should enroll in MATH 30000 during their junior year and MATH 40000 during the fall semester of their senior year. Departmental Honors further require satisfactory presentation of thesis results to faculty.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36) in the Bachelor's Degree section of the University requirements.
Up to (but no more than) 3 hours earned in elective courses that are offered only on a pass/no-credit basis may be applied to meet major or minor requirements within the College of Science \& Engineering. Additional hours in such courses may be used as free electives or for majors or minors in other colleges (as permitted by those colleges).

## Mathematics Affiliations

TCU is an institutional member of the American Mathematical Society and the Mathematical Association of America. The department holds a charter for Texas Alpha Chapter of Pi Mu Epsilon, a national mathematics honor society.

## Mathematics, BA

For a student taking a major in mathematics (BA), the recommended sequence for the first four semesters is MATH 10524, MATH 20524, MATH 30224 and MATH 30524. In either the first or second semester the student should also complete COSC 10403 or COSC 10503. In addition, MATH 20123 should be taken in one of the first four semesters.
Students planning to do graduate work in mathematics should work closely with an adviser to plan their upper-division electives.
Credit is not allowed for both MATH 10283 and MATH 10524.

## Requirements

The program of study requires a minimum of 26 hours, with a grade of C - or better, on a 124 -hour degree consisting of:

## Core Courses

| MATH 10524 | Calculus I | 4 |
| :--- | :--- | :--- |
| MATH 20123 | Discrete Mathematics I | 3 |
| MATH 20524 | Calculus II | 4 |
| MATH 30224 | Linear Algebra | 4 |
| MATH 30524 | Calculus III | 4 |
| MATH | 9 hours of approved electives 30000 level or above | 9 |

An additional 9 hours must be chosen from among mathematics courses at or above the 30000 level.

Also required are

| COSC 10503 | Introduction to Programming for Engineering and <br> Science |
| :--- | :--- |
|  | OR |
| COSC 10403 | Introduction to Programming |

## Any two of the following

| COSC 20203 | Techniques in Programming | 3 |
| :--- | :--- | :--- |
| ECON 40313 | Econometrics | 3 |
| PHYS 20474 | Physics I with Laboratory: Mechanics | 4 |
| PHYS 20484 | Physics II with Laboratory: Electromagnetism and | 4 |
|  | Optics |  |

## Mathematics, BS

For a student taking a major in mathematics (BS), the recommended sequence for the first four semesters is MATH 10524, MATH 20524, MATH 30224 and MATH 30524. In either the first or second semester the student should also complete COSC 10403 or COSC 10503. In addition, MATH 20123 should be taken in one of the first four semesters.
Students planning to do graduate work in mathematics should work closely with an adviser to plan their upper-division electives.
Credit is not allowed for both MATH 10283 and MATH 10524.

## Requirements

## Core Courses

The program of study requires a minimum of 40 hours, with a grade of C - or better, on a 124 -hour degree consisting of:

| MATH 10524 | Calculus I | 4 |
| :--- | :--- | ---: |
| MATH 20123 | Discrete Mathematics I | 3 |
| MATH 20524 | Calculus II | 4 |
| MATH 30224 | Linear Algebra | 4 |
| MATH 30524 | Calculus III | 4 |
| MATH 30803 | Probability | 3 |
| MATH 50253 | Abstract Algebra I | 3 |
| MATH 50503 | Real Analysis I | 3 |
| MATH | 12 hours of approved electives 30000 level or | 12 |
|  | above |  |

## Associated requirements

| COSC 10503 | Introduction to Programming for Engineering and <br> Science | 3 |
| :--- | :--- | :--- |
|  | OR |  |

## Any two of the following

COSC 20203 Techniques in Programming 3
ECON 40313 Econometrics 3
PHYS 20474 Physics I with Laboratory: Mechanics 4
PHYS $20484 \quad$ Physics II with Laboratory: Electromagnetism and 4
Optics

## Mathematics Actuarial Concentration Requirements

This program may be pursued under either the BA or BS option as described above.

## Mathematics coursework for the actuarial concentration must include

| MATH 30603 | Interest Theory | 3 |
| :--- | :--- | :--- |
| MATH 30803 | Probability | 3 |
| MATH 30853 | Statistics | 3 |
| MATH 40603 | Actuarial Mathematics | 3 |

Additional required courses outside the Department of Mathematics are

ECON 10223 Introductory Microeconomics 3
ECON 10233 Introductory Macroeconomics 3
ECON 30223 Intermediate Microeconomics 3
ECON 30233 Intermediate Macroeconomics 3
ACCT 20353 Fundamentals of Accounting I 3
ACCT 40163 Fundamentals of Accounting II 3
FINA 30153 Financial Management 3
Students seeking the BA degree are advised to consider a minor in economics. All actuarial students need to work closely with an adviser to plan course schedules.

## Mathematics Actuarial Minor

## Requirements

The program of study requires a minimum of 18 hours, with a grade of C - or better, consisting of:

| MATH 10524 | Calculus I | 4 |
| :--- | :--- | :--- |
| MATH 20524 | Calculus II | 4 |
| MATH 30524 | Calculus III | 4 |

An additional 6 semester hour sequence chosen from either

| MATH 30603 | Interest Theory |
| :--- | :--- |
|  | AND |
| MATH 30623 | Interest Theory II |
|  | OR |
| MATH 30803 | Probability |
|  | AND |
| MATH 40603 | Actuarial Mathematics |

## Required:

ECON 10223 Introductory Microeconomics 3
ECON 10233 Introductory Macroeconomics 3

All actuarial students need to work closely with an adviser to plan course schedules and understand the requirements of the Society of Actuaries.

## Mathematics Minor

## Requirements

The program of study requires a minimum of 18 hours, with a grade of C - or better, consisting of:

## Core Courses

| MATH 10524 | Calculus I | 4 |
| :--- | :--- | :--- |
| MATH 20524 | Calculus II | 4 |
| MATH 30224 | Linear Algebra | 4 |

And an additional 6 semester hours from among
MATH 20123
Discrete Mathematics I
Courses at or above the 30000 level

## Required

COSC 10403

COSC 10503
Introduction to Programming
3
OR
Introduction to Programming for Engineering and
Mathematics Certification, Secondary and Middle School

Students seeking certification for either grade levels 8-12 or 4-8 should be advised by both a mathematics faculty member and an adviser in the College of Education. Secondary Certification in Mathematics requirements include a major in mathematics (BA or BS) and an educational studies minor. Middle school mathematics majors pursue the BSE degree from the College of Education.

## Neuroscience

Neuroscience is available as a major on the BS degree.
This interdisciplinary major is built upon the understanding of basic principles in neuroscience. Neuroscience blends areas within psychology,
biology and chemistry, which converge on the understanding of the brain and its relationship to the behavior and physiology of living organisms.
A total of 124 semester hours is required. Students may obtain information and/or advisement from the Department of Psychology.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations in the Bachelor's Degree section of the University requirements.

## Neuroscience BS

## Requirements:

## The program of study requires a minimum of 81 hours, on a 124 hour degree, consisting of: <br> Biology (20 hours) <br> A. Required Courses (8 hours):

BIOL 10501 Introductory Biology Lab I 1
BIOL 10503 Introductory Biology I 3
BIOL 10511 Introductory Biology Lab II 1
BIOL 10513 Introductory Biology II 3
B. Minimum of $\mathbf{1 2}$ hours selected from:

BIOL 30304 Microbiology 4
BIOL 30404 Comparative Vertebrate Anatomy 4
BIOL 30603 Cellular, Molecular, and Developmental Biology 3
BIOL 40123 Genetics 3
BIOL 40203 Histology 3
BIOL 40403 Mammalian Physiology 3
Chemistry (24 hours)
A. Required Courses (18 hours):

CHEM 10113 General Chemistry I 3
CHEM 10123 General Chemistry II 3
CHEM 10122 General Chemistry II Laboratory 2
OR
CHEM 20123 Quantitative Analysis 3

CHEM 30121 Organic Chemistry I Laboratory 1
CHEM 30123 Organic Chemistry I 3
CHEM 30133 Organic Chemistry II 3
CHEM 30143 Organic Qualitative Analysis 3
B. Minimum of 6 hours selected from:

CHEM 50133 Biochemistry I 3
CHEM 50143 Biochemistry II 3
CHEM 50502 Biochemistry Laboratory 2
CHEM 50993 Neurochemistry 3
Psychology (23 hours)
A. Required Courses (8 hours):

PSYC $10514 \quad$ Principles of Behavior I 4
PSYC $10524 \quad$ Principles of Behavior II 4
B. Minimum of 6 hours selected from:

PSYC 30363 Abnormal Psychology 3
PSYC 30414 Experimental Psychology: Learning 4
PSYC 30423 Experimental Psychology: Perception 3
PSYC 30433 Experimental Psychology: Motivation 3

PSYC 30503 Behavioral Research

## C. Minimum of 9 hours selected from:

| PSYC 30463 | Introductory Neuroscience |
| :--- | :--- |
| PSYC 30483 | Human Neuropsychology |
| PSYC 50463 | Functional Neuroanatomy |
| PSYC 50472 | Laboratory in Physiological Psychology and |
|  | Neuroscience |
| PSYC 50482 | Laboratory in Physiological Psychology and |
|  | Neuroscience |
| PSYC 50513 | Psychopharmacology |

PSYC $30483 \quad$ Human Neuropsychology
PSYC 50463
Laboratory in Physiological Psychology and
PSYC 50472

Laboratory in Physiological Psychology and

## Physics (8 hours)

| PHYS 10154 | General Physics I with Laboratory | 4 |
| :--- | :--- | :--- |
| PHYS 10164 | General Physics II with Laboratory | 4 |

Mathematics and Computer Science (Minimum of 6 hours)
MATH 10043
Elementary Statistics
MATH 10524
Calculus I
COSC 10403
Introduction to Programming

## Nutritional Sciences

Nutritional sciences is available as a major on the BS degree and a minor on both the BS and BA degrees. The four degree options:

- Coordinated Program in Dietetics (Academy of Nutrition and Dietetics)
- Didactic Program in Dietetics (Academy of Nutrition and Dietetics)
- Nutrition
- Food Management

All BS degrees in nutritional sciences follow the TCU Core Curriculum requirements for the College of Science \& Engineering.

## Honors College

Nutritional sciences majors who plan to pursue Departmental Honors must be members of the Honors College and should enroll in NTDT 30003 during their junior year and NTDT 40003 during their senior year.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36) in the Bachelor's Degree section of the University requirements.

## Nutritional Sciences Affiliations

Students who demonstrate high scholarship are eligible for membership in the Beta Zeta chapter of Phi Upsilon Omicron, national honor society. The department sponsors a chapter of the Texas Student Dietetic Association. All NTDT majors are encouraged to join the Academy of Nutrition and Dietetics as well as the state and local chapters.

## Coordinated Program in Dietetics (Option I)

[^7]leaders within the dietetics profession and the global community. In addition, the CP provides students with Core Knowledge and Competencies for the Registered Dietitian in compliance with the Accreditation Standards of the Academy of Nutrition and Dietetics. The CP combines coursework emphasizing the foundation of dietetic knowledge (communications, physical and biological sciences, social sciences, research, food, nutrition, management and health care systems) and supervised practice experiences. The supervised practice experience involves working with dietetic professionals to demonstrate performance in medical nutrition therapy, community nutrition, food service systems management and business/entrepreneurial dietetics.
Admission to TCU is required for all programs; however, admission to the University does not guarantee admission to the Coordinated Program in Dietetics. Eligibility for admission to the TCU Coordinated Program in Dietetics is based on successful completion of at least 60 semester hours with a cumulative GPA of at least 3.0 for Nutrition (NTDT) and an associated requirement GPA of $2.75,45$ semester hours of required prerequisites and major courses, and 200 hours of documented food or nutrition practical experience. Application packets for the Coordinated Program in Dietetics must be received by Feb. 1, and applicants are notified of provisional acceptance by April 15. Students who are accepted begin coursework and supervised practice the subsequent fall semester. Final acceptance/enrollment in the Coordinated Program in Dietetics depends on successful completion of work in progress and required summer school prerequisites.
A student's continuation in the Coordinated Program in Dietetics is contingent upon attainment of a strong academic record and successful completion of the program sequence. Upon graduation, the student must attain a minimum Nutrition (NTDT) GPA of 3.0, attain a minimum GPA of 2.75 in the associated requirements, and earn a grade of "C" or better in all NTDT courses and a "C-" or better in associated requirements. Students who successfully complete the Coordinated Program in Dietetics will receive verification and are eligible to take the Registration Examination for Dietitians.
Costs for tuition and University fees are available through the Office of Admission or Financial Services. More detailed costs for students are outlined in the CP Student Handbook and include approximately $\$ 1,000-\$ 1,500$ per year for travel to supervised practice sites, lab fees, photocopying, school and office supplies, textbooks, lab coats, malpractice insurance and professional dues.
The TCU Coordinated Program in Dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics, 120 S. Riverside Plaza, Suite 2000, Chicago, III. 60606-6995, (312) 899-0040, ext. 5400, www.eatright.org/ACEND .

## Requirements

The program of study requires a minimum of 77 hours, on a 135 -hour degree, consisting of:

## Major Requirements

| NTDT 10003 | Contemporary Issues in Nutrition | 3 |
| :--- | :--- | :--- |
| NTDT 10103 | Food Preparation | 3 |
| NTDT 20403 | Nutrition | 3 |
| NTDT 21163 | Food and Culture | 3 |
| NTDT 30123 | Nutrition Throughout the Life Cycle | 3 |
| NTDT 30144 | Quantity Food Production | 4 |
| NTDT 30233 | Essentials of Dietetics Practice | 3 |
| NTDT 30303 | Communication and Education for Food, Nutrition, | 3 |
|  | and Dietetics |  |
| NTDT 30306 | Supervised Practice in General Dietetics | 6 |
| NTDT 30313 | Food Systems Management | 3 |
| NTDT 30317 | Supervised Practice in Food Systems Management | 7 |
| NTDT 30331 | Medical Terminology | 1 |
| NTDT 30333 | Medical Nutrition Therapy I | 3 |
| NTDT 40333 | Medical Nutrition Therapy II | 3 |
| NTDT 40337 | Supervised Practice in Medical Nutrition Therapy | 7 |
| NTDT 40343 | Nutritional Biochemistry | 3 |

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| NTDT 40353 | Experimental Food Science |
| :--- | :--- |
| NTDT 40363 | Community Nutrition |
| NTDT 40364 | Supervised Practice in Community Nutrition |
| NTDT 40373 | Culminating Supervised Practice |
| NTDT 40403 | Research Methods in Nutrition |
| NTDT 40411 | Supervised Practice in Nutrition Research I |
| NTDT 40421 | Supervised Practice in Nutrition Research II |
| NTDT 40431 | Supervised Practice in Nutrition Research III |

## Associated Requirements

CHEM 10113 General Chemistry I
CHEM 10123 General Chemistry II
CHEM 10122 General Chemistry II Laboratory
CHEM $30123 \quad$ Organic Chemistry I
BIOL 20214 Anatomy and Physiology
BIOL 20234
Basic Microbiology
MATH 10043 Elementary Statistics
ECON 10223 Introductory Microeconomics
OR
ECON 10233 Introductory Macroeconomics
SOCI 20213 Introductory Sociology
PSYC 20333 Basic Leadership Theory and Skills
MANA 30653 Survey of Management
MARK 30653 Principles of Marketing
No minor is required.
All upper-level (30000 and 40000) NTDT courses must be taken at TCU.

## Didactic Program in Dietetics (Option II)

A Didactic Program in Dietetics is an academic program in a U.S. regionally accredited college or university that culminates in a minimum of a baccalaureate degree. The Didactic Program in Dietetics (DPD) at TCU offers the required didactic instruction (lecture and laboratory classes) to meet the Core Knowledge for the Registered Dietitian as mandated in the Accreditation Standards of the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (formerly the Commission on Accreditation for Dietetics Education of the American Dietetic Association). The curriculum includes courses with a focus on basic human nutrition, food science, food and culture, community nutrition, food systems management, medical nutrition therapy and nutrition research. These courses are based on a solid science and math background, which include general chemistry, organic chemistry, biochemistry, microbiology, physiology, psychology and elementary statistics. The DPD prepares students for careers in a variety of nutrition/dietetics settings, including clinical, community, education, food systems or business/entrepreneurial.
The mission of the Didactic Program in Dietetics (DPD) at Texas Christian University is to support the missions of the University, college and department by providing a preeminent academic curriculum that prepares students to be scientifically competent, accountable and ethically responsible food, health and nutrition professionals prepared for supervised practice and/or graduate school and advancing as self-educating dietetics professionals who will become registered dietitians. The DPD combines coursework emphasizing the foundations of dietetic knowledge (communications, physical and biological sciences, social sciences, research, food, nutrition, management and health care systems).
Admission to TCU is required for all programs; however, admission to the University does not guarantee admission to the Didactic Program in Dietetics. Eligibility for admission to the Didactic Program in Dietetics is based on successful completion of at least 60 semester hours with a cumulative GPA of at least 3.0 for Nutrition, (NTDT) classes, and an associated requirements GPA of $2.75,45$ semester hours of required prerequisites and major courses, 200 hours of documented food or nutrition practical experience and an application packet. Application packets for the Didactic Program in Dietetics must be received by Feb. 1, and applicants are notified of provisional acceptance by April 15 . Students who are accepted begin

NTDT 20403
NTDT 21163
Food and Culture
NTDT $30101 \quad$ Career and Professional Issues in Nutrition
NTDT 30103
Gourmet Foods
NTDT 30123
Nutrition Throughout the Life Cycle
NTDT 30133
Meal Management
NTDT 30144 Quantity Food Production
NTDT 30233 Essentials of Dietetics Practice
NTDT 30303 Communication and Education for Food, Nutrition, and Dietetics
NTDT $30313 \quad$ Food Systems Management
NTDT 30331 Medical Terminology 1
NTDT 30333 Medical Nutrition Therapy I 3
NTDT 40101 DPD Senior Seminar 1
NTDT 40333 Medical Nutrition Therapy II 3
NTDT 40343 Nutritional Biochemistry 3
NTDT 40353 Experimental Food Science 3
NTDT 40363 Community Nutrition 3
NTDT 40403 Research Methods in Nutrition 3
NTDT 40411 Supervised Practice in Nutrition Research I 1
NTDT 40421 Supervised Practice in Nutrition Research II 1
NTDT 40431 Supervised Practice in Nutrition Research III 1

## Associated Requirements

CHEM 10113 General Chemistry I 3
CHEM 10123 General Chemistry II 3
CHEM 10122 General Chemistry II Laboratory 2
CHEM 30123 Organic Chemistry I 3
BIOL 20214 Anatomy and Physiology 4
BIOL 20234 Basic Microbiology 4
MATH 10043 Elementary Statistics 3

| ECON 10223 | Introductory Microeconomics |
| :--- | :--- |
|  | OR |
| ECON 10233 | Introductory Macroeconomics |
| SOCI 20213 | Introductory Sociology |
| PSYC 20333 | Basic Leadership Theory and Skills |
| MANA 30653 | Survey of Management |
| MARK 30653 | Principles of Marketing |
| No minor is required. |  |
| All upper-level (30000 and 40000) NTDT courses must be taken at TCU. |  |
| Nutrition with emphasis on Pre- |  |
| Professional Health Careers and Post- |  |
| Graduate Education (Option III) |  |

With a focus on the scientific basis of human nutrition, the nutrition major provides students with knowledge and skills to work in a myriad of food and nutrition settings focused on attaining and maintaining the health and wellbeing of individuals across the lifespan. In addition to preparing graduates for careers in clinical, management, community or business/entrepreneurial nutrition settings, the nutrition major prepares students for graduate education programs and for careers in research and development, medical/nutritional sales, medicine, dentistry, optometry, pharmacy, physical therapy and other allied health professions. Students who major in nutrition take courses that include nutrition, food science, food and culture, community nutrition, food systems management, medical nutrition therapy and nutrition research. These courses are based on a solid science and math background, which include general chemistry, organic chemistry, biochemistry, microbiology, physiology, psychology and elementary statistics.
Students are encouraged to consult with their advisers on the specific course requirements for entering postgraduate work in the allied health field. The nutrition major does not meet DPD requirements to earn verification to apply for dietetic internships. Additional coursework is necessary to fulfill DPD requirements.

## Requirements

The program of study requires a minimum of 50 hours on a 124 -hour degree, consisting of:

## Major Requirements

NTDT $10003 \quad$ Contemporary Issues in Nutrition 3
NTDT 10103 Food Preparation 3
NTDT 20403 Nutrition 3
NTDT $21163 \quad$ Food and Culture 3
NTDT 30123 Nutrition Throughout the Life Cycle 3
NTDT 30133 Meal Management 3
NTDT 30144 Quantity Food Production 4
NTDT 30303 Communication and Education for Food, Nutrition, 3 and Dietetics
NTDT 30313 Food Systems Management 3
NTDT 30331 Medical Terminology 1
NTDT 30233 Essentials of Dietetics Practice 3
NTDT 30333 Medical Nutrition Therapy I 3
NTDT 40333 Medical Nutrition Therapy II 3
NTDT 40343 Nutritional Biochemistry 3
NTDT 40353 Experimental Food Science 3
NTDT 40363 Community Nutrition 3
NTDT 40403
Research Methods in Nutrition

## Associated Requirements

CHEM 10113 General Chemistry I
CHEM 10123 General Chemistry II ..... 3
CHEM 10122 General Chemistry II Laboratory ..... 2
CHEM 30123 Organic Chemistry I ..... 3
BIOL 20214 Anatomy and Physiology ..... 4
BIOL 20234 Basic Microbiology ..... 4
MATH 10043 Elementary Statistics ..... 3
ECON 10223 Introductory Microeconomics ..... 3
OR
ECON 10233 Introductory Macroeconomics ..... 3
SOCI 20213 Introductory Sociology ..... 3
PSYC 20333 Basic Leadership Theory and Skills ..... 3
MANA 30653 Survey of Management ..... 3
MARK 30653 Principles of Marketing ..... 3

No minor is required.
All upper-level (30000 and 40000) NTDT courses must be taken at TCU.

## Food Management (Option IV)

The food management major is designed for students who elect to emphasize practical experience in the food industry and/or the management of food service systems. During the junior and senior years, students complete four semesters ( 16 credit hours) of required supervised practice that provides hands-on training in various food service applications, such as restaurant operations, catering, industrial food systems, research and development, or sales/marketing. Students have the option to complete an additional six credit hours of supervised practical experience in a culminating internship/special problems course during the senior year. A minor is required of all food management majors; the business minor is recommended. A minimum 2.7 GPA is required to graduate with a major in food management.

## Requirements

The program of study requires a minimum of 53 hours on a 126 -hour degree, consisting of:

## Major Requirements

| NTDT 10003 | Contemporary Issues in Nutrition | 3 |
| :--- | :--- | :---: |
| NTDT 10103 | Food Preparation | 3 |
| NTDT 20403 | Nutrition | 3 |
| NTDT 21163 | Food and Culture | 3 |
| NTDT 30103 | Gourmet Foods | 3 |
| NTDT 30123 | Nutrition Throughout the Life Cycle | 3 |
| NTDT 30133 | Meal Management | 3 |
| NTDT 30144 | Quantity Food Production | 4 |
| NTDT 30303 | Communication and Education for Food, | 3 |
|  | Nutrition, and Dietetics |  |
| NTDT 30313 | Food Systems Management | 3 |
| NTDT 40353 | Experimental Food Science | 3 |
| NTDT 40403 | Research Methods in Nutrition | 3 |
| NTDT 40970 | Special Problems | $1-$ |
|  |  | 8 |

## Associated Requirements

ACCT 20653 Introduction to Accounting 3
BIOL 20234 Basic Microbiology 4

ECON 10223 Introductory Microeconomics 3

ECON 10233 Introductory Macroeconomics 3
MATH 10043 Elementary Statistics 3
FINA $30653 \quad$ Financial Planning 3

| MANA 30653 | Survey of Management |
| :--- | :--- |
| MARK 30653 | Principles of Marketing |
| Minor Requirements |  |
| General business; public relations/advertising; film, television and digital |  |
| media or other approved minor. |  |
| Nutrition Minor |  |
| Requirements |  |

The program of study requires a minimum of 19 hours consisting of:

| Required courses |  |  |
| :---: | :---: | :---: |
| NTDT 10003 | Contemporary Issues in Nutrition OR | 3 |
| NTDT 10103 | Food Preparation | 3 |
| NTDT 20403 | Nutrition | 3 |
| NTDT 30113 | Infant and Child Nutrition | 3 |
|  | OR |  |
| NTDT 30123 | Nutrition Throughout the Life Cycle | 3 |
| NTDT 30331 | Medical Terminology | 1 |
| NTDT 30233 | Essentials of Dietetics Practice | 3 |
| The final two courses (6 hours) may be selected from: |  |  |
| NTDT 30133 | Meal Management | 3 |
| NTDT 30163 | Sports Nutrition | 3 |
| NTDT 30333 | Medical Nutrition Therapy I | 3 |
| NTDT 40333 | Medical Nutrition Therapy II | 3 |
| NTDT 40343 | Nutritional Biochemistry | 3 |
| NTDT 40403 | Research Methods in Nutrition | 3 |
| NTDT 40363 | Community Nutrition | 3 |

All courses for the minor must be completed with a grade of "C" or better.

## Physics \& Astronomy

Physics and astronomy are available as a major or minor on both the BA and BS degrees.

## Honors College

Physics and astronomy majors who plan to pursue Departmental Honors must be enrolled in the Honors College. Students should take PHYS 30003 during their junior year and PHYS 40003 during their senior year.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36) in the
Bachelor's Degree section of the University requirements.
Physics and Astronomy Honor Societies
The department sponsors Sigma Pi Sigma, the national honor society in physics.

## Physics, BS <br> Requirements

The program of study requires a minimum of 36 hours, on a 124-hour degree, consisting of:

## Core Courses

PHYS 10901
First-Year Physics and Astronomy Seminar
PHYS 20474
Physics I with Laboratory: Mechanics

PHYS 20484
3
PHYS 30493
PHYS 30491
23 hours selected from

| PHYS 30014 | Materials Science | 4 |
| :--- | :--- | :--- |
| PHYS 30553 | Mechanics | 3 |
| PHYS 30603 | Thermal Physics | 3 |
| PHYS 30703 | Digital Electronics | 3 |
| PHYS 30843 | Biomedical Imaging | 3 |
| PHYS 40113 | Elements of Quantum Mechanics | 3 |
| PHYS 40653 | Electromagnetic Fields | 3 |
| PHYS 40663 | Electromagnetic Radiation and Optics | 3 |
| PHYS 50703 | Nonlinear Dynamics | 3 |
| PHYS 50713 | Contemporary Topics in Physics | 3 |
| PHYS 50723 | Introduction to Solid State Physics | 3 |
| PHYS 50733 | Computational Physics | 3 |
| PHYS 50743 | Astrophysics | 3 |
| PHYS 50753 | Topics in Biophysics | 3 |
| PHYS 50763 | Experimental Methods in Biochemistry and | 3 |

PHYS 40103 Senior Research in Physics or Astronomy
OR
PHYS 40003 Senior Honors Research in Physics or Astronomy 3
It is recommended that students planning to attend graduate school take
PHYS 30553 Mechanics 3
PHYS 30603 Thermal Physics 3
PHYS 40113 Elements of Quantum Mechanics 3
PHYS 40653 Electromagnetic Fields 3
PHYS 40663 Electromagnetic Radiation and Optics 3

## Associated Requirements

Twenty-one hours of mathematics are required, including
MATH $10524 \quad$ Calculus I
MATH 20524 Calculus II 4
MATH 30613 Differential Equations 3
MATH $30524 \quad$ Calculus III
Students planning to attend graduate school should take MATH 50613.

## Also required are

COSC 10503 Introduction to Programming for Engineering and 3 Science
CHEM 10113 General Chemistry I 3
CHEM 10123 General Chemistry II 3
CHEM 10122 General Chemistry II Laboratory 2
OR
CHEM 20123 Quantitative Analysis 3
Study of a modern language is recommended.

## Astronomy \& Physics, BS <br> Requirements

The program of study requires a minimum of 39 hours, on a 124 -hour degree, consisting of:

| Core Courses |  |
| :---: | :---: |
| PHYS 10901 | First-Year Physics and Astronomy Seminar |
| PHYS 10154 | General Physics I with Laboratory |
|  | AND |
| PHYS 10164 | General Physics II with Laboratory |
|  | OR |
| PHYS 20474 | Physics I with Laboratory: Mechanics |
|  | AND |
| PHYS 20484 | Physics II with Laboratory: Electromagnetism and Optics |
| PHYS 30493 | Physics III Modern Physics |
| PHYS 10263 | Cosmic Origins |
| PHYS 10273 | Introductory Astronomy: Earth and Planets |
| PHYS 30113 | Intermediate Astronomy |
| PHYS 30123 | Observational Astronomy |
| PHYS 50743 | Astrophysics |

## 12 hours selected from <br> PHYS 30014 Materials Science 4

PHYS 30553 Mechanics 3
PHYS 30603 Thermal Physics 3
PHYS 30703 Digital Electronics 3
PHYS 30843 Biomedical Imaging 3
PHYS 40113 Elements of Quantum Mechanics 3
PHYS 40653 Electromagnetic Fields 3
PHYS 40663 Electromagnetic Radiation and Optics 3
PHYS 50703 Nonlinear Dynamics 3
PHYS 50713 Contemporary Topics in Physics 3
PHYS 50723 Introduction to Solid State Physics 3
PHYS 50733 Computational Physics 3
PHYS 50813 Meteorites, Asteroids, and Planets 3

| PHYS 40103 | Senior Research in Physics or Astronomy | 3 |
| :--- | :--- | :--- |
|  | OR |  |
| PHYS 40003 | Senior Honors Research in Physics or Astronomy | 3 |

It is recommended that students planning to attend graduate school take
PHYS 30553 Mechanics 3
PHYS 30603 Thermal Physics 3
PHYS 40113 Elements of Quantum Mechanics 3
PHYS 40653 Electromagnetic Fields 3

## Associated Requirements

| MATH 10524 | Calculus I | 4 |
| :--- | :--- | :--- |
| MATH 20524 | Calculus II | 4 |
| MATH 30613 | Differential Equations | 3 |
| MATH 30524 | Calculus III | 4 |

It is recommended that students planning to attend graduate school take MATH 50613

## Also required are

COSC $10503 \quad$| Introduction to Programming for Engineering and |
| :--- |
|  |
| Science |

And Either OPTION ONE:

| CHEM 10113 | General Chemistry I | 3 |
| :--- | :--- | :--- |
| CHEM 10123 | General Chemistry II | 3 |
| CHEM 10122 | General Chemistry II Laboratory | 2 |
|  | OR | 3 |
| CHEM 20123 | Quantitative Analysis |  |
| Or OPTION TWO: |  | 3 |
| CHEM 10113 | General Chemistry I | 3 |
| GEOL 10113 | Understanding the Earth | 3 |
| GEOL 30213 | Mineralogy |  |
| Study of a modern language is recommended. |  |  |

## Physics, BA

## Requirements

The program of study requires a minimum of 26 hours, on a 124 -hour degree, consisting of:
26 hours in physics, including:

| PHYS 10901 | First-Year Physics and Astronomy Seminar | 1 |
| :--- | :--- | :--- |
| PHYS 20474 | Physics I with Laboratory: Mechanics | 4 |
| PHYS 20484 | Physics II with Laboratory: Electromagnetism and <br> Optics | 4 |
| PHYS 30493 | Physics III Modern Physics | 3 |
| PHYS 10154, PHYS | 10164 can be taken in place of PHYS 20474 and 20484 |  |
| with permission. |  |  |
| Associated Requirements |  |  |
| Twelve hours of mathematics are required, including |  |  |
| MATH 10524 | Calculus I | 4 |
| MATH 20524 | Calculus II | 4 |
| MATH 30224 | Linear Algebra | 4 |
| Students planning graduate study in physics should seek the BS degree. |  |  |

## Physics with Secondary Concentration in the Biomedical Field, BA

## Requirements

The program of study requires a minimum of 30 hours on a 124 -hour degree, consisting of:

| Thirty hours of physics are required, including $\mathbf{1 3}$ hours of |  |  |
| :--- | :--- | :--- |
| PHYS 10901 | First-Year Physics and Astronomy Seminar | 1 |
| PHYS 20474 | Physics I with Laboratory: Mechanics | 4 |
| PHYS 20484 | Physics II with Laboratory: Electromagnetism and | 4 |
|  | Optics |  |
| PHYS 30491 | Physics III Laboratory | 1 |
| PHYS 30493 | Physics III Modern Physics | 3 |


| $\mathbf{1 2}$ hours selected from |  |  |
| :--- | :--- | :--- |
| PHYS 30113 | Intermediate Astronomy | 3 |
| PHYS 30123 | Observational Astronomy | 3 |
| PHYS 30553 | Mechanics | 3 |


| PHYS 30603 | Thermal Physics |
| :--- | :--- |
| PHYS 30703 | Digital Electronics |
| PHYS 30843 | Biomedical Imaging |
| PHYS 40113 | Elements of Quantum Mechanics |
| PHYS 40653 | Electromagnetic Fields |
| PHYS 40663 | Electromagnetic Radiation and Optics |
| PHYS 50703 | Nonlinear Dynamics |
| PHYS50713 | Contemporary Topics in Physics |
| PHYS 50723 | Introduction to Solid State Physics |
| PHYS 50733 | Computational Physics |
| PHYS50743 | Astrophysics |
| PHYS50753 | Topics in Biophysics |
| PHYS50763 | Experimental Methods in Biochemistry and |
|  | Biophysics |


| PHYS 40103 | Senior Research in Physics or Astronomy | 3 |
| :--- | :--- | :--- |
|  | OR |  |
| PHYS 40003 | Senior Honors Research in Physics or Astronomy | 3 |

PHYS 10154, PHYS 10164 can be taken in place of PHYS 20474 and 20484 with permission
It is recommended that 9 or more hours be selected from
PHYS 30553
Mechanics
PHYS 30603
PHYS 30843
PHYS 40113
PHYS 40653
PHYS $40663 \quad$ Electromagnetic Radiation and Optics

| Associated requirements |  |  |
| :--- | :--- | ---: |
| $\mathbf{1 2}$ hours of |  | 4 |
| MATH 10524 | Calculus I | 4 |
| MATH 20524 | Calculus II |  |

## Plus

CHEM 10113 General Chemistry I 3
CHEM 10123 General Chemistry II 3
CHEM 10122 General Chemistry II Laboratory 2

CHEM 20123 Quantitative Analysis 3

CHEM $30121 \quad$ Organic Chemistry I Laboratory 1
CHEM 30123 Organic Chemistry I 3
CHEM 30143 Organic Qualitative Analysis 3
CHEM 30133 Organic Chemistry II 3
BIOL 10501 Introductory Biology Lab I 1
BIOL 10503 Introductory Biology I 3
BIOL 10511 Introductory Biology Lab II 1
BIOL 10513 Introductory Biology II 3

| Recommended additional $\mathbf{6}$ hours selected from |  |  |
| :--- | :--- | :--- |
| BIOL 30404 | Comparative Vertebrate Anatomy | 4 |
| BIOL 30603 | Cellular, Molecular, and Developmental Biology | 3 |
| BIOL 40123 | Genetics | 3 |
| BIOL 40224 | Developmental Biology | 4 |

## Physics with Secondary Concentration in the Biomedical Field, BS

(for students interested in Pre-Health Professions or Biophysics Graduate Programs)

## Requirements

The program of study requires a minimum of 30 hours, on a 124 -hour degree, consisting of: All of the requirements for the Physics with a Secondary Concentration in the Biomedical Field - BA with the addition of 6 additional hours ( 18 hours total vs. 12 hours) from the list of PHYS courses for the major. For this degree, PHYS 30113 is not an option.

## Physics with a Secondary Concentration in Another Field, BS

## Requirements

## General Requirements

30 hours of physics, including 12 hours of:

| PHYS 10901 | First-Year Physics and Astronomy Seminar | 1 |
| :--- | :--- | :--- |
| PHYS 20474 | Physics I with Laboratory: Mechanics | 4 |
| PHYS 20484 | Physics II with Laboratory: Electromagnetism and <br> Optics | 4 |
| PHYS 30493 | Physics III Modern Physics | 3 |

PHYS 10154, PHYS 10164 can be taken in place of PHYS 20484 with permission
19 hours selected from:
PHYS 30113 Intermediate Astronomy 3
PHYS 30123 Observational Astronomy 3
PHYS $30491 \quad$ Physics III Laboratory 1
PHYS 30553 Mechanics 3
PHYS 30603 Thermal Physics 3
PHYS 30703 Digital Electronics 3
PHYS 40113 Elements of Quantum Mechanics 3
PHYS 40653 Electromagnetic Fields 3
PHYS 40663 Electromagnetic Radiation and Optics 3
PHYS50703 Nonlinear Dynamics 3
PHYS $50713 \quad$ Contemporary Topics in Physics 3
PHYS 50723 Introduction to Solid State Physics 3
PHYS $50733 \quad$ Computational Physics 3
PHYS 50743 Astrophysics 3

PHYS 40103 Senior Research in Physics or Astronomy 3
PHYS 40003 Senior Honors Research in Physics or Astronomy 3
It is recommended that 9 or more hours be selected from:
PHYS $30553 \quad$ Mechanics
PHYS 30603 Thermal Physics 3
PHYS 40113 Elements of Quantum Mechanics 3
PHYS 40653 Electromagnetic Fields 3

## Associated Requirements (16 hours)

MATH $10524 \quad$ Calculus 4
MATH $20524 \quad$ Calculus II 4
MATH 30224 Linear Algebra 4 Science
CHEM 10113
General Chemistry I
Approved secondary concentration with a minimum of 24 -hours
COSC 10503 or an approved substitute

## Approved Concentrations with Respective Additional Requirements:

## BS in Physics with Secondary

 Concentration in Computer ModelingThis option prepares students for graduate work in physics.
General requirements except that PHYS 50733 and an approved project in either PHYS 40103 or PHYS 40003 are required.

## Additional Requirements

COSC 20101 Assembler Fundamentals 1
COSC 20203 Techniques in Programming 3
COSC 20803 Data Structures 3
COSC 30203 Computer System Fundamentals 3
COSC 30403 Programming Language Concepts 3
Also three hours selected from
COSC 30803 Simulation Techniques 3
COSC $40503 \quad$ Artificial Intelligence 3
COSC 40903 Advanced Topics in Computer Software 3
COSC $50123 \quad$ Object-Oriented Design and Programming 3
MATH 30613 Differential Equations 3
MATH 50613 Partial Differential Equations 3
MATH $40663 \quad 3$

## BS in Physics with Secondary Concentration in Electronics

This option prepares students for graduate studies in electrical engineering or physics. General requirements except that PHYS 40113 and PHYS 40653 (or ENGR 30543) are required, and PHYS 40663 is recommended.

## Additional Requirements

ENGR $10042 \quad$ Principles of Digital Logic 2
ENGR 20404 Circuit Analysis and Design II 4
ENGR 20413 Circuit Analysis and Design III 3
ENGR 30014 Materials Science 4
ENGR 30444 Electronics I 4
ENGR 30454 Electronics II 4
ENGR 40454 Semiconductor Device Electronics 4
MATH 30613 Differential Equations 3

## BS in Physics with Secondary Concentration in Environmental Science

This option prepares students for graduate work in physics or environmental science.

## General requirements plus

CHEM 10123
General Chemistry II
CHEM 10122
General Chemistry II Laboratory

```
BIOL 10501
BIOL 10503
BIOL 10511
BIOL 10513
BIOL 30403
```

GEOL 10113
ENSC 10143

ENSC 30133
ENSC 40193

Introductory Biology Lab I 1
Introductory Biology I 3
Introductory Biology Lab II 1
Introductory Biology II 3
Ecology and the Environment 3
3 hours of approved upper-level biology courses
Understanding the Earth
Contemporary Environmental Issues 3
OR
Concepts in Environmental Science 3
Environmental Stewardship Seminar 3

## 3 hours selected from

GEOL 30113 Weather and Climate 3

ENSC 40193 Environmental Stewardship Seminar 3
GEOL 40393 Soils in the Environment 3
GEOL 50493 Physical Hydrology 3

## Astronomy Minor Requirements

| The astronomy minor requires $\mathbf{1 8}$ hours including |  |  |
| :--- | :--- | :--- |
| PHYS 10273 | Introductory Astronomy: Earth and Planets | 3 |
| PHYS 10263 | Cosmic Origins | 3 |

Six hours selected from
PHYS 10154 General Physics I with Laboratory 4

PHYS $20474 \quad$ Physics I with Laboratory: Mechanics 4

PHYS 10164 General Physics II with Laboratory 4
OR
PHYS $20484 \quad$ Physics II with Laboratory: Electromagnetism and Optics
GEOL 10113 Understanding the Earth 3
PHYS 10293 Archaeoastronomy 3

PHYS 6 hours of upper division PHYS courses approved electives 30000 or above

## Physics Minor <br> Requirements

| The physics minor requires $\mathbf{1 8}$ hours of physics, including |  |  |
| :--- | :--- | :--- |
| PHYS 10154 | General Physics I with Laboratory | 4 |
| PHYS 10164 | General Physics II with Laboratory | 4 |
|  | OR | 4 |
| PHYS 20474 | Physics I with Laboratory: Mechanics | 4 |
| PHYS 20484 | Physics II with Laboratory: Electromagnetism and <br> Optics | 4 |

## PHYS

10 hours of approved electives of which 6 must be 30000 or above

## Applied Physics Minor

The applied physics minor is designed for engineering majors but is open to all majors.

## Requirements

## The program of study requires a minimum of $\mathbf{1 8}$ hours of physics including

PHYS 20474 Physics I with Laboratory: Mechanics 4

PHYS 20484
Physics II with Laboratory: Electromagnetism and Optics
PHYS 30493
Physics III Modern Physics

## Four hours of research selected from

PHYS 30003 Junior Honors Research in Physics or Astronomy
PHYS 40003 Senior Honors Research in Physics or Astronomy
PHYS 40103 Senior Research in Physics or Astronomy
PHYS $50970 \quad$ Special Problems in Physics

## Pre-Health Professions

TCU offers a curriculum preparing students for programs leading to doctoral degrees in the following health professions: Allopathic Medicine (MD), Dentistry (DDS), Optometry (OD), Osteopathic Medicine (DO), Pharmacy (PharmD), Physician's Assistant (PA), Podiatric Medicine (DPM), and Veterinary Medicine (DVM).
The Health Professions Advisory Committee (HPAC) consists of faculty members who teach courses normally taken by students pursuing the above professional goals and presently includes Professors Giri Akkaraju, biology; Gary Boehm, psychology; Jeff Coffer, chemistry; Amanda Hale, biology; Doug Ingram, physics and astronomy; Mike Chumley, biology; Karol Gryczynski, physics and astronomy; Shauna McGillivray, biology; Anna Petursdottir, psychology; David Stone, biology; David Minter, chemistry; Mike Misamore, biology; and Matt Chumchal, biology (chair). Jill Fritchen, administrative program specialist to the program, is housed in SWR 258.
The duties of the committee are to advise students on their curriculum; provide counseling regarding the health professions; and evaluate, both for the student and for the professional schools, the student's suitability for entering the profession. The committee offers "mock" interviews and will write a committee-based letter of evaluation for those students who submit the appropriate biographical materials. Additional information is available at www.prehealth.tcu.edu.

## Curriculum

Health profession schools prefer applicants who have completed a four-year curriculum leading to a BA or BS degree. While the health professions schools will accept students in any major, certain courses are required or suggested as described below. In addition, if medicine, dentistry or veterinary medicine is a student's primary career goal, the Health Professions Advisory Committee strongly recommends that students major within the College of Science \& Engineering.

## Required and Suggested Courses

Although each professional program has its own list of required and suggested courses, those shown below meet the requirements of the majority. Students should check the current requirements of schools to which they intend to apply before they begin their junior year at TCU to ensure that new or unusual requirements can be met before graduation.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations (p. 36) in the Bachelor's Degree section of the University requirements.

## Aptitude Tests

Most professional schools require aptitude tests to have been taken at the time of application. Generally, these should be taken 15-17 months before contemplated admission; i.e., in the spring of the junior year for four-year students or in the sophomore year for three-year students (see below). Information on these exams is available in the Pre-Health Professions Office

SWR 258. These include the Dental Admissions Test (DAT), the Medical College Admissions Test (MCAT) and the Optometry Admissions Test (OAT).

## Alpha Epsilon Delta

The program sponsors the Texas Zeta Chapter of Alpha Epsilon Delta, the national honor society for pre-professional health science students. Additional information is available at http://www.aed.tcu.edu.

## Pre-Health Professions Scholarships

The M.D. Anderson Foundation of Houston sponsors several scholarships for pre-health professions students who are at least sophomores; have a GPA above 3.0; are in the top third of their class; have a record of service to TCU, the community or the profession; and have demonstrated a high motivation toward a career in medicine and dentistry. Applications are available from the Office of Scholarships and Financial Aid.

## Pre-Health Professions

## General Requirements <br> Biology:

BIOL 10501
BIOL 10503 Introductory Biology I
BIOL 10511 Introductory Biology Lab II 1
BIOL 10513 Introductory Biology II 3
Chemistry:
CHEM 10113 General Chemistry I 3
CHEM 10123 General Chemistry II 3
CHEM 10122 General Chemistry II Laboratory 2

OR

| CHEM 10113 | General Chemistry I | 3 |
| :---: | :---: | :---: |
| CHEM 10123 | General Chemistry II | 3 |
| CHEM 20123 | Quantitative Analysis | 3 |
| CHEM 20123 | Quantitative Analysis | 3 |
| CHEM 30123 | Organic Chemistry I | 3 |
| CHEM 30121 | Organic Chemistry I Laboratory | 1 |
| CHEM 30133 | Organic Chemistry II | 3 |
| Natural Sciences: |  |  |
| BIOL 30603 | Cellular, Molecular, and Developmental Biology | 3 |
| BIOL 40503 | Basic Biochemistry | 3 |
|  | OR |  |
| BIOL 50133 | Biochemistry I | 3 |
| BIOL 50143 | Biochemistry II | 3 |
| Math: |  |  |
| MATH 10043 | Elementary Statistics | 3 |
| Physics: |  |  |
| PHYS 10154 | General Physics I with Laboratory | 4 |
| PHYS 10164 | General Physics II with Laboratory | 4 |

## Other:

TCU Core Curriculum requirements and requirements of the major/minor.

## General Suggestions

## Humanities:

| WRIT 30223 | Technical Writing and Information Design | 3 |
| :--- | :--- | :--- |
| HIST 40803 | History of Medicine and Public Health | 3 |
| PHIL 10003 | Philosophy One | 3 |
| PHIL 30313 | Moral Problems |  |
| PHIL 30363 | Bioethics | 3 |
| SPAN 10103 | Spanish for Beginners 1 | 3 |
| RELI 30723 | Religion and Science | 3 |

## Social Sciences:

| ANTH 30373 | Medical Anthropology |
| :--- | :--- |
| SOCI 20213 | Introductory Sociology |
| SOCI 40523 | Health, Illness and Medicine |
| SOWO 30853 | Human Behavior and Social Environment II |

## Natural Sciences:

| BIOL 30304 | Microbiology | 4 |
| :--- | :--- | :--- |
| BIOL 30404 | Comparative Vertebrate Anatomy | 4 |
| BIOL 30603 | Cellular, Molecular, and Developmental Biology | 3 |
| BIOL 40123 | Genetics | 3 |
| BIOL 40133 | Molecular Biology of Eukaryotes | 3 |
| BIOL 40143 | Genetics Laboratory | 3 |
| BIOL 40203 | Histology | 3 |
| BIOL 40224 | Developmental Biology | 4 |
| BIOL 40403 | Mammalian Physiology | 3 |
| CHEM 40123 | Physical Chemistry I | 3 |
| CHEM 50133 | Biochemistry I | 3 |
| CHEM 50143 | Biochemistry II | 3 |
| MATH 10043 | Elementary Statistics | 3 |
| COSC 10403 | Introduction to Programming | 3 |
| PSYC 10213 | General Psychology | 3 |
| PSYC 30463 | Introductory Neuroscience | 3 |

## Other:

| NTDT 20403 | Nutrition | 3 |
| :--- | :--- | :--- |
| COMM 10123 | Communicating Effectively | 3 |
| COMM 30153 | Interviewing | 3 |
| KINE 10603 | Anatomical Kinesiology | 3 |
| KINE 30623 | Biomechanics | 3 |
| KINE 30634 | Exercise Physiology | 4 |
| HLTH 40203 | Study of Human Disease | 3 |
| COSD 10303 | Survey of Communication Disorders | 3 |
| COSD 10343 | Basic Sign Language | 3 |
| COSD 30303 | Anatomy and Physiology of the Speech and | 3 |
|  | Hearing Mechanisms | 3 |

## Additional Pre-Dental Courses

Two advanced biology courses as listed under general suggestions with following courses especially recommended
BIOL 30304
Microbiology
BIOL 40123
Genetics
BIOL 40133
BIOL 40503
Molecular Biology of Eukaryotes
Basic Biochemistry

BIOL 50133
Biochemistry I

## Additional Pre-Medical Courses

Biology (same as pre-dental)

| MATH 10043 | Elementary Statistics | 3 |
| :--- | :--- | :--- |
| CHEM 30143 | Organic Qualitative Analysis | 3 |

Additional Pre-Optometry Courses

| BIOL 20204 | Anatomy and Physiology | 4 |
| :--- | :--- | :--- |
| BIOL 20214 | AND |  |
|  | Anatomy and Physiology <br> OR | 4 |
| BIOL 30404 | Comparative Vertebrate Anatomy | 4 |
|  |  | 4 |
| BIOL 30304 | Microbiology | 4 |
| BIOL 40403 | Mammalian Physiology | 4 |
| MATH 10524 | Calculus I | 4 |
| PSYC 10213 | General Psychology | 3 |
| PSYC 30503 | Behavioral Research | 3 |
|  |  | 3 |
| CHEM 40503 | Basic Biochemistry | 3 |
| CHEM 50133 | OR | Biochemistry l |

Additional Pre-Pharmacy Courses
BIOL 30304 Microbiology
BIOL $30404 \quad$ Comparative Vertebrate Anatomy 4
MATH $10524 \quad 4$
MATH $10043 \quad 3$
Additional Pre-Podiatric Courses
Same as pre-med.
Additional Pre-Veterinary Courses
BIOL 30304 Microbiology 4
BIOL 30603 Cellular, Molecular, and Developmental Biology 3
BIOL 40123 Genetics 3
BIOL 40254 Immunology 4
BIOL 50133 Biochemistry I 3
BIOL 50143 Biochemistry II 3
MATH 10043 Elementary Statistics 3
MATH $10524 \quad 4$
ENGL 30233 Creative Nonfiction Workshop I 3
OR
COMM 20113 Interpersonal Communication 3
Two advanced biology courses as listed under general suggestions, especially recommended:

## GPA Requirements:

To continue in the Pre-Health Professions Program (e.g., be advised by HPAC and utilize HPAC for mock interviews and recommendation letters) students MUST maintain at least a:

1. 2.5 GPA in TCU biology and chemistry courses after their first two semesters at TCU. For most students, this consists of BIOL 10501, BIOL 10503, BIOL 10511 and BIOL 10513 and CHEM 10113 and either CHEM 10125 or CHEM 10123 and CHEM 20123.
2. 2.8 GPA in TCU biology and chemistry courses after their first four semesters at TCU. For most students, this consists of chemistry through Organic (CHEM 30123, CHEM 30121, CHEM 30133 and CHEM 30143) and BIOL 30603.
3. 3.1 GPA in TCU biology and chemistry courses after their first six semesters at TCU.

## Important notes:

- Students may return to the program at any time if their GPA meets or exceeds the thresholds given above. For transfer students from two-year institutions who have taken biology and chemistry, a 3.2 GPA in introductory chemistry and biology courses and a cumulative GPA of 3.6 is required for entrance into the program.
- For transfer students from two-year institutions who have not taken biology and chemistry, a cumulative GPA of 3.7 is required for entrance into the program.
- For transfer students from four-year institutions who have taken biology and chemistry, a 2.8 GPA in introductory chemistry and biology courses and a cumulative GPA of 3.4 is required for entrance into the program.
- For transfer students from four-year institutions who have not taken biology and chemistry, a cumulative GPA of 3.5 is required for entrance into the program.
- These are minimum requirements and in no way should be considered competitive. The average entering GPA for medical, dental and vet schools is almost always in the 3.6-3.8 range, and very few applicants are accepted with a GPA of less than 3.3.


## Pre-Health Professions Combination BS Degree

An exceptionally few highly qualified pre-health professions students may be accepted by the professional school after the completion of a three-year college curriculum. TCU offers the BS Combination Degree Program for these students. The student must complete a minimum of 94 semester hours, including the prescribed courses, the TCU Core Curriculum and admissions tests listed above. The last 45 hours of the 94 must be taken at TCU. The BS combination degree is awarded after successful completion of the first year of professional school. Students must declare their interest in this program (i.e., file a degree plan) prior to application to a professional school. A typical curriculum that meets all these requirements is outlined below.

## Typical Combination BS Degree Program

## Freshman Year

BIOL 10501 Introductory Biology Lab I 1
BIOL 10503 Introductory Biology I 3
BIOL 10511 Introductory Biology Lab II 1
BIOL 10513 Introductory Biology II 3
CHEM 10113 General Chemistry I 3
CHEM 10123 General Chemistry II 3
CHEM 10122 General Chemistry II Laboratory

CHEM 20123 Quantitative Analysis 3

Writing Workshop
Other TCU CC
Subtotal: 30-33

## Sophomore Year

BIOL 30603 Cellular, Molecular, and Developmental Biology 3
CHEM 30123 Organic Chemistry I 3
CHEM 30121 Organic Chemistry I Laboratory 1
CHEM 30133 Organic Chemistry II 3
CHEM 30143 Organic Qualitative Analysis 3
PHYS $10154 \quad$ General Physics I with Laboratory 4
PHYS 10164 General Physics II with Laboratory 4
TCU CC

Aptitude test should be taken at this point

## Junior Year

BIOL (7-9 hours)
TCU CC (15 hours)
Electives or Additional Requirements (6-9 hours)
Subtotal: 28-33

## Psychology

Psychology is available as a major and minor on both the BA and BS degrees. Although the programs may be used to achieve a variety of objectives, they are designed to:

- Provide majors with a strong background for graduate or professional training in psychology or related fields;
- Educate intelligent consumers who can seek, evaluate and apply selected psychological services effectively; and
- Provide fundamental information for a critical understanding of psychological knowledge and problems.
In addition to basic coursework, the programs offer learning experiences that include research projects, individual career planning, special seminars and supervised off-campus activities. Such courses, primarily for juniors and seniors, require approval from the students' adviser or the instructor during the semester prior to the one in which the student intends to enroll. Students are encouraged to consult with their academic adviser at least once each semester to plan an appropriate selection of courses to meet their individual goals. Further information regarding the psychology curriculum may be obtained from the chair of the department.


## Honors College

A student wishing to complete Departmental Honors in psychology must be enrolled in the Honors College and complete PSYC 30003 and PSYC 40003. It is recommended that students enroll in PSYC 40003 for the fall semester of the senior year.

## Pass/No-Credit Option

See the Bachelor's Degree Definitions and Regulations in the Bachelor's Degree section of the University requirements.
Up to (but no more than) 3 hours earned in elective courses that are offered only on a pass/no-credit basis may be applied to meet major or minor requirements within the College of Science \& Engineering. Additional hours in such courses may be used as free electives or for majors or minors in other colleges (as permitted by those colleges).

## Psi Chi

The department sponsors the TCU Chapter of Psi Chi, the national honor society for psychology.

## Psychology, BS

The BS with a major in psychology is recommended for students planning graduate work and careers in psychology or related fields.

## Requirements

The program of study requires a minimum of 42 hours on a 124-hour degree consisting of:

## One of the following:

PSYC 10213 General Psychology 3
PSYC 10514 Principles of Behavior I 4
PSYC $10524 \quad$ Principles of Behavior II 4

## Plus

PSYC 30503 Behavioral Research 3
PSYC 40993 Senior Seminar in Psychology 3

At least one course must be taken from each of the following five areas, plus at least one additional course from areas $A, B, C$ or $D$.

Area A:
PSYC 30463 Introductory Neuroscience 3
PSYC 30483 Human Neuropsychology 3
PSYC 50513 Psychopharmacology 3
Area B:
PSYC 30433 Experimental Psychology: Motivation 3
PSYC 30473 Comparative Psychology 3
PSYC 30414 Experimental Psychology: Learning 4
PSYC 30513 Fundamentals of Learning 3
Area C:
PSYC 30313 Developmental Psychology 3
PSYC 30453 Memory and Cognition 3
PSYC 30523 Experimental Psychology: Cognition 3
PSYC 40413 Cognitive Development 3
PSYC 40423 The Tao of Strategy 3
PSYC 40433 Advanced Developmental Psychology 3
Area D:
PSYC 30393 Evolutionary Psychology 3
PSYC 30443 Psychology of Personality 3
PSYC 40493 Introduction to Psychological Measurement 3
PSYC 30353 Social Psychology 3

PSYC 30343 Social Psychology 3
PSYC 40533 Experimental Psychology: Social 3
Area E:
PSYC 30363
PSYC 30373
PSYC 40463
Abnormal Psychology

Students who will apply to psychology Ph.D. programs are strongly encouraged to take research courses
PSYC 40313 Research in Neuroscience 3
PSYC 40323 Research in Psychology of Learning 3
PSYC 40333 Research in Social Psychology 3
PSYC 40343 Development/Cognitive Research 3
At most 9 hours in these courses may be applied to the 42 minimum required hours in psychology, but additional hours may be taken as electives.

## Associated Requirement:

A minor or second major is required for the BS degree in psychology. MATH 10043 Elementary Statistics

3

## Psychology, BA

The BA with a major in psychology is suited for students who have a general interest in psychology, but do not plan a career in psychology or a psychology-related field. It may prove suitable for a variety of career objectives not subsumed under the BS program.

## Requirements

The program of study requires a minimum of 30 hours, on a 124 hour degree consisting of:

## One of the following:

| PSYC 10213 | General Psychology | 3 |
| :--- | :--- | :--- |
| PSYC 10514 | Principles of Behavior I | 4 |
| PSYC 10524 | Principles of Behavior II | 4 |
| Plus |  |  |
| PSYC 30503 | Behavioral Research | 3 |
| PSYC 40993 | Senior Seminar in Psychology | 3 |

At least one course must be taken from each of the five areas listed
under the BS degree requirements.

A maximum of 6 hours of research may be applied to the 30
minimum required hours in psychology, but additional hours may
be taken as electives.

PSYC $40313 \quad$ Research in Neuroscience 3
PSYC 40323 Research in Psychology of Learning 3
PSYC 40333 Research in Social Psychology 3
PSYC 40343 Development/Cognitive Research 3
Associated Requirement:
A minor or second major is required for the BA in psychology.
MATH 10043 Elementary Statistics 3

## Psychology Minor

## Requirements

A minor in psychology requires 18 hours in psychology consisting of:

## One of the following:

| PSYC 10213 | General Psychology | 3 |
| :--- | :--- | :--- |
| PSYC 10514 | Principles of Behavior I | 4 |
| PSYC 10524 | Principles of Behavior II | 4 |
| A maximum of 3 hours of PSYC 40970 may be applied to the minor in |  |  |
| psychology. |  |  |
| Students cannot pursue both a minor in psychology and a minor in the <br> psychology of leadership. |  |  |

## Psychology of Leadership Minor

The minor in psychology of leadership provides students with knowledge and experiences relevant to the scientific study of leadership and its application. A minimum of 21 credit hours is required.

## Requirements

The program of study requires a minimum of 18 hours consisting of:

## One of the following:

PSYC 10213 General Psychology 3
PSYC $10514 \quad$ Principles of Behavior I 4
PSYC $10524 \quad$ Principles of Behavior II 4

## Psychology of Leadership: 6 hours

PSYC 20333 Basic Leadership Theory and Skills 3
PSYC 40233 Advanced Leadership Skills 3

## Foundations in Psychology: 3 hours

PSYC 30443 Psychology of Personality 3
PSYC 30353 Social Psychology 3
PSYC 30433 Experimental Psychology: Motivation 3
PSYC 40493 Introduction to Psychological Measurement 3

Electives in the Psychology of Leadership: 9 hours

| PSYC 30263 | Problem Solving in Task Oriented Groups |
| :--- | :--- |
| PSYC 30373 | Organizational Psychology |
| PSYC 40473 | Psychology of Women and Men |
| PSYC 40260 | Basic Internship |
| PSYC 40290 | Advanced Internship in Psychology |
|  |  |
| PSYC 40423 | The Tao of Strategy |
| PSYC 51000 | Seminar on Ethics and Science |
| Students cannot pursue both a minor in psychology and a minor in the |  |
| psychology of leadership |  |
| Psychology Specialization Secondary |  |
| Certification |  |

## Requirements

The program of study requires one of the following 3:

| PSYC 10213 | General Psychology | 3 |
| :--- | :--- | :--- |
| PSYC 10514 | Principles of Behavior I | 4 |
| PSYC 10524 | Principles of Behavior II | 4 |
|  | AND |  |
| PSYC 30503 | Behavioral Research |  |
| Students must also select enough from the courses listed in Areas A-E under <br> the BS degree requirements to make a total of at least 24 semester hours. |  |  |

## Psychology Outreach Program

The Psychology Outreach Program is designed to afford qualified students the opportunity to participate in psychology-related internships in local community settings.
The major goal of the outreach program is to increase student awareness of professional psychology by allowing students to engage in activities similar to those of a counseling or clinical psychologist. Many psychology majors are interested in becoming helping professionals, and it is the department's belief that these students can make more informed decisions about their careers if they have experienced these professional activities firsthand.
A second goal of the outreach program is to help students build their resumes through professionally related internship experiences. In this way, they cannot only include the fieldwork experience on their resumes, but they also have the opportunity to earn letters of recommendation from offcampus professionals.
The Department of Psychology's fieldwork experience consists of a twosemester sequence, Introduction to Field Work (PSYC 40260), taken in the fall semester, and Advanced Field Work (PSYC 40290) taken in the following spring semester.

## Sustainabilty Minor <br> Requirements

The program of study requires a minimum of 18 hours consisting of:

## Required

ENSC $10143 \quad$ Contemporary Environmental Issues

## Electives: 15 hours

## Social Sciences and Humanities: $\mathbf{3}$ hours

| ANTH 30663 | Food Justice | 3 |
| :--- | :--- | :--- |
| ANTH 30743 | Animals, Religion, and Culture | 3 |
| ANTH 30783 | Anthropological Approaches to Nature and the | 3 |

ANTH 30823
ANTH 40433

ECON 40970

ENGL 30153
HIST 40853
PHIL 30403
POSC 33133
RELI 30783
SOCI 20223
SOCI 30233

SOCI 30253
SOCI 40303

Sacred
Native American Religions and Ecology 3
Transnational Processes: Globalization, 3
Migrations, and Borders
Experimental Course 1.00
Nature Writing in Nature 3
American Environmental History 3
Environmental Philosophy
Energy and Global Geostrategy 3
Religion and Environmental Ethics 3
Social Problems 3
Sustainability: Environmental, Social \& 3
Economic Issues
Environmental Sociology 3
Animals, Culture and Society 3

## Natural Sciences: 3 hours

BIOL 30403 Ecology and the Environment 3

BIOL 40353 Wildlife Ecology and Management 3
ENGR 30113 Energy in Society 3
ENSC 30133 Concepts in Environmental Science 3
ENSC 30313 Environmental Issues in Costa Rica 3
ENSC 30453 Wildlife Research Project 3
ENSC 40193 Environmental Stewardship Seminar 3
ENSC 40603 South African Biodiversity and Human 3
Development Part 1
ENSC 50233
Urban Wildlife
ENSC 50333 Energy Development and Wildlife Conservation 3
ENSC 50703 Environmental Compliance 3
ENSC 50753 Environmental Management Systems 3
ENSC 50793 Environmental Sustainability 3
NTDT 30993 A Global Perspective in Food Insecurity 3
Other Elective Options:
RAMA 20103 Challenges of Global Food Production 3
MANA 30773 Entrepreneurship and Energy 3
If ENSC 10143 is required for a student's major or another minor, the student will choose an additional course from those listed above as a substitution.

## Intensive English Program

The Intensive English Program (IEP) is a non-degree, credit-bearing unit of TCU's University Programs. It aims to help students advance rapidly toward their academic, professional and personal English language goals. Advancedlevel IEP students may enroll in TCU courses for degree credit while in the noncredit certificate program. (Undergraduate candidates should see the admissions section on international students on page 10 in this catalog. Completion of the advanced-level IEP allows applicants to the undergraduate program to waive the TOEFL admission requirement.) TCU employees and family members may pay half the IEP tuition when enrolling.
An IEP student begins at his or her own level and studies intensively at least 20 hours a week. Classes are organized into teams of 15 or fewer students. Outside class, IEP students work in a computer learning lab, take standardized English exams and meet one on one with conversation partners (native English-speaking TCU students, staff or faculty who speak with the IEP student in English and sometimes in another language known by the IEP student and being studied by the partner).
IEP sessions begin in January, March, May, July, August and October. More information is available at www.iep.tcu.edu.

## Intensive English Language Courses

IELP 00412 - Advanced Intensive English I
Advanced Intensive English I
IELP 00422 - Advanced Intensive English II
Intensive English II

## Ranch Management Program

Since 1956, students from 44 states and 22 nations have studied ranching at TCU through the certificate program. In addition to the certificate program, ranch management is available as a Bachelor of Science Degree and as a minor with a Bachelor of Science or Bachelor of Arts in another discipline. The Office of University Programs administers the Bachelor of Science degree, the ranch management minor and the certificate program.
Students admitted to TCU as pre-ranch management must complete the following to advance to the ranch management major:

- Have sufficient working experience in agriculture to understand the nature of the industry
- Have a minimum 2.50 cumulative TCU GPA
- Apply to the Ranch Management Program
- Go through a professional interview
- Be formally admitted to the Ranch Management Program

Students may typically apply in their sophomore year for the Ranch Management Program. Contact the Ranch Management Program regarding specific admission policies. Enrollment is limited.

## General Business Minor for Non-Business Majors, B.S.

Students admitted to TCU as pre-ranch management must complete the following to advance to the ranch management major:

- Have sufficient working experience in agriculture to understand the nature of the industry
- Have a minimum 2.50 cumulative TCU GPA
- Apply to the Ranch Management Program
- Go through a professional interview
- Be formally admitted to the Ranch Management Program

Students may typically apply in their sophomore year for the Ranch Management Program. Contact the Ranch Management Program regarding specific admission policies. Enrollment is limited.

## Pre-Ranch Management Declaration Requirements

## Entering freshmen begin taking courses to satisfy the TCU Core Curriculum requirements, including: <br> Natural Sciences - 6 hours from the following lab science choices

| BIOL 10003 | Contemporary Issues in Biology | 3 |
| :--- | :--- | :--- |
| GEOL 10113 | Understanding the Earth | 3 |
| ENSC 10143 | Contemporary Environmental Issues | 3 |

Social Sciences $\mathbf{- 3}$ required from the following choices
ECON $10223 \quad$ Introductory Microeconomics
ECON 10233 Introductory Macroeconomics 3

## Upper-Level and Major Requirements

Students are required to take the 18 hours for the General Business Minor and only one 3 hour upper-level science course from the courses listed for a total of 21 hours.

## Ranch Management, BS

## Components of the BS Degree in Ranch Management

- Core Curriculum: 39-63 credit hours
- General Business Minor for Non-Business Majors: 18 credit hours (For more information and specific requirements, refer to the General Business Minor section of this catalog.)
- Major Course Requirements: 38 credit hours
- Elective hours vary depending on core curriculum credit hours
- Minimum Hours Required for BS degree: 124 hours


## Requirements

## Choose one upper level science course from the following:

BIOL 30613 Natural History 3

GEOL 30113 Weather and Climate 3
GEOL 30133 Historical Geology I 3
GEOL 30153 Geology of National Parks 3
GEOL 40393 Soils in the Environment 3
GEOL 50523 Introduction to Geographic Information Systems 3
(substitutions require dean's approval)

## Ranch Management Courses

Sequence of ranch management courses must be taken in two consecutive semesters starting with fall semester. Spring courses include two writing emphasis courses to satisfy the core curriculum.

## Fall Semester (17 hours)

RAMA 30102 Ranch Operations and Development 2
RAMA 30403 Soil and Water Conservation 3
RAMA 40103 Beef Cattle Production 3
RAMA $40303 \quad$ Animal Health Management 3
RAMA 50503 Range Management 3
RAMA 50603 Ranch Records and Finance 3
Spring Semester (18 hours)
RAMA 30703 Animal Nutrition and Feeding

RAMA $40101 \quad$ Management Plan Capstone Course 1
RAMA $40112 \quad$ Sheep and Goat Production 2
RAMA 40313 Animal Health and Reproduction 3
RAMA $40903 \quad$ Forage Production and Use 3
RAMA 50213 Ranch Business Management 3
RAMA 50803 Marketing of Livestock and Meats 3
Components of the BS Degree in Ranch Management
Core Curriculum: 39-63 credit hours
General Business Minor for Non-Business Majors: 18 credit hours (For more information and specific requirements, refer to the General Business Minor section of this catalog.)
Major Course Requirements: 38 credit hours
Elective hours vary depending on core curriculum credit hours
Total Hours for BS degree: 125 hours

## Transfer Students

Transfer students must first become pre-ranch management students. Approval is not automatic, and admission to TCU does not guarantee the student admission as a pre-ranch management student. Transfer students should first work with the Office of Transfer Admissions regarding transfer credits and specific transfer student requirements and guidelines. Students must apply to the Ranch Management Program and be formally admitted prior to taking the upper-level ranch management courses. A GPA of 2.50 is required for admission to the program, but does not guarantee admission to the Ranch Management Program. In addition, applicants should have sufficient working experience in agriculture to understand the nature of the industry.

## Pass/No-Credit Policy

Courses for the major (including associated requirements) and the minor may not be taken on a Pass/No-Credit basis.

## Bachelor of Science in Ranch Management Requirements for Graduation

Students should submit the Request for Degree Plan form to the Office of the Dean after completing 54 credit hours.
The Intent to Graduate form should be filed when 88 hours of course credit have been completed.
Approval of the department chair and the dean is required for any coursework completed at another university after enrollment at TCU. Students are responsible for completing the Academic Action form and submitting it to the department chair and the dean.
Approval of the department chair and the dean is required in contract form for all non-traditional courses (special problems, independent study, research problems, etc.). Per University policy, students wishing to pursue independent study must receive all necessary approvals at least one semester in advance of the semester in which the independent study will occur. Students are responsible for submitting the Request for NonTraditional Course form to the department chair and the dean.
Beyond the studies specified for the ranch management major, the bachelor's degree is built on the TCU Core Curriculum that applies to all University graduates.
All required forms are available on the University Programs website, www.universityprograms.tcu.edu.

## Ranch Management Minor

Students may pursue a degree in a discipline other than ranch management and utilize the ranch management certificate program to meet graduation requirements, provided they are qualified for admission into the Ranch Management Program. A minimum 2.50 cumulative TCU GPA is required. Students interested in pursuing the ranch management minor should contact the Ranch Management office at 817.257.7145 for information on the application process prior to their junior year.
The ranch management minor requires 35 hours of coursework and must be taken in two consecutive semesters. See Required Courses (p. 182) for Certificate Program for a complete list of courses required for the ranch management minor.

## Ranch Management Certificate

## Admission to the Certificate Program

Applicants meeting academic enrollment criteria should have sufficient working experience in agriculture to understand the nature of the industry. Basic knowledge and experience with farming or ranching enables the students to benefit more from the course of study. Enrollment is limited. Selection to the program is made after completion of the application, including transcripts and a professional interview. For information or to request an application, call 817.257.7145 or write to:
Director, Ranch Management Program
Texas Christian University
TCU Box 297420
Fort Worth, TX 76129
www.webforms.tcu.edu/fam/rama/Gedt.html
Email: ranching@tcu.edu
The ranch management certificate program requires two consecutive semesters to complete. Intensive classroom instruction in basic management principles complement courses in livestock production, natural resource conservation, forage production and accounting principles. Fieldwork is coordinated with classroom study to demonstrate principles as they apply in production situations.
Classes are offered in three-hour units to allow concentration of subject matter and to facilitate field work. Generally, class hours are from 9 a.m. to noon and 1-4 p.m. five days a week. Class hours may vary when fieldwork requires additional travel time.
Basic vocational skills are taught that require physical mobility and manual dexterity. Field work includes five week-long trips and numerous day trips. No other courses may be taken during the year. The two-semester program leads to 35 hours of credit and a ranch management certificate.

## Required Courses for Certificate in Ranch Management

## Fall Semester ( $\mathbf{1 7}$ hours)

RAMA 30102 Ranch Operations and Development 2

RAMA 30403 Soil and Water Conservation 3
RAMA 40103 Beef Cattle Production 3
RAMA $40303 \quad$ Animal Health Management 3
RAMA 50503 Range Management 3
RAMA $50603 \quad$ Ranch Records and Finance 3
Spring Semester (18 hours)
RAMA 30703 Animal Nutrition and Feeding 3
RAMA 40101 Management Plan Capstone Course 1
RAMA 40112 Sheep and Goat Production 2
RAMA 40313 Animal Health and Reproduction 3
RAMA $40903 \quad$ Forage Production and Use 3
RAMA 50213 Ranch Business Management 3
RAMA 50803 Marketing of Livestock and Meats 3

## Purple Passport: Your Global Citizenship Credential

Global Citizenship Credential (GCC) consists of Global Realities that will affect the world in which we work and live. Students pursuing GCC will select one of six Global Realities for in depth study via course work and global engagement. For more information, visit www.studyabroad.tcu.edu.

## Women and Gender Studies

Women and gender studies is available as a minor and as an emphasis on both the $B A$ and $B S$ degrees.

## Women and Gender's Studies Minor and Emphasis

The minor and the emphasis in women and gender studies are designed to provide students theoretical frameworks for recovering and analyzing women's experiences as part of a larger investigation of gender and difference, and to offer opportunities to study disciplines through these frameworks.
Students seeking the minor complete 18 hours: two required courses (WGST 20003 and WGST 40003) and a choice of four additional courses from an approved list (see below). In choosing these courses, students take no more than two courses from any single discipline. Students who minor in women and gender studies must choose whether WGST-approved courses in their major discipline will count toward the major or the minor. No course may count for both.

Students seeking the emphasis in women and gender studies complete 15 hours: either WGST 20003 or WGST 40003 and a choice of four additional courses from the approved list. Emphasis students may count WGSTapproved courses toward both their major and the emphasis, and may also concentrate their WGST electives in a single discipline. Emphasis students in programs requiring a minor must complete a minor in another disciplinary field.

## Requirements

## Required Courses

WGST 20003 Introduction to Women and Gender Studies 3
WGST 40003 Senior Seminar in Women and Gender Studies 3

## Elective Courses

An approved list of courses is maintained by the director of Women and Gender Studies.

For more information, contact WGST@tcu.edu

## The John V. Roach Honors College

## The Honors College Description

The Honors College holds as its central purpose and philosophy the stimulation and encouragement of academic activity at the highest level. It strives to bring together dedicated faculty and highly-motivated students who share a commitment to the finest qualities of scholarship. Through collaboration with all schools and colleges of the University, the Honors College provides opportunities for the intellectual growth and fulfillment of students in all disciplines, as well as of the many faculty who share a commitment to these ideals.

## The John V. Roach Honors College's Mission

Dedicated to enriching the intellectual life of TCU, the John V. Roach Honors College seeks to empower, inspire and motivate high-achieving students to become leaders in a global society.
To accomplish the mission, the TCU Honors College:

- promotes self-discovery, critical thinking and a conscientious understanding of world cultures through rigorous academic endeavors and creative inquiry in the context of big questions, great ideas and relevant issues that transcend the curriculum
- offers unique residential, curricular and co-curricular opportunities, fostering a community of scholars for whom vigorous engagement with local, national and global communities becomes a way of life


## Honors College Admission

Admission to the Honors College is by invitation only and is separate from general University admission. The Honors College normally extends an invitation to approximately the top 10 percent of students entering TCU each fall. Primary metrics include strength of the high school curriculum, SAT or ACT scores, high school rank (if applicable) and grades earned in academic courses.

Selected TCU faculty and staff examine each application in a threefold process: first, for admission to the University; second, for academic, meritbased scholarship support; and third (and most selective) for invitation to the Honors College. The Honors College, therefore, requires no additional application, and virtually all Honors students have excellent scholarship support.
Current students of freshman, sophomore or junior classification who achieve a minimum 3.5 cumulative GPA in at least 12 graded TCU hours are eligible and encouraged to apply for admission to the Honors College.

## Honors College Requirements

The Honors College offers programs for students of all majors and complements all areas of study on campus.

## GPA Requirements

To remain in good academic standing as a member of the college, a student must meet the following minimum GPA requirements:

- completion of freshman year: 3.0
- completion of sophomore year: 3.25
- completion of junior year: 3.4
- completion of junior year: 3.5 Students who fail to meet these requirements may reapply to the Honors College when they have attained the required GPA.


## Pass/No-Credit Policy

Courses to fulfill Honors College requirements may not be taken on a pass/no-credit basis.

## Lower-Division Requirements

Successful fulfillment of honors lower-division requirements entails completing 15 hours of lower-division honors courses, including a minimum of 6 hours of Cultural Visions courses, with the remaining hours in honors electives. First- and second-year students should enroll in at least one honors class per semester until lower-division requirements are met.
A student who fulfills the lower-division requirements and maintains a minimum cumulative 3.25 GPA will be honored as a Kathryne McDorman Honors Scholar.

## Upper-Division Requirements

Students may complete upper-division honors by choosing either Departmental Honors (which involves a research or creative project) or University Honors (which requires completion of four colloquium courses). See below for details on each option.
A student who fulfills the upper-division requirements and achieves a minimum 3.5 cumulative GPA will be honored as a Paul and Judy Andrews Honors Scholar. Students who complete a Departmental Honors Project in their major and present the project in a public forum determined by their college will be recognized as an Andrews Honors Scholar in their field of study (Andrews Honors Scholar in Biology, Andrews Honors Scholar in History, etc.); students who complete at least four interdisciplinary colloquia classes will be recognized as an Andrews Honors Scholar in Colloquia. Some students choose to complete both pathways to upper-division honors certification, i.e., both Departmental Honors and University Honors.

## Departmental Honors

Departmental Honors involves intense study in the student's major, typically consisting of a junior and senior-level seminar and completion of a Departmental Honors Project under the guidance of a faculty committee. This project may be presented in several forms; for instance, a paper reflecting research or creative study, a portfolio or original composition in literature or one of the fine arts, or a documented performance in the arts. Procedures and methodologies vary by department, consistent with University guidelines such as those of the Institutional Review Board (IRB). Honors students who want to pursue Departmental Honors should consult their major department and the current year's guidelines from the Honors College, available online.

## University Honors

University Honors encourages interdisciplinary thought during the junior and senior years. In small seminar settings, students explore questions that have challenged thinkers through the centuries: What is the nature of values, of society, of the universe? What does it mean to be human?

To graduate with University Honors requires satisfactory completion of four interdisciplinary honors colloquia, such as HCOL 40013, 40023, 40033, 40043 or 40053 . Students may also enroll in special sections of HSPR 40970 or HSPR 40000 for colloquia credit, provided prior approval is secured in the Honors College.

## John V. Roach Honors College Laureates

Students who complete all honors requirements, including lower-division and upper-division, will graduate as John V. Roach Honors College Laureates. A minimum cumulative GPA of 3.5 is required to graduate with John V. Roach Honors College distinctions (e.g., Andrews Scholar or Honors Laureate).

## Honors College Courses

## Course-Subcategories

## Honors Lower-Division Cultural Vision

HNRS 20103 Africa Through Film 3
HNRS 20113 College Life and Identity 3
HNRS 20213 Language, Communication and Cultural Identity 3
HNRS 20223 Gender and Cultural Identity 3
HNRS 20503 Exploring Cultural Contact Zones 3
HNRS 20913 Cultural Memory in the United States I 3
HNRS $20923 \quad$ Cultural Memory in the United States II 3
Other Honors Cultural Visions courses are offered by discipline departments, under prefixes associated with those units. Students should consult the Class Search system for electives being offered in any particular semester by checking under the "Honors: Cultural Visions Classes" Class Attribute.

## Honors Lower-Division Electives

HNRS 20003 Honors: Special Topics
HHIT 20123 Honors Intellectual Traditions: Order

| HHIT 20133 | Honors Intellectual Traditions: Change | 3 |
| :--- | :--- | ---: |
| HITP 10113 | Honors Intellectual Traditions: Purpose | 3 |
| HNRS 30970 | The Scottish Enlightenment | $1.00-$ |
|  |  | 6.00 |

Many Honors electives are offered by discipline departments, under prefixes associated with those units. Students should consult the Class Search system for electives being offered in any particular semester by checking under the "Honors Classes" Class Attribute category.
Honors Colloquia Courses for University Honors

| HCOL 40013 | Nature of the Universe | 3 |
| :--- | :--- | :--- |
| HCOL 40023 | On Human Nature | 3 |
| HCOL 40033 | Nature of Values | 3 |
| HCOL 40043 | Nature of Society | 3 |
| HCOL 40053 | Origins | 3 |

These courses are repeatable provided the topic of an offering does not duplicate a student's previous course work from this sequence.

## Honors Special Project Courses

| HSPR 30990 | International Residential Study | $1.00-$ |
| :--- | :--- | ---: |
|  |  | 20.00 |
| HSPR 40000 | Honors Interdisciplinary Inquiry | $1.00-$ |
|  |  | 6.00 |
| HSPR 40970 | Honors Directed/Independent Study | $1.00-$ |
|  |  | 6.00 |

## Milestones in TCU History

1873
Founded as AddRan Male and Female College, Thorp Spring, Texas. Addison Clark, president (until 1899).

## 1889

Property given to the Christian Churches of Texas, name changed to AddRan Christian University; J.J.J Jrvis president of the board (until 1895).

## 1895

Moved to Waco, Texas, December; Colonel J.Z. Miller, president of the board (until 1899).

## 1899

T.E. Shirley, president of the board (until 1909).

## 1902

Named changed to Texas Christian University; E.V. Zollars, president (until 1906).

1906
Clinton Lockhart, president (until 1910).

## 1909

T.E. Tomlinson, president of the board (until 1917).

1910
Main building at Waco destroyed by fire, March 22; the University moved to Fort Worth with classes in downtown buildings, September.

## 1911

Frederick Kershner, president (until 1915); school opened on present campus with main building, J arvis and Goode halls, September; first endowment received, $\$ 25,000$, from L.C. Brite.

## 1912

Fort Worth Medical College adopted as medical department; charter member of the Association of Texas Colleges.

## 1913

Original Clark Hall completed.

## 1914

Brite College of the Bible founded, Brite Hall erected.

## 1915

School of Law added, E.R. Cockrell, principal.
1916
E.M. Waits, president (until 1941); S.J . McFarland, president of the board (until 1927).

1918
Medical College closed due to rising costs.
1920
Endowment of $\$ 300,000$ attained; School of Law closed.
1921
Gymnasium building completed; recognition by and aid from General Education Board; elected to membership in the Association of American Colleges.
1922
Elected to membership in Southern Association of Colleges and Schools, including accreditation; became member of the Southwest Athletic Conference.

## 1923

Jubilee celebration of 50th anniversary; \$500,000 endowment achieved; the Mary Couts Burnett Trust received.

Mary Couts Burnett Library opened.

## 1926

Graduate school organized, first field house built.

## 1927

Van Zandt Jarvis, president of the board (until 1940).

## 1928

University placed on approved list of Association of American Universities.
1930
New stadium erected on West Campus; University placed on approved list of American Association of University Women.

## 1935

University became charter member of the Southern University Conference.

## 1936

Evening College made distinct administrative unit.

## 1938

School of Business organized.

## 1939

Silver anniversary of Brite College of the Bible celebrated.

## 1940

R.H. Foster, president of the board (until1941).

## 1941

M.E. Sadler, president (until 1959, when he became chancellor until 1965); L.D. Anderson, president of the board (until 1954); Brite College accredited by American Association of Theological Schools.

## 1942

Foster Dormitory completed.

## 1943

University reorganized into seven schools and colleges.

## 1946

Harris College of Nursing added as eighth academic unit.
1947
Tom Brown Dormitory, E.M. Waits Dormitory completed.

## 1948

Jubilee celebration of 75th anniversary of the University; \$5 million endowment achieved; stadium enlarged to 33,500 capacity.

## 1949

Ed Landreth Hall and Auditorium (College of Fine Arts) completed.
1950
TCU Summer School in Mexico established at Monterrey Tech.

## 1952

Winton-Scott Hall of Science completed.

## 1953

Stadium enlarged to 37,000 capacity; old field house burned.

## 1954

Religion Center completed; Milton Daniel, chairman of board (until 1958).

## 1955

Brown-Lupton Student Center, Pete Wright Dormitory completed; Jarvis Dormitory renovated.

## 1956

TCU-Amon G. Carter Stadium expanded to 47,000 capacity; Ranch Management Program established.
1957

Dan D. Rogers Hall (School of Business) completed; Milton E. Daniel and Colby D. Hall dormitories completed.

## 1958

Lorin A. Boswell, chairman of the board (until 1969); estate of Milton E. Daniel left in trust to University; Mary Couts Burnett Library enlarged; Sherley Dormitory completed, new Clark Dormitory built on site of Goode Hall; Bailey Building (old Brite Hall) renovated for College of Education.

## 1959

First Ph.D. programs approved; title of chief administrative officer changed from president to chancellor.

## 1960

M.E. Sadler Hall (administration and classrooms) completed on site of original Clark Hall; first students enrolled in Ph.D. programs in physics and psychology.

## 1961

Dave Reed Hall (old Administration Building) rebuilt for classrooms, faculty offices, second cafeteria; sale of adjacent Worth Hills Golf Course to the University approved by voters of the city.

## 1962

Daniel-Meyer Coliseum built, seating 7,166; Ph.D. programs in English and mathematics inaugurated; University elected to membership in College
Entrance Examination Board and as a sponsor of the Oak Ridge Institute of Nuclear Studies; Computer Center put into operation; Institute of Behavioral Research established.

## 1963

Worth Hills Golf Course acquired for future expansion; Brown-Lupton Health Center completed; Ph.D. program in chemistry begun.

## 1964

Five residence halls and cafeteria completed on Worth Hills property.

## 1965

Ph.D. program in history inaugurated; endowment of more than $\$ 27$ million reached; M.E. Sadler retired as chancellor (July 1); James M. Moudy elected chancellor and inaugurated November 19.

## 1966

Approved faculty leaves with pay; authorized creation of "The TCU Press;" received $\$ 3.4$ million matching grant from Sid W. Richardson Foundation toward construction of Science-Research Center.

## 1967

Named School of Business M. J. Neeley School of Business; began participation in TAGER (The Association for Graduate Education and Research in North Texas) TV network; approved formation of a Faculty Assembly and Senate; Brown-Lupton Student Center expanded.

## 1968

Adopted new academic calendar with fall term ending before Christmas; established Pastoral Care and Training Center.

## 1969

M.J. Neeley chairman of the board (until 1972); approved New Century Program and goal; Leo Potishman Tennis Center completed; Bellaire North and Princeton House apartments purchased for student housing.

## 1970

Completed Sid W. Richardson Physical Sciences Building, Annie Richardson Bass Building for Harris College of Nursing and Home Economics and a new living-learning residence hall (named during 1971-72 session for Dr. and Mrs. Solomon Brachman); Phi Beta Kappa Chapter established February 24.

## 1971

Completed Cyrus K. and Ann C. Rickel Health and Physical Education Building and new women's residence hall (named during 1972-73 session for Mary Lipscomb Wiggins); formed Centennial Commission to plan 100th year observance during 1973; Friends of the Texas Christian University Libraries organized January 28; Tom Brown Hall renovated and refurnished.

## 1972

Administration reorganized into two major areas: academic and support, each headed by a vice chancellor; Theodore P. Beasley elected chairman of the board; Waits and Milton Daniel halls renovated and refurnished.

1973

Celebrated centennial year; \$35 million achieved during New Century campaign for capital, operating and endowment funds; "Old Gym" remodeled for Division of Ballet, "Little Gym" as annex for the Department of Art.

## 1974

William C. Conner elected chairman of the board; Chancellor J. M. Moudy received grant from the Danforth Foundation for leave of absence during spring semester, Vice Chancellor and Provost Howard G. Wible named acting chancellor during that time.

## 1975

Miller Speech and Hearing Clinic Building completed.

## 1976

Mary Potishman Lard Tennis Center completed for public and University use; third floor added to Annie Richardson Bass Building.

## 1977

Addison and Randolph Clark Society established to recognize donors of \$1,000 or more annually; Texas Growth Companies Endowment Fund established.

## 1978

Ground broken for J.M. Moudy Building for Visual Arts and Communication (dedicated March 26, 1982); new building for Starpoint School completed.

## 1979

Graduate program reorganized by school/college, replacing Graduate School; Bayard Friedman elected chairman of the board; Martin-Moore Hall named; James M. Moudy retired as chancellor, succeeded on September 5 by William E. Tucker (inaugurated April 16, 1980).

## 1980

Brite Divinity School passes $\$ 7.5$ million goal of its first fund-raising campaign; goal of $\$ 10$ million to expand library achieved.

## 1981

Library collection passes 1 million items; \$5 million endowment for financial aid received from Theodore and Beulah Beasley Foundation.

## 1982

The 40,000th graduate received a degree at summer commencement; addition almost doubling size of the library occupied (dedicated March 25, 1983).

## 1983

Endowment reaches and passes $\$ 100$ million for first time; appointments made to The 1990s Project: A Commission on TCU and the Future; Chancellor William E. Tucker elected to two-year term as moderator of the Christian Church (Disciples of Christ).

## 1984

Expansion of building for M.J. Neeley School of Business approved; suggestions received from The 1990s Project; football team gained national attention and played in Bluebonnet Bowl.

## 1985

Limitations placed on freshman, transfer enrollments; duties of vice chancellor for administrative services and student affairs divided among two positions as fifth vice chancellor is added.

## 1986

Construction of new residence hall approved.

## 1987

Groundbreaking for Tandy Hall expansion of M.J. Neeley School of Business and Moncrief Hall, a new residence hall; School of Fine Arts re-named College of Fine Arts and Communication; new University Curriculum Requirements approved.

## 1988

Academic Services Center put into full operation; Moncrief Hall dedicated.

## 1989

Tandy Hall dedicated; endowment passes $\$ 200$ million.

## 1990

John Roach elected chairman of the board; 50,000th graduate receives degree; more than $\$ 3$ million in gifts assure permanence of Ranch Management Program; priorities for academic initiatives in the 1990s include
a program in engineering, stronger focus on Ph.D. programs, strengthened international study opportunities for faculty and students.

## 1991

Master plan for the physical campus completed and approved; central dining hall renovated for $\$ 2.2$ million.

## 1992

First freshmen admitted to new engineering program; Winthrop Rockefeller Building for Ranch Management completed (dedicated January, 1993); first "global-theme semester" held and student exchange with Universidad delas Americas-Puebla approved; $\$ 15$ million bequest from estates of B.M. and Frances Britain received.

## 1993

Board of Trustees approves planning of a comprehensive fund-raising campaign, the first in a quarter century; endowment passes $\$ 400$ million.

## 1994

The Walsh Complex, a $\$ 2.5$ million expansion of the athletics weight training and rehabilitation center, is built; when the Southwest Conference acts to disband after 1995, TCU joins the Western Athletic Conference, then wins the SWC football co-championship and plays in the Independence Bowl; The Next Frontier Campaign is publicly announced with a $\$ 100$ million goal, with \$61 million raised or committed during the "silent phase" of the five-year campaign.

## 1995

Ground is broken for the $\$ 6$ million Dee J. Kelly Alumni and Visitors Center (dedicated at Homecoming 1996); computer/information technology extended to all residence hall rooms; pre-enrollment Frog Camp becomes integral to freshman program.

## 1996

First class of engineering students awarded degrees; faculty expanded by 10 primarily to enhance freshman seminar program; ground broken for \$11.5 million F. Howard and Mary D. Walsh Center for the Performing Arts; renewal/reconfiguration of residence halls approved.

## 1997

The combined TCU/Brite Endowment exceeds $\$ 750$ million after completion of the five-year Next Frontier Campaign, which raised more than \$126 million; Pete Wright Hall razed to make way for the Tom Brown/Pete Wright residential community, completed in 1998; the Department of Engineering receives accreditation; TCU establishes partnership with Columbia University to send students to Biosphere II.

## 1998

The Mary D. and F. Howard Walsh Center for Performing Arts dedicated; the TCU London Centre, the University's first permanent overseas facility, opens its doors to the first class of students in the fall; Chancellor William E. Tucker retires after 19 years of service, paving the way for the University's ninth chancellor, Michael R. Ferrari; the Department of Music renamed the School of Music and becomes one of the country's few all-Steinway schools. TCU defeats USC in the Sun Bowl, 28-19.

## 1999

Tom Brown/Pete Wright Residential Complex, housing upperclassmen in apartment style quarters, opens in J anuary; work begins on the William E. and Jean Jones Tucker Technology Center; Commission on the Future of TCU kicks off in fall; Lowdon track is dedicated; ground is broken for 35,000 square-foot J ustin Athletics Center; Frogs beat East Carolina 28-14 in the Mobile Alabama Bowl; trustees approve an aggressive program to improve classroom technology and hire 21 new faculty.

## 2000

Schools and colleges reorganized from five to seven—AddRan College of Liberal Arts, M.J. Neeley School of Business, the Bob Schieffer College of Communication, the College of Education, the College of Fine Arts, the College of Health \& Human Sciences, and the College of Science \& Engineering; the James A. Ryffel Entrepreneurship Center established; TCU parents Steve and Sarah Smith donate $\$ 10.5$ million for an entrepreneurship facility, the largest private gift in University history; Brite's Leibrock Village dedicated; Runningback LaDainian Tomlinson becomes the third Horned Frog to run for the Heisman Trophy, placing fourth in the nation in the final vote and earning the Doak Walker Award; the Frogs end with an 10-2 football season and go to their third consecutive bowl game_the Mobile Alabama Bowl; in November, the University signs an agreement with the Universidad de las Americas-Puebla, Mexico , allowing students from both universities to earn degrees in communication from both institutions simultaneously.

## 2001

Spring closes the most successful athletics program in school history as the University leaves the Western Athletic Conference and joins Conference USA; in February, TCU Board of Trustees approved a new flat-rate pricing structure that better aligns TCU with other prominent private universities and reflects the value of the complete "TCU Experience"; Gary Patterson becomes the 29th head coach in the history of the TCU football program and takes the Horned Frogs to their fourth consecutive post-season appearance-The galleryfurniture.com Bowl; Harris College of Nursing launches an online master's degree to allow RNs with a Bachelor of Science degree to complete their master's degree in two years, and RNs with an Associate of Arts degree to complete the program in three; the women's basketball team wins the WAC regular season title and post-season tournament, earning the Lady Frogs their first-ever appearance in the NCAA Tournament; in May, the James A Ryffel Center for Entrepreneurial Studies sponsors the first-ever Entrepreneurial Summit, a networking and idea-sharing event; construction begins on the Sarah and Steve Smith Entrepreneurs Hall; M.J. Neely School of Business launches a Center for Supply and Value Chain Studies; Men's Head Basketball Coach Billy Tubbs announces he will step down at the end of the season. He compiles a 156-95 record, including a regular season WAC division title in eight seasons; Mary Couts Burnett Library expands its computer lab to 100 computers and adds Bistro Burnett, a coffee bar in the library's foyer; the University begins a three-year \$30 million plan to upgrade about 80 classrooms and laboratories with new lighting, ceilings, furniture and audio-visual equipment and renovate several residence halls.

## 2002

The M.J . Neely School of Business makes plans for the Luther King Capital Management Center for Financial Studies; the College of Education announces a Center for Urban Education that will form a coalition of teachers, principals, and TCU faculty and students to turn neglected innercity schools into thriving environments; Mary Couts Burnett Library establishes Information Commons, a combination reference help desk and computer troubleshooting center; construction begins on 2,220-seat Lupton Stadium, the new home for the baseball team; William E. and Jean J ones Tucker Technology Center opens for engineering, computer science and mathematics; Neil Dougherty becomes the 18th head coach in the history of TCU men's basketball; a School of Anesthesia opens within the College of Health \& Human Sciences; the football team wins its fifth consecutive bowl game, beating Colorado State 17-3 in the Liberty Bowl in Memphis, ending the season 10-2 with a No. 22 ranking.

## 2003

The Steve and Sarah Smith Entrepreneurs Hall opens; Victor J. Boschini, Jr. becomes TCU's 10th leader when he takes office as chancellor; Chancellor Michael R. Ferrari retires after leading the University for five years; D. Newell Williams becomes the eighth president of Brite Divinity School; Monnig Meteorite Gallery opens; Baseball Coach Lance Brown, TCU's all-time winningest coach, retires after 17 years and 517 victories, Jim Schlossnagle is named his successor and the new stadium hosts its first game; the freshman class was the largest and smartest group to date at 1,596 with an average SAT of 1168; the Frogs lost to Boise State 34-31 in the Inaugural Fort Worth Bowl after an 11-1 season pushed them into the national media spotlight with talk of a BCS game if they went undefeated; tuition rose to \$19,700, a 11.9 percent increase; Vision in Action: Planning TCU's Future was launched to develop a long-range strategic plan; purple gowns were instituted for graduation.

## 2004

Victor J. Boschini, Jr. is inaugurated as the 10th chancellor; R. Nowell Donovan is named provost; D. Newell Williams is inaugurated as the eighth president of Brite Divinity School; TCU accepts a bid to join the Mountain West Conference; Daniel Short is named dean of the M.J. Neeley School of Business; Chancellor EmeritusJames Mattox Moudy dies; Bronson Davis, vice chancellor for advancement for 14 years, retires; architectural plans are drawn up for a new Veterans Plaza; Baseball team makes regionals for the second time ever.

## 2005

Approval for a $\$ 100$ million Vision in Action plan to add four residence halls, a University union and a green-space commons to the heart of the campus; construction begins on renovation and expansion to triple the size of the College of Education; Veterans Plaza memorial to alumni and students erected; M.J. Neely School of Business ranked 18th in the nation by the Wall Street Journal Guide ; journalism school named for Bob Schieffer; new core curriculum instituted; football wins Mountain West Championship and Houston Bowl; baseball wins last Conference USA Championship; women's basketball makes sixth consecutive appearance in NCAA Tournament; baseball pitcher Lance Broadway drafted by the Chicago White Sox in the first round.

## 2006

Commencement moved back to campus after four years, and split into two ceremonies to handle the crowds; TCU Bookstore on Berry Street moved into temporary trailers while the store's building underwent a second-floor expansion, but the building subsequently burned to the ground during the night; Frog Fountain is dismantled for renovation as construction on the newly announced Campus Commons gets underway; ground is broken in April for the new J.E. and L.E. Mabee Foundation Education Complex that will include the renovation of the historic Bailey Building and addition of the Steve and Betsy Palko Building; GrandMarc at Westberry Place, a public/private partnership, opened its doors as student housing on campus; TCU announced plans for an indoor sports practice facility and a new bookstore; TCU became the first school in Texas to adopt an all-paperless application process.

## 2007

A policy change required all sophomores and freshmen to live on campus beginning in the fall, when two of the four dorms in the Campus Commons opened; the Sam Baugh Indoor Practice Facility and Cox Field opened in May; the Mabee Education Complex for the newly named College of Education opened in July. Trustees approve a $\$ 315$ million budget for 2007 08 , which included $\$ 6.4$ million in additional financial aid. A drilling rights agreement is signed with Four Sevens Resources Co., Ltd., signaling intent by the University to allow gas drilling in the Barnett Shale on campus. The largest incoming class, 1,660 students, with the highest SAT average scores (1759) to date, arrived in the fall. A refurbished Frog Fountain was installed in December. Jarvis Dormitory and Clark Hall closed for renovations in December. When J arvis reopens in 2008 as J arvis Hall, it will house only offices.

## 2008

A 34,000-square-foot TCU Barnes \& Noble bookstore opened at the corner of University Drive and Berry Street in January. Students moved into the Teresa and Luther King and Mary and Robert J. Wright residences halls on the Campus Commons. The public phase of the Campaign for TCU kicked off in April. The Brown-Lupton Student Center was razed in July and construction began on the Clarence and Kerry Scharbauer Hall for the Honors College and AddRan College of Humanities \& Social Sciences. The Brown-Lupton University Union opened. Clark and Jarvis Halls reopened, though J arvis is now office space. Sherley Hall was closed for renovation. The incoming Class of 2010 boasted the highest average SAT score (1754) in school history. An addition to Moudy South, which will house a convergence lab for the Schieffer, was announced in late fall

## 2009

An addition to the Starpoint School/KinderFrogs building opened in February. The John V. Roach Honors College was established. Milton-Daniel Hall closed for renovation. Sherley Hall reopened in August as an allfreshman residence hall following a year-long renovation. Construction of an Admission building is announced. Amon Carter Stadium has a record crowd of 50,307 for the game against Utah on Oct. 31, which the Frog won, 55-28. ESPN's College Game Day was on hand that day too, another campus first. The Frogs, under Coach Gary Patterson have the first perfect regular season since 1938 (12-0). Fort Worth gets on board, turning the Trinity River purple and lighting up downtown in purple lights. Finishing the season at \#5 in the nation, the Frogs earn a spot in their first BCS tournament, the Tostitos Fiesta Bowl in Arizona.

## 2010

In January the No. 4 Frogs fell 17-10 to No. 6 Boise State in the 2010 Tostitos Fiesta Bowl in Glendale, Arizona. It was the Frogs' first-ever Bowl Championship Series appearance. Scharbauer Hall, completed in 2009, was opened to classes for the spring 2010 semester. The hall also houses the AddRan College of Liberal Arts and the John V. Roach Honors College. Reed Hall, which was renovated to match the newly-constructed Scharbauer Hall, is re-opened in the summer. In February the Bob Schieffer College of Communication dedicated its new $\$ 5.6$ million convergence lab, bringing together the Skiff, TCU News Now and Image magazine operations in one newsroom. In May "Range Duty," an 800-pound bronze sculpture depicting a cowboy at a campfire, was added to the front lawn of the Winthrop Rockefeller Building for Ranch Management. In June the Athletic department added the Jane J ustin Soccer Fieldhouse to its roster of facilities. The \$7.9 million, 14,500-square-foot Mary Wright Admission Center opened its doors in August. The facility's use of geothermal energy for heating, cooling and water temperature systems has earned it LEED (Leadership in Energy and Environmental Design) gold certification. After a year-long renovation, Milton Daniel residence hall re-opened in August to house students in the John V. Roach Honors College. In November TCU accepted an invitation to join the Big East Conference effective July 1, 2012. On Dec. 5, 2010, the west grandstand of Amon G. Carter Stadium was imploded to make way for the
planned \$105 million renovation project. In December the TCU Jazz Ensemble was among the first U.S. college groups to travel to Cuban when it performed at the Havana International Jazz Festival. U.S. News \& World Report ranked the Neeley School of Business in the Top 10 schools for MBAs with the Most Financial Value at Graduation in a 2010 survey.

At the 97th Rose Bowl on Dec. 31 in Pasadena, TCU beat the University of Wisconsin 21-19. The victory followed two days of Los Angeles festivities including New Year's Eve party for alums, a Frog Bash, a pep rally and the Tournament of Roses parade. At home, 7,000 local fans gathered at DanielMeyer Coliseum with Fort Worth Mayor Mike Moncrief and State Senator Wendy Davis '90 for a celebration that was televised live.

## 2011

TCU was included in The Princeton Review's Best 376 Colleges, 2012 Edition. Only about 15 percent of America's 2,500 four-year colleges and three outside the U.S. are profiled in the guide. TCU also was included in The Princeton Review's Guide to 311 Green Colleges, 2011 edition, for the environmentally responsible practices. In November, TCU received approval from its Board of Trustees' Executive Committee to renovate the east side of Amon G. Carter Stadium immediately following the conclusion of the 2011 football season. In August the inaugural Frogs First orientation, welcomed the Class of 2015. Also in August, the School for Classical \& Contemporary Dance moved into the newly renovated Erma Lowe Hall (formerly the Ballet Building); the official opening was celebrated in October. On Oct. 10 the Board of Trustees unanimously approved an invitation to join Baylor, Iowa State, Kansas, Kansas State, Missouri, Oklahoma, Oklahoma State, Texas and Texas Tech in the Big 12 conference, effective July 1, 2012. In November construction of two residence halls in Worth Hills was announced as part of a multi-phase plan to create a new residential Worth Hills Village. The halls will accommodate about 400 students with completion expected by August 2013. In December a two-ton wrecking ball finished its work on the last of the old Amon G. Carter Stadium in preparation for further renovation, completion is scheduled for late summer 2012, well before the first home game against Grambling State. Also in December, a time capsule containing TCU memorabilia was buried inside a column on the west side of the stadium. After failing to earn a bowl berth in BCS standings, TCU was picked for the San Diego County Credit Union Poinsettia Bowl. The Frogs' 31-24 victory over Louisiana Tech gave TCU its third straight Mountain West Conference title.

## 2012

The W. Oliver and Nell A. Harrison Building of Brite Divinity School opened in January. The TCU Board of Trustees approved the next phase of Vision in Action, called the Academy of Tomorrow, in February. Construction on the new academic building and an addition to Annie Richardson Bass Hall began in the fall. The Campaign for TCU concluded in May with a total of $\$ 434,103,887$ raised. Construction began on two new residence halls in Worth Hills, at the corner of Bellaire Drive North and Stadium Drive. Ol' Rip, a new horned frog statue, was installed between Reed Hall and Scharbauer Hall in April. Membership in the Big 12 Conference kicked off July 1. A completely renovated Amon G. Carter Stadium opened in September, and Gary Patterson became TCU's winningest coach with his 110th victory at the first home game of the season against Grambling State.

## 2013

With a freshman class featuring some of the highest SAT and ACT scores in TCU history, the University remained the second most selective school in Texas, behind only Rice University. The student-faculty ratio was an enviable 13:1, and the freshman-to-sophomore retention rate approached 90 percent The Chronicle of Higher Education listed TCU among its "Great Colleges to Work For," and The Princeton Review ranked TCU at No. 15 in the nation for Best College Dorms. The Greek Circle of Excellence, built to celebrate a halfcentury of Greek-letter societies at TCU, was dedicated. The Pre-Health Professions Program was elevated to the Pre-Health Professions Institute. The Neeley School of Business, recognized by The Economist as having the world's best MBA faculty, celebrated its 75th anniversary. Three graduate programs enrolled their first students: the Master of Social Work, the MBA for Energy Professionals and the Master of Science in Supply Chain Management. Work continued on the Intellectual Commons, including construction of Rees-Jones Hall, TCU's first interdisciplinary academic building, and an addition to the Annie Richardson Bass Building. Two residence halls opened in the Worth Hills Development, Marion Hall and Pamela and Edward Clark Hall, while a third was under construction

## 2014

U.S. News \& World Report placed TCU No. 76 among national universities, while Forbes named the University one of its "Rising Stars: 10 Top Colleges to Watch." Further evidence of TCU's academic excellence was the selection of six Horned Frogs as Fulbright Scholars. For the fourth consecutive year, the University was on The Chronicle of Higher Education's "Great Colleges to Work

For" list. With 17,000 applications for the Class of 2018, the admission rate was in the "highly selective" category. On the east campus, a classical new entrance to the Mary Couts Burnett Library was constructed, and work began on a technology-rich reimagining of the library. Rees-J ones Hall opened in the Intellectual Commons, as did an addition to the Annie Richardson Bass Building. On the west campus, Marlene Moss Hays Hall was the latest facility to open in the Worth Hills residential development. As part of TCU's Quality Enhancement Plan to internationalize the University, the fall 2014 focus of Discovering Global Citizenship was the Middle East and Central Asia. The first of the "great themes" courses, which examine critical challenges facing the planet, addressed water issues.

## 2015

A multipurpose building opens in Worth Hills. The university endowment reaches $\$ 1.5$ billion. TCU and the University of North Texas Health Science Center sign a memorandum of understanding to create a new M.D. school in Fort Worth. The baseball team makes its third College World Series appearance in six years. The renovated Mary Couts Burnett Library opens in the Intellectual Commons, while an ambitious new complex for the Neeley School of Business is on the drawing board. After an injury-plagued 2015 football season, the Frogs win the Alamo Bowl with a 31-point comeback to earn a No. 7 postseason national ranking. The Ed and Rae Schollmaier Arena in the Daniel-Meyer Athletic Complex is dedicated. Work begins on Greek Village in Worth Hills. The Class of 2019 - more than 2,000 strong continues a trend of excellence with the highest academic credentials in TCU history.
2016
Significant events in the University's history continue as TCU opts out of Senate Bill 11 and prohibits guns on campus. Dr. Stuart Flynn is selected as the founding dean of the new M.D. School being created by TCU and the University of North Texas Health Science Center. William and Sue Parrish donate life-sized bronze statues to commemorate TCU Football iconsDavey O'Brien, Leo "Dutch" Meyer and Gary Patterson. Bob Schieffer "retires" The Schieffer Symposium in the News, and establishes TCU's most generous and academically prestigious scholarship. The Art Galleries secure a handpainted chromogenic print titled Dead Cock and Contemplative Magpie, 2007 for the University's Permanent Art Collection and TCU's Percussion Orchestra wins the International Percussion Ensemble Competition for the fourth time.

## Material Resources

Through the generous gifts and bequests of friends over the years, the University has accumulated endowment funds with a market value of $\$ 1.469$ billion as of December 31, 2015.
Fully endowed chairs, several professorships, lectureships and many endowed scholarships have been contributed by individuals, charitable foundations and churches.

## Chairs and Professorships

A named academic position may be created by an endowed amount consistent with recently adopted guidelines.
The Abell-Hanger Professorship in Gerontological Nursing was endowed for the Harris College of Nursing as the result of a challenge grant offered by Mrs. George T. Abell '26 and the Abell-Hanger Foundation. The professorship is held by Dennis Cheek.
The William L. and Betty F. Adams Chair of Education was established in the College of Education by an endowment from Mr. and Mrs. William L. Adams. The chair is held by Molly Weinburgh.
The Charles F. and Alann P. Bedford Professorship in International Business was established through a bequest gift from Dr. Alann P. Bedford, who was awarded the honorary Doctor of Laws degree in 1973. She was a TCU trustee 1975-88. This position aids the M.J. Neeley School of Business in emphasizing the increasingly global nature of business. The professorship is held by William C. Moncrief III.
The John Biggs Professorship in Ranch Management was established from a gift from the E. Paul and Helen Buck Waggoner Foundation in 1992. The professorship is held by Jason Faubion.
The Stan Block Chair of Finance was established in the M.J. Neeley School of Business in 2001 through the generous gifts of M.J. Neeley School of Business alumni and friends. The chair is held by Larry J. Lockwood.
The BNSF Railway Endowed Professorship in Leadership was established in 2012 by the BNSF Railway Foundation. The professorship is held by Mary Uhl-Bien.
The A.A. Bradford Chair of Religion was established by Mrs. L.K. Helen Bradford, in memory of her husband, A.A. "Jack" Bradford, an alumnus and trustee of TCU. The chair is held by David Moessner.
The I. Wylie and Elizabeth M. Briscoe Professor of History of Christianity and History of Christian Thought was established in Brite Divinity School in honor of the Briscoes. The professorship in Hebrew Bible is held by James Duke.
The Harold Glen Brown Lecturer in Pastoral Ministry was established in Brite Divinity School by Mr. and Mrs. Robert M. Leibrock of Midland, Texas. This position will be filled at a later time.
The Herman Brown Chair of Political Science was created through an endowment grant by The Brown Foundation, Inc. of Houston to recognize distinguished achievement in the field of political science. The chair is held by James M. Scott.
The Philip J. and Cheryl C. Burguières Professorship in Communication Studies was established by Mr. and Mrs. Philip J. Burguières of Houston, Texas. The professorship is held by Paul Schrodt.
The Burnett Ranches Endowed Professorship in Ranch Management was established in 1990 by the Anne Burnett and Charles Tandy Foundation. The professorship is held by Kerry L. Cornelius.
The Hunter Enis Endowed Chair in Petroleum Geology was established in 2013 by Shirley and Hunter Enis and Patti and Larry Brogdon, as well as through additional gifts made by friends and alumni. The chair is held by Richard Allen Denne.
The Charles Fischer Catholic Professorship in New Testament was established in Brite Divinity School in 2004 with a gift from an anonymous donor and provides material support to Brite's vision as an ecumenical seminary. The position is held by Francisco Lozada, Jr.
Cecil H. and Ida Green Distinguished Emeritus Tutor was funded by an endowment from Drs. Cecil H. and Ida Green. This position provides an opportunity to name an emeritus tutor from among the ranks of TCU's emeritus faculty on a year-to-year basis. The position is held by Manfred $G$. Reinecke, Department of Chemistry \& Biochemistry; Ronald B. Flowers,

Department of Religion; and Carroll A. Quarles, Jr., Department of Physics and Astronomy; and Donald W. J ackson, Department of Political Science.
Cecil H. and Ida Green Honors Chair was established by Drs. Cecil H. and Ida Green of Dallas to bring to campus many nationally known visiting scholars, scientists, writers and other career persons on a rotating appointment program.
The Luther A. Henderson University Chair of Leadership was established in the M.J. Neeley School of Business by an estate gift from Mr. Luther A. Henderson. The chair is held by Richard Lee Priem.
The Harold D. and Imogene Herndon Professorship in Geology was contributed by Dr. and Mrs. Herndon in 1978. The professorship is held by Richard E. Hanson.
The Harold D. and Imogene Herndon Professorship in Music was established in 1978 by a gift from Dr. and Mrs. Herndon. The professorship is held by John Owings.

## The Houston Livestock Show and Rodeo Professorship in Ranch

Management was established in the TCU Ranch Management Program by the Houston Livestock Show and Rodeo Educational Fund. The professorship is held by Kevin Lee Johnson.
The Rt. Reverend Sam B. Hulsey Chair in Episcopal Studies was established in 2010 and is held by Ed Waggoner.
The Lyndon B. Johnson Chair of United States History was created through an endowment grant by The Brown Foundation, Inc. of Houston to honor the late president of the United States and to recognize distinguished achievement in the field of U.S. history. The position is presently held by Alan Gallay.
The Ann M. Jones Endowed Chair in Special Education was established in 2010 through a gift from Mr. and Mrs. Jon Rex Jones. The chair is held by Malinda Crawford.
The Kay and Velma Kimbell Chair of Art History was established through an endowment grant by the Kimbell Art Foundation in 1994. The chair is held by Mark E. Thistlethwaite.
The Kleinheinz Family Foundation Endowment Chair in International Finance and Investments was established in 2013 through the generosity of John and Marsha Kleinheinz. The chair is presently held by Paul Irvine.
The Addie Levy Professorship in Literature was created through a bequest of Mr. Dan A. Levy. The annual income from the trust fund is used to provide this professorship of world literature. The professorship is held by Linda K . Hughes.
The Robert and Maria Lowdon Chair of Finance was established by an endowment from Robert and Maria Lowdon to bring to the M. J. Neeley School of Business a nationally prominent scholar in the field of business. The chair is held by John Bizjak.
The Erma and Ralph Lowe Chair of Texas History, the first at any institution of higher education in the state, was created through an endowment gift from the Mary Ralph Lowe Foundation of Houston to honor Ms. Lowe's parents. The chair is presently held by David Gregg Cantrell.
Alberta H. and Harold L. Lunger Professorship in Spiritual Resources and Disciplines honors two lifelong ministers and teachers. Alberta Lunger was the first woman to be awarded an honorary Doctor of Divinity degree by TCU. Harold Lunger was professor of Christian ethics in Brite Divinity School 1956-77. The professorship is held by Tim Robinson.
The Ross B. Matthews Professorship in Petroleum Engineering was established in 2007 through a generous gift from Ross B. Matthews ' 84 and his wife, Kathleen. The professorship is held by John R. Fanchi.
The William Watt Matthews Directorship of the TCU Ranch Management Institute was made possible by a gift from friends and family of Mr. Matthews. The Institute was established in the 1990s as an outreach accompaniment to the Ranch Management academic program. The directorship is held by Jeffrey C. Geider.
The Charles B. Moncrief Chair of Geology was established by Mr. and Mrs. W.A. Moncrief, Jr. in honor of their son, Charlie Moncrief '72, in 1984. The chair is held by R. Nowell Donovan.
The W.A. "Tex" Moncrief, Jr. Chair of Physics was also established by Mr. and Mrs. Moncrief in late 1984. The chair is held by Zygmunt Gryczynski.

The W.A. "Tex" Moncrief, Jr. Founding Chair of Engineering was established in 1991 by Mr. and Mrs. Moncrief. The chair is held by Efstathios Michaelides.
The M.J. Neeley Professorship in Accounting was established in 1981 to advance and strengthen the accounting program in the Neeley School of Business. The professorship is held by Karen Kristine Nelson.
The M.J. Neeley Professorship in Management was established in 1981 to advance and strengthen the management program in the Neeley School of Business. The professorship is held by Charles R. Greer.
The A.M. Pate, Jr. Professorship in History is funded by a generous gift from A. M. Pate, Jr., and family. The professorship is currently awarded to a faculty member in the Department of History and Geography in recognition for excellence in research and writing and is designed to assist the awardee with support for completing a book project. The professorship is held by Peter Martin Worthing.
The Neville G. Penrose Chair of Latin American Studies was established in 1985 by an anonymous gift to honor Dr. Penrose's interest in Latin American/U.S. relations. The chair is held by Susan E. Ramirez.
The John William and Helen Stubbs Potter Professorship in Mathematics was established by a gift from Deedie Potter Rose and Rusty Rose in honor of Mrs. Rose's parents. The professorship is held by Frederico Jose Xavier.
The Lillian Radford Chair of Rhetoric and Composition was established by a gift from the Rupert Radford Estate Trust and a grant from the National Endowment for the Humanities. The chair is held by Richard L. Enos.
The W.F. "Tex" and Pauline Curry Rankin Professorship in Nursing was established at Harris College of Nursing and Health Sciences by W.F. "Tex" and Pauline Curry Rankin. The professorship is held by Rhonda Keen.
The Rees-J ones Directorship Endowment for the Institute of Child Development was established in 2013 by The Rees-Jones Foundation to support the director of the Institute of Child Development.
The Jean W. Roach Chair of Laboratory Schools was established in 2005 through the generosity of Mr. and Mrs. John V. Roach and the Roach Foundation to recognize the academic leadership in special education of the director of TCU's two laboratory schools, KinderFrogs School and Starpoint School. The position is currently held by Marilyn Tolbert.
The John V. Roach Dean of the Neeley School of Business was established in 2005 through the generosity of Mr. and Mrs. John V. Roach and the Roach Foundation to recognize the academic leadership and national prominence of the dean of the M.J. Neeley School of Business. The chair is held by Homer Erekson.
The Deedie Potter Rose Chair of Art History was established in 2004 through a generous gift by Deedie Potter Rose to bring to the Department of Art and Art History a nationally prominent scholar in the field of contemporary art. The chair is held by Frances J. Colpitt.
The Rosalyn and Manny Rosenthal Chair of Judaic Studies was created by a gift from E.M. "Manny" Rosenthal and his wife Roz in 1997. The endowment supports a chairholder who serves as a faculty member in Brite Divinity School and directs teaching and research in Jewish studies for Brite and TCU. The chair is held by Ariel Feldman.

## The Lance Corporal Benjamin Whetstone Schmidt Professorship in

 History is funded by a generous gift from Teresa and David R. Schmidt, M.D., in honor of their son Marine Lance Corporal Benjamin W. Schmidt, a scout sniper who was killed in Helmand Province, Afghanistan on October 6, 2011. The professorship is held by Kara Vuic.The Saul B. Sells Chair of Psychology was established by a bequest of the late Dr. Sells, who founded TCU's Institute of Behavioral Research in 1962. The chair is held by Patrick M. Flynn.
The Lorraine Sherley Professorship in Literature was created through a bequest by Dr. Lorraine Sherley, a former professor in TCU's English Department, in 1984. The professorship is held by Sarah Ruffing Robbins.
The Southwestern Exposition and Livestock Show Professorship in Ranch Management was established in 1998 by the Southwestern Exposition and Livestock Show. The professorship is held by Chris Farley.
The Mark and Linda Wassenich Honors Chair was established in 2000 by Mark Wassenich '64 and Linda Wassenich '65. The position is currently open.
The Granville T. and Erline H. Walker Professorship in Homiletics was established in 1991 in honor of the ministries of Granville and Erline Walker. The professorship is held by Lance Pape.
The John F. Weatherly Professorship in Religion was established in 1959 through an endowment gift by the A.D. Weatherly family. The professorship is currently held by Claudia Camp.

The Robert A. Welch Chair of Chemistry was established by The Robert A. Welch Foundation of Houston to recognize distinguished achievement in the field of chemistry. The chair is held by Eric Simanek.
The J ames L. and Eunice West Chair of American Enterprise was initiated by their 1980 gift. The chair provides the holder with the opportunity to communicate-through teaching, public outreach and research-an accurate and objective understanding of the purposes, functions and operations of American business organizations. The chair is currently unfilled.
The James L. and Eunice West Chair of Information Systems and Supply Chain Management in the Neeley School of Business is held by Morgan Swink.
The C.R. Williams Professorship in Financial Services was established by the family of C.R. Williams to bring an outstanding scholar in the financial services area to the M.J. Neeley School of Business. The professorship is held by Audra Leigh Boone.
The J. Vaughn and Evelyne H. Wilson Chair of Marketing was established in 2006 through a bequest of Mr. James V. "Tony" Wilson Jr. '63. Mr. Wilson named the chair in honor of his parents. The chair is held by Robert Leone.
The J. Vaughn and Evelyne H. Wilson Professorship in Accounting was established in 2006 through a bequest of Mr. James V. "Tony" Wilson Jr. '63. Mr. Wilson named the professorship in honor of his parents. The professorship is held by In-Mu Haw.
The J. Vaughn and Evelyne H. Wilson Professorship in Marketing was established in 2006 through a bequest of Mr. James V. "Tony" Wilson Jr. '63. Mr. Wilson named the professorship in honor of his parents. The professorship is held by William Cron.
The Betty S. Wright Chair of Applied Ethics in Philosophy was created from the estate of Betty S. and Hal James Wright '32. The chair is held by Richard Galvin.
The Hal Wright Chair of Latin American Economics was created from the estate of Betty S. and Hal James Wright '32. The chair is held by W. Charles Sawyer.

## Named Lectureships

The following named lectureships, either annually funded or endowed, have been established:
The J ane and Pat Bolin Innovation Forum was established by Jane and Pat Bolin to introduce transformational business leaders and their ideas to audiences on campus.
The Kenneth W. Davis, Jr. Endowed Lectureship at Texas Christian University was established by the generosity of Kenneth W. Davis, Jr. It welcomes distinguished speakers who promote energy-related dialogue and enhance our understanding of energy-related issues.
The Earl E. Dyess Lectureship in Marketing was established by Jack Blanton, Jr. in honor of his father-in-law.
The Florsheim Family Lecture Series in Ethics was established in 2010 by Charles Florsheim '71, Ann Florsheim '71, Charles C. Florsheim '00, Sarah Florsheim '01 and Claire Florsheim '05. The lecture series examines contemporary moral issues.
The Frost Foundation Lectureship for Global Issues was established by the Denver-based Frost Foundation. This endowed lectureship provides for a series of speakers of international stature who can discuss, from personal or professional experience, topics related to preparing students and faculty members to live and work in a global society.
The Gates of Chai Lectureship was endowed through the generosity of Gates of Chai, Inc., in memory of Larry Kornbleet and family members of Stanley and Marcia Kornbleet Kurtz who perished in the Holocaust.
The JoAnn Houston Outstanding Contemporary Thinkers Lecture Series honors JoAnn Houston, a College of Education staff member and longtime educator who died in 1995. Memorial gifts from family and friends and additional funding by the University established this endowed lecture series. The College of Education coordinates bringing to campus outstanding educational thinkers on contemporary concerns.
The McFadin Lectures are supported annually from the McFadin Fund.
The J oseph Morgan Physics Lectureship is funded by the generosity of alumni and friends of the Department of Physics at TCU. It was created in memory of Dr. Joseph Morgan, an honored teacher and noted author who drew regional and national attention to the University.

The W.F. "Tex" and Pauline Curry Rankin Lectureship in Nursing was established in 1998. This endowed lectureship brings to campus national leaders in interdisciplinary areas related to health and nursing.
The Ruth Evelyn Sanders Memorial Lectureship was established in 1994 through a bequest gift by Dr. Ruth Evelyn Sanders ' 39 and longtime educator. A chemistry major at TCU, Dr. Sanders directed that her gift establish a lectureship in that discipline.
The Oreon E. Scott Lectures, funded by the Oreon E. Scott Foundation, provide for an outstanding lecturer on "Crucial Current, National and International Issues from the Christian Point of View."
The Nancy Quarles Stuck Art History Lecture Fund is provided by Mrs. Hosmer B. Stuck of Fort Worth. One of TCU's first recipients of a bachelor's degree in art history, Nancy Stuck directed her gift to that discipline. The fund helps expand the scope of the Art History Program.
The Wells Sermons are financed by the East Dallas Christian Church honoring its former minister, Dr. L.N.D. Wells.
The Speaker Jim Wright Symposia Series Endowment was created to support an annual symposium that examines, from a nonpartisan and nonideological perspective, a contemporary political issue. Outstanding scholars and practitioners from around the country are brought to the TCU campus to participate in this one- or two-day event.

## Research and Departmental Funds

The Larry D. Adams International Award was established in 2012 by friends to honor Dr. Larry D. Adams.
The Catherine R. Alexander Endowment for Ballet Choreographer-inResidence was established in 2003 within the College of Fine Arts from contributions by the Robert D. and Catherine R. Alexander Foundation.
The Robert D. Alexander Endowment for the Liberal Arts was provided by the Robert D. and Catherine R. Alexander Foundation and enables the AddRan College of Liberal Arts to support a biennial lecture series that explores the relevance of a liberal arts education and its role in contemporary society.
The Carl T. and May Anna Anderson Fund for Geology was established by Mr. and Mrs. Anderson '41' '41 to provide budget support for the Department of Geology. This endowed fund is used to provide scholarship assistance, instructional equipment purchases, reference materials, field trips and for support of the instructional budget.
The Andrews Institute of Math, Science and Technology Education Endowment was established in 2007 within the College of Education through a gift from Paul and Judy Andrews.
The AXA Endowed Fund was established by Jeff and EvMarie Angelovich in 2009. It allows the Department of Film, Television and Digital Media to welcome industry professionals to campus so they can speak to students.
The Barrentine Values and Ventures®Endowed Fund was established in 2013 by Lisa and Ron Barrentine to support the Richards Barrentine Values and Ventures®Competition.
The Theodore Beasley Faculty Fellowships in the Neeley School of Business were established by The Theodore and Beulah Beasley Foundation, Inc., to honor the memory of Theodore Beasley.
The Biegert Values and Ventures®Endowment was created by Jeff and Sally Biegert in 2012 to aid the Neeley Entrepreneurship Center in enhancing its many activities and further strengthening its national reputation.
The Alann P. Bedford Endowment Fund was established in 1995 through a planned gift from Alann P. Bedford to support the Neeley School of Business.
The BNSF Neeley Leadership Program is funded through an endowment that was established by the BNSF Foundation in 2006. The BNSF Neeley Leadership Program facilitates unique learning opportunities for some of the Neeley School's most promising students.
The Willene Glass Boger and Allen Dickson Boger, Jr. Endowment for the College of Science \& Engineering was established in 2014 by Mr. and Mrs. Allen Boger to assist with needs in the College of Science \& Engineering.
The Boller Honors Fund, established by Dr. Paul F. Boller, J r., allows the John V. Roach Honors College to award prize money each year for the Boller Award, which is given in recognition of the best Senior Honors Projects.
The Paul Boller Humanities and Fellowship Funds provide travel grants and dissertation support for graduate students in history, enabling them to conduct research or attend conferences.

The Rev. and Mrs. Paul F. Boller Endowment Fund was established by Dr. Paul F. Boller, Jr. in 1981. It supports the John V. Roach Honors College.
The Buschman Endowed Fund in the AddRan College of Liberal Arts was established in 2010 through a bequest from the estate of Robert Alfred Buschman.
The Robert and Jerita Buschman Fund for Theatre was established by Mr. Robert Buschman and Ms. Jerita Foley Buschman in 1986 to provide budget support for the Department of Theatre and especially for theatre production activities.
The John Butler Fund was endowed in 2004 through the gifts of numerous donors. The fund provides support for student interns in the University Ministries Program.
The Electra Carlin Art Department Endowment was established in 2001 by a bequest from Mrs. Carlin's estate. The fund underwrites exhibitions of Texas artists.
The Center for Civic Literacy Endowment was created in 2006 through gifts from Teri Baker O'Glee '78 and the Brown Foundation. The endowment benefits activities of TCU's Center for Civic Literacy.
The Center for Texas Studies Endowment is funded through an endowment that was established to support the Center in its mission to celebrate all that makes Texas distinctive.
The Center for Urban Studies is housed in the AddRan College of Liberal Arts and was primarily funded through gifts from Clarence and Kerry Scharbauer.

The Brent Chesney Endowed Student Fellowship was established in 2014 by Brent Chesney ' 85 to recognize outstanding students in the Washington Internship Program.
The Louise and Frieda Cristol Endowment for Academic Programming in Jewish Studies was established by Bernice Cristol Selman '37 in 2001.
The Davies School of Communication Sciences \& Disorders Endowment was established in 2014 by Ms. Marilyn E. Davies.
The Davis Family Entrepreneur-in-Residence Endowment was provided by Barry and Antoinette Davis to support the work of a distinguished scholar within the Neeley Entrepreneurship Center. The position is held by Brad Hancock.
The Lou Hill and Ralph Davidson Endowment for the Institute of Child Development was established in 2006 within the College of Science \& Engineering by Lou Hill ' 64 and Ralph Davidson to aid the institute in its areas of research training and service.
The William M. Dickey Entrepreneur-in-Residence was established by a gift from the estate of Houston real estate developer William M. Dickey. Currently, Michael Sherrod holds the position.
The Duncan Faculty Fellowship in the M.J. Neeley School of Business was established in 2006 through a bequest from the estate of Robert Roy Duncan '40 and Margaret F. Duncan '41.
The Vera Turbeville Edelbrock Art Endowment was created in 2000 through a bequest from Mrs. Edelbrock's estate.
The Endowed Student Fund for International Business Programs was established in 2008 within the M.J. Neeley School of Business to support students participating in its international initiatives.
The Fogelson Honors Forum was established through a gift from the estates of Buddy Fogelson and his wife Greer Garson. The forum brings renowned speakers, eminent scholars and professional practitioners to campus to address TCU students, staff and faculty as well as the Fort WorthDallas community.
The William E. Forehand Endowment for Undergraduate Business was established in 2014 by the estate of Mr. William E. Forehand.
The Allen Fozzard Leadership Development Fund was established in 2015 by Mr. and Mrs. Peter A. Fozzard to support the BNSF Neeley Leadership Program.
The Frog Camp Endowment was established in 2014 by TCU alumni and friends to cover costs for attendees who would not otherwise be able to participate.
The Garrett Ranch Management Endowed Fund was created by Michael and Toni Garrett in 2011. It equips the TCU Ranch Management Program with necessary resources to better support its operations.

## The Geography Department Speaker Endowed Program Fund was

 established in 2011 to enable the Department of History and Geography to welcome guest speakers who give lectures on various geographic topics.The Gibson Endowed Geography Fund was established in 2010 by E. Lawrence Gibson '51 in honor of Dr. Martine Emert to support field trips for geography students.
The Robert E. Glaze Endowment Fund was established through a gift from Mr. and Mrs. Robert E. Glaze of Dallas.
The Gorvetzian Family Fund for Communication Studies was established in 2013 by Ken and Lori Gorvetzian to create a speaker series for the Department of Communication Studies.
The Hamilton Family eleven40seven Endowed Fund was established in 2013 by Emory and Frederic Hamilton in honor of their daughter, Helen. It enables TCU's student-run journal of the arts to enhance its operations and better showcase students' work with print and online media.
The Harris College Fund Endowment was established in 2014 by an anonymous donor.
The Dr. Phil Hartman Endowed Director's Fund for Excellence was established in 2015 by a group of donors in honor of Dr. Phil Hartman to provide flexible operating support for the Pre-Health Professions Institute Director.
The Mark Henderson Art History Endowment was established through a gift from Mr. Henderson of Los Angeles, California to provide support for students and faculty in the Department of Art and Art History.
The Dawn and Brian Hoesterey Student Excellence Fund in Honors Business was established in 2013 by Dawn and Brian Hoesterey. It enhances the Neeley Fellows Program experience through educational research and travel opportunities.

## The G. Dallas Horton Economics Research and Travel Fund was

established in 2008 by G. Dallas Horton ' 92 to support travel and research in the Economics department.
The Lucile Maxine Houston Endowed Fund was established through a bequest from Ms. Houston to benefit the Harris College of Nursing and Health Sciences.

The Mary E. Hughes Student Loan Fund was established through a bequest from Ms. Hughes to fund student loans at TCU.
The Ignite Campus Ministries Endowed Fund was established by Cindy and Harry Holmes in 2012. It provides technical and administrative support for Ignite Campus Ministries.
The Institute for Critical and Creative Expression is housed in the AddRan College of Liberal Arts and was primarily funded through gifts from Clarence and Kerry Scharbauer.
The Institute of Ranch Management was founded by gifts from two anonymous donors and from the William A. and Elizabeth B. Moncrief Foundation and Edward P. Bass. The institute's mission is to encourage networking and continuing education among the Ranch Management Program's graduates and cattle industry leaders, and to expand the existing program's reach internationally.
The Jim and Wyn J acobsen Band Fund was funded by the TCU ExBandsmens' Association in honor of Jim J acobsen, former TCU band director, and his late wife, Wyn.
The Kimbell Art Foundation Graduate Art History Fund is an endowment that was established by the Kimbell Art Foundation in 2001 to fund stipends for art history graduate students.
The Luther King Capital Management Funds were established by Luther King of Dallas to benefit the M.J. Neeley School of Business.
The Luther and Teresa King Ranch Management Information Resources and Program Enhancement Fund was established in 1995 by Mr. and Mrs. J. Luther King, Jr. to support the Institute of Ranch Management.
The Herbert and Mamie LaGrone Teacher Education Student Leadership Fund was established by the late Mamie LaGrone in memory of her husband, Herbert, retired dean of the College of Education.
The Lay-Williams Endowed Fund for Special Education was established by Richard and Julianne Lay Williams and Carol Lay Fletcher in 2007 to benefit the Alice Neeley Special Education Research and Service Institute in its many endeavors.
The Lesley Family Foundation Endowment for the Institute of Child
Development was established by the Lesley Family Foundation in 2011 and enables the Institute of Child Development to bolster support for its general operations.

The Lettermen's Legacy Endowed Fund was established in 2013 by the TCU Lettermen's Association Board of Directors to assist with athletic capital projects, strengthen scholarships for student-athletes and address the University's greatest needs.
The Suzanne and Kevin G. Levy Endowment for the School of Art was established in 2013 by Suzanne and Kevin Levy. It gives the School of Art flexibility in addressing a variety of needs related to the overall educational experience.
The Linbeck Construction Corp. Residential Life Program Fund was established by the Linbeck Group in 2001. It enables student staff members in housing and residence life to pursue development opportunities.
The Linbeck Supply and Value Chain Endowment supports key initiatives within the Supply and Value Chain Center. The endowment was created by the Linbeck Group in 2004.
The LKCM Center for Financial Studies is funded through an endowment that was established by the Luther King Capital Management Corporation in 2002. The LKCM Center for Financial Studies exists to enhance the quality, prestige and national visibility of finance programs at the Neeley School of Business with outstanding faculty, top students, industry partnerships and excellent employment opportunities for graduates.
The Dr. Brad and Mary Ann Loeffelholz Endowed Fund was established in 2015 by Dr. and Mrs. Brad Loeffelholz to support the Dr. Phil Hartman Endowed Director's Fund for Excellence.
The McCallum AddRan Faculty Development and Creativity Fund was established by Jack and Dana McCallum in 2011 to support the AddRan College of Liberal Arts.
The Jay and Gail Milner Distinguished Student J ournalism Awards
Endowment was established in 2011 to enable the Bob Schieffer College of Communication and its Department of Journalism to annually recognize the work of outstanding student journalists.
The Laurana Rice Mitchelmore Masters Series Fund was established in 2007 in honor of Laurana Rice Mitchelmore '61. Income from this endowment enables the College of Fine Arts to welcome noted vocalists and accompanists for appearances on campus.
The W.A. "Monty and Tex" Moncrief Athletic Endowment was established in 2003 by W.A. "Tex" Moncrief, Jr. to fund operations supporting football.
The W.A. "Tex" Moncrief, Jr. Athletic Endowment was established in 1984 by Mr. Moncrief to benefit TCU's football and golf programs.
The Ronald E. Moore Humanities Symposium is funded by an endowment that was established in 2007 by Ronald E. Moore ' 65 . The symposium series is directed within the AddRan College of Liberal Arts and features an array of humanities-related discussions.
The Mrs. Marcia and Dr. Brady Lee Mootz II Pre-Health Institute Endowed Programming Fund was established in 2011 by Dr. and Mrs. Brady Mootz II to support the Pre-Health Professions Institute.
The Alma and Robert D. Moreton Award for Research in Nursing was established in 2000 by Mrs. Alma Moreton '44 in honor of her husband, Dr. Robert D. Moreton.
The Neeley Fellows Program is funded through an endowment that was established to enhance the three-year business honors program experience.
The Neeley Premium Credentials ${ }^{\text {m }}$ Program is funded through an endowment that was established by Mike and Marilyn Berry. The program offers targeted development for undergraduate business students so they can become more marketable leaders.

The Nowlan Family Excellence Fund in Entrepreneurship was established in 2014 by Mr. and Mrs. John Nowlan to enable the Neeley School of Business to strengthen its undergraduate entrepreneurship program for students across the Texas Christian University campus.
The Dr. Karyn B. Purvis Fellowship in Developmental Trauma was established in 2014 by Mr. and Mrs. Doug Rock and the RockJensen Foundation to support a professional-in-residence fellowship within the Institute of Child Development.
The Rees-J ones Operations Endowment for the Institute of Child Development was established in 2014 by Mr. and Mrs. Trevor Rees-J ones and The Rees-J ones Foundation.
The Ann Hazelwood Regina Memorial Endowment for History was established by Charles and Judy Munnerlyn and Edward Regina to allow the Department of History and Geography to strengthen its programming and the overall educational experience for history majors.
The Kay Lynn Curtis Reininger Endowed Fund for Professional
Development in Special Education was established in 2013 by Reid

Reininger in memory of his wife, Kay. It enables the Alice Neeley Special Education Research and Service (ANSERS) Institute to support professional development activities for special education teachers in Fort Worth and the surrounding area.
The Ann L. Rhodes Artist-in-Residence Endowment Fund was established in 1997 by Ann L. Rhodes of Fort Worth for an artist-in-residence in the Department of Theatre.
The Tartaglino-Richards Foundation New Ventures Endowed Fund for the Richards Barrentine Values \& Ventures®Competition was established by Nancy Tartaglino Richards in 2010 to create and support the Richards Barrentine Values and Ventures®Business Plan Competition.
The John V. Roach Honors College Endowment was established in honor of John V. Roach '61 in 2007 by Paul and Judy Andrews. The endowment funds development of the Honors College at TCU.
The John V. Roach Honors College Undergraduate Research Fund was established in 2014 by the John V. Roach Honors College Board of Visitors to underwrite costs for senior research projects.
The Ryan Center for Sports Broadcasting and Management Endowment was established in 2014 by the Ryan Family Foundation to elevate the capabilities and reputation of the TCU sports broadcasting major.
The Salmon International Student Teaching Endowed Fund was established in 2015 by Dr. Martha Hackley Salmon ' 66 ' 71 and Dr. James A. Salmon to support students who travel to take part in the College of Education's International Student Teaching Program.
The John and Pamela Samford Endowed Fund for the Ryan Center for Sports Broadcasting \& Management was established in 2015 by John and Pamela Samford to support the Ryan Center in the Bob Schieffer College of Communication.
The Dorothy and Clarence Scharbauer, Jr. Student Life Fund was established by Mr. and Mrs. Clarence Scharbauer, Jr. of Midland to enhance and expand student programs.
The Bob Schieffer College of Communication is funded through an endowment that supports work to educate journalism and strategic communication students.
The Schildt Family Endowed Dean's Fund for Excellence was established in 2015 by Susan Schildt ' 83 and Tim Schildt ' 81 to support student research and special projects in the College of Science and Engineering.
The Robert and Edith Schumacher Faculty Fellowships in Innovations and Technology were established by Robert and Edith Schumacher to support distinguished scholars with expertise in entrepreneurship. These two positions are held by Dr. Ray Smilor and Dr. Keith Hmieleski.
The Bill Shaddock Entrepreneurship Fund was provided by Bill and Kim Shaddock in 2011 to enable the Neeley Entrepreneurship Center to better assist students who attempt to launch or run a new business.
The Bill Shaddock Venture Capital Fund was established in 2014 by Mr. William C. Shaddock to assist students who attempt to launch or run new businesses.
The Ora M. Shelton Fund was established in 2012 by the estate of Ora M. Shelton.
The Maryrose Short Teaching Excellence Award was established in 2013 by Daniel Short in memory of his wife, Maryrose. It supports an annual award that recognizes teaching excellence within the Department of Accounting.
The Marjorie and James Sly Student Entrepreneurs Experience Fund was established in 2015 by Marjorie Sly '59 to support the Neeley
Entrepreneurship Center and Entrepreneurship Club.
The Marjorie and James Sly Award for Values \& Ventures was established in 2015 by Marjorie Sly' 59 to support an award in the Richards Barrentine Values \& Ventures®Business Plan Competition.
The Emmet G. Smith Endowment for Symposia was established in 1999 through the generosity of friends and former students in honor of Emmet G. Smith to further the education of musicians and clergy in the realm of worship.
The Sue Wheeler Smith Memorial Fund for Visiting Organists was established by Emmet Smith, retired music faculty, and his family and friends in memory of his late wife.
The Hosmer B. Stuck Fund for Business Research was established in memory of Mr. Stuck '41 by his widow to finance research projects of faculty members in the M.J. Neeley School of Business.
The George and Sue Sumner Library Expansion Fund was established in 1995 by Dr. and Mrs. George Sumner to support the expansion and
renovation of the Mary Couts Burnett Library and to offer continued support of the Library program.
The Mary Jane and Robert Sunkel Art History Endowment was established in 2001 through the benevolent support of Mary Jane '55 and Robert Sunkel '54. The fund's income supports graduate student research in art history.
The Gretchen Swanson Family Foundation Fund in Geology Research was established in 2014 by the Gretchen Swanson Family Foundation to support broad and innovative geological research opportunities for faculty and students.
The Swenson Land and Cattle Company Field Studies Endowment was established in 2013 by the Swenson Land and Cattle Company in honor of John Merrill to support field study operations in the TCU Ranch Management program.
The TCU Endowment for Equestrian Excellence was established in 2015 by the David and Christy May family to support the TCU Equestrian Program.
The TCU Horned Frog Marching Band Endowment was established in 2014 by Scot and Trisha Hillman Philipp to support travel expenses incurred by the Horned Frog Marching Band during away games.
The Thistlethwaite Family Memorial Travel Grant was established in 2005 by Dr. Mark Thistlethwaite and his family in memory of Aline and Lote Thistlethwaite. The fund enables undergraduate studio art majors to travel for educational purposes to museums, galleries and special exhibitions.
The Hannah Tutera Endowed Travel Fund for the College of Communication was established in 2014 by Joe and Marian Tutera to support travel opportunities for students in the Bob Schieffer College of Communication.

The Laura Tutera Endowed Travel Fund for Interior Design and Fashion
Merchandising was established in 2014 by Joe and Marian Tutera to support travel opportunities for students in the Department of Interior Design and Fashion Merchandising in the College of Fine Arts.
The Robert Vigeland Accounting Excellence Fund was established in 2015 by Pat Admire '65 and Sondra Admire '74, along with other accounting alumni, in honor of Dr. Robert Vigeland to support the Accounting Department in the Neeley School of Business.
The Nadia and Kevin Walgreen Family Endowed Fund for the College of Fine Arts was established in 2014 by Mr. and Mrs. Kevin Walgreen to support the needs of the Department of Graphic Design.
The Walsh Foundation Sports Broadcasting Endowed Fund was established by the Walsh Foundation in 2010. It enables the Department of Film, Television and Digital Media to better support its sports broadcasting program and give students more opportunities to gain quality work experience.
The Wassenich Award for Mentoring in the TCU Community was established by Mr. and Mrs. Mark Wassenich of Dallas.
The Wilson F. Wetzler Endowment for Philosophy was established in 1999 by a planned gift from Dr. Wilson F. Wetzler '37 to support the Philosophy Department.
The J. Vaughn and Evelyne H. Wilson Honors Fellowship was established in 2006 through a bequest of Mr. James V. "Tony" Wilson Jr. '63. Mr. Wilson named the fellowship in honor of his parents. The fellowship is held by Ron Pitcock.
The Marion C. and F. Peter Zoch III and Family Endowment for the Center for Academic Services was established by Mrs. Marion C. Zoch of Mountain Home, Texas, and her late husband, Peter, for annual equipment needs of the Center for Academic Services.

## Endowed Scholarships

Only the annual interest is used on endowed scholarships; the principal of the fund is held in permanent trust. The scholarships are administered by the Office of Scholarships and Financial Aid unless stated otherwise.
Abell-Hanger Foundation Nursing Scholarship
Abilene Ex-Students Chapter Scholarship
Sam and Marian Woody Acola Memorial Scholarship
Susan B. Adams Greek Leadership Scholarship
AddRan College of Liberal Arts Political Science Heritage Fund
Patrick H. and Sondra K. Admire Accounting Scholarship Award
Glenn P. Albers Scholarship

DD \& Rick Alexander Family Endowed Athletic Equestrian Scholarship Tom and Bea Alexander Scholarship

Ernest Allen, Jr. Language Award
Alumni Excellence in Economics Scholarship
Samuel Alvarez Memorial Scholarship
Betty Jo and Frank T. Anderson Memorial Scholarship
Harvey Anderson Scholarship in Music
L. D. Anderson Memorial Ministerial Scholarship
M. D. Anderson Foundation Nursing Scholarship
M.D. Anderson Lloyd Armstrong '29 Memorial Scholarship

Rebecca and Richard Anderson Family Scholarship
Rose W. and Raymond E. Anderson Memorial Scholarship
Thomas F. Anderson Performance Award in Percussion
Andrews Institute Mathematics and Science Teacher Scholarship
Andrews Institute of Mathematics and Science Education Scholarship
Clarence and Loreen Angle Memorial Scholarship
Jane Bradford Armstrong \& Liz Armstrong Scholarship
Bonnie Lee Arnett Memorial Scholarship
Michael T. Ashworth Athletic Scholarship
Jim F. Atchison Church Vocation Scholarship
Austin Commercial Endowed Scholarship
Robert L. Avinger Fund for Athletic Scholarships
Russell Alan Aycock Memorial Scholarship
Amy Roach Bailey Special Scholarship
Dr. Noel R. and Elaine D. Bailey Scholarship
Dr. Noel R. and Elaine D. Bailey Scholarship at Starpoint School
Dr. and Mrs. Noel Bailey Special Education Scholarship
T. Ross Bailey Scholarship

Robert R. Baillargeon, Jr. Family Endowed Scholarship
Brooke Dewey Baird Memorial Scholarship
Katherine Knight Baker Scholarship
Jesse Clyde and Thomas Wiley Ball Ministerial Scholarship
Mr. and Mrs. W. E. Bancroft Disciples Scholarship
Andrew Bankston Scholarship
Thomas Barber Geology Award
Jay and Linda Barlow Athletic Scholarship
Josephine Harrold Barnes Trust
Louis H. and Madlyn B. Barnett Fellowship
Dr. Christopher B. Barry Graduate Memorial Scholarship
Bartek Endowed Scholarship
Edwin J. Barts Insurance Scholarship
Alan and Genelle Basye Scholarship
Raymond H. Bazemore Memorial Scholarship
Hal and Nancy Bearden Scholarship
Theodore and Beulah Beasley Foundation Scholarship
Amanda J ean Beaty Memorial Scholarship
Amanda Michelle Bebout Memorial Scholarship in Nursing
Lelia and Lee Beckelman Endowed Scholarship
Phillip T. Bee Scholarship for Ranch Management
Dorothy Mays Bell Graduate Scholarship for Speech-Language
Pathology
Edward A. Bell Scholarship
Happy Bell Scholarship
Heather A. Bellomy Memorial Scholarship
Ethel Evans Bennett Scholarship
Benson Family Scholarship

Dr. Arthur K. Berliner Scholarship
Bermont Family Undergraduate Jewish Student Scholarship
Elaine Bing and Stephen Bing Scholarship
Alice and David C. Bintliff Nursing Scholarship
Roy and Anna Biser Memorial Scholarship
Black Alumni Alliance Scholarship
Blackmon Endowed Scholarship
Dr. Donald Blake College of Science and Engineering Endowed Scholarship

Mr. and Mrs. William M. Blanks Memorial Scholarship
Cathy Collins Block Endowed Scholarship
Marjorie Weiner Bodzy J ournalism Award
Beatrice Bolen Piano Scholarship
Bob Bolen Leadership Scholars Program
Bolen Family Scholarship
Bonds Ranch Scholarship for Ranch Management
Keith D. Booke Scholarship
Megan and Victor J. Boschini Scholarship
Bruce Lowell Boswell Scholarship
Ed and Margie Boswell Scholarship
Edith and V. W. Boswell Scholarship
Robin Elise Boyer Memorial Scholarship
Marci K. Bozarth Scholarship in Women's Golf
Leon H. Brachman and Louis H. Barnett Scholarship
Minda and Malcolm Brachman Honors Study Abroad Scholarship
Mr. and Mrs. Soloman Brachman Scholarship
Nelson Louis Brackin Scholarship
Tom and Bess Braniff Scholarship
Buster Brannon Basketball Scholarship
Miss Jimmie Katherine Bratton Memorial Nursing Scholarship
Weldon Brigance Trust Scholarship
I. Wylie Briscoe Disciples Scholarship
I. Wylie and Elizabeth Briscoe Scholarship

Malcolm Samuel Briscoe Scholarship
Broiles J ournalism Scholarship
Bill Brown Memorial Scholarship
Dr. Bobby Brown Endowed Scholarship
Elmer Brown Athletic Training Scholarship
Leigh Ann Brown Memorial Scholarship
Oscar K. Brown Family Scholarship
Sandra Brown Excellence in Literary Fiction Award
L.F. "Curly" Broyles TCU J azz Scholarship

Walter E. Bryson Scholarship
Ross Buford Memorial Scholarship
Edmund W. and Elizabeth G. Burke Scholarship
Burnett Ranches Scholarship in Ranch Management
Burns Family Scholarship in Nursing
Presnall "Grady" Cage Scholarship
Cagle Scholarship Fund
Paisley Caldwell Memorial Scholarship
J im Hillard Camp Scholarship
Mary and Charles Campbell Scholarship
Ross and Winnie Day Cannon Scholarship
Curtis K. Canter Memorial Scholarship
Lou Miller Canter Memorial Scholarship
J. Paul and Lori Carey Scholarship

Robert L. and Sallie Carlock Scholarship
Brion T. Carlson Scholarship
Geneva Zulette Carson Scholarship
Dr. Ralph G. Carter Excellence in Political Science Scholarship
Cartwright/Sells Scholarship
Clemmie and J ames Cash Endowed Athletic Scholarship
George and Thelma Cash Endowed Community Scholarship Fund
Gertrude Fears Castleberry Scholarship
Tom S. Cate, Jr. Memorial Scholarship
Thornton Cecil Memorial Scholarship
Challenging Christian Youth Scholarship
Barney and Edyth A. Lacy Chapman Scholarship
I. B. Chapman, Sr., Scholarship

Shirley Gibson Chapman Scholarship
Chick-fil-A Peach Bowl Endowed Scholarship
W. Brown Chiles, Jr. and Wanda H. Williams Chiles Scholarship Endowment for Baseball
W. Brown Chiles, Jr. and Wanda H. Williams Chiles Scholarship Endowment

Chisholm Trail Round-Up Endowed Scholarship
Floyd "Zeke" and J oan Gardner Chronister Scholarship
Ted A. Chuman, DDS Memorial Scholarship
Clark Society Endowed Scholarship
Addison Clark-Randolph Clark Ministerial Scholarship
Jerry P. and Martha C. Clark Geology Scholarship
Joseph Addison Clark Scholarship Fund
Warren Clark Disciples Scholarship
Class of 1933 Scholarship
Class of 1967 Scholarship
Harriet V. Clay Scholarship
Betsy Clement Memorial Scholarship
Jack and June Clements Scholarship
E.D. Cleveland Scholarship

Brenda and Chad Cline Endowed Scholarship
Joe B. Cobb Memorial Scholarship
Mary Magee Cobb and Julia Magee Hartley Scholarship
Calloway and Jerry Bywaters Cochran Scholarship for Excellence in Modern Dance

Robert Glenn Coffin Music Scholarship
College of Science and Engineering Pre-Health Institute Heritage Endowed Scholarship

College of Science and Engineering Pre-Dental Endowed Heritage Scholarship
Bryant F. Collins Memorial Scholarship
Bryant Miller Collins and Ruth Coquat Collins Endowed Scholarship Fund

Betsy Feagan Colquitt Scholarship
Landon A. Colquitt Scholarship
Earl E. Combest Scholarship
Comrades True Endowed Football Scholarship
E. Constantin, Jr. Scholarship

Mr. and Mrs. J. W. Conway Memorial Scholarship
Charles \& Lynette Coody Golf Scholarship
Coon Family Foundation Scholarship
Jerry Cooper Memorial Scholarship
Gwendolyn M. Copeland Foreign Studies Scholarship in History Raymond H. and Stephen R. Copeland Scholarship

Richard and Lillie Corley Endowed Scholarship
Kimberly Kash Ray Corona Scholarship
Corpus Christi Ex-Students Scholarship
Arthur H. Courtade Memorial Scholarship
Russell A. and Leila Park Cox Scholarship
Willie Craft Memorial Scholarship
Donald and Katherine Cram Scholarship
Dr. Laura Lee Crane Scholarship
Bill Crawford Athletic Scholarship
J. Malcolm and Kati Mai Crim Scholarship

Ann Cross Memorial Scholarship
C. C. and Mildred Cross Scholarship

John Medford Crowder Memorial Scholarship
Brittany Joy Cune Scholarship
Curtis Family Scholarship
DeRue Armstrong Curtis Memorial Scholarship
Melvin O. Dacus and Kathryne P. Dacus Memorial Performance Award in Musical Theatre

Ashlyn Dahlke Endowed Scholarship Fund
Dallas Alumni Chapter Scholarship
Dan Danciger Memorial Scholarship
Davidson Foundation Business Scholarship
C. J. "Red" Davidson Scholarship

James A. "Buddy" Davidson Scholarship Fund in Nursing
James A. "Buddy" Davidson Scholarship in Ranch Management
John Perryman Davidson II Scholarship
Bronson and Cathie Davis Endowed Scholarship
Lori Roach Davis Special Scholarship
Mr. and Mrs. William S. Davis Scholarship
George and Rachel Deahl Memorial Ministerial Scholarship
Roberta Smith Deason Scholarship
Del Conte Family Scholarship
DeLuca Family Scholarship
Dickinson Middle Income Scholarship
Scott Dike Memorial Scholarship
The Kelly and Jeff Dillard Family Endowment
Robert Parker Dimmitt Memorial Scholarship
Nancy Savage Doherty Scholarship
Donovan Family Scholarship
Donovan-Knox J ournalism Scholarship
James C. Dooley Memorial Scholarship
Sam Y. Dorfman Memorial Scholarship
Sylvia \& Tommy Dorsey Family Scholarship
Jeffrey B. Dudderar Memorial Scholarship
Dumas Family Scholarship
Minnie Cahill Dunn Scholarship
Beatrice Dunning Art and Art History Scholarship
C. H. Dyar Memorial Scholarship
F. W. and Bessie A. Dye Scholarship
R. W, and Helen Eades Scholarship

Roy and Jeannine Eaton Journalism Scholarship
Frank B. and Vera Turbeville Edelbrock Scholarship
Ambrose Edens Scholarship
Pepper and Ashley Edens Endowed Athletic Scholarship
Cass O. Edwards II Memorial Scholarship
Dr. Arthur J. EhImann Scholarship for Research Excellence

Charles G. Ellis Scholars of Environmental Science
Ellwood Foundation Pre-Medical Scholarship
Endowed Scholarship for Students From California
Mary Mitchell Engle Music Scholarship
Bonnie Enlow Scholarship
Dr. and Mrs. M. E. Ensminger Scholarship in Ranch Management
Equipment Managers Endowed Scholarship
William Shields Erwin Memorial Scholarship
Gregory Esch Scholarship
Richard Michael Etnyre Scholarship
Leslie P. Evans Memorial Scholarship
W. A. Eyre and C. Johnson Scholarship

Thomas Kinder Farris Scholarship
Mr. and Mrs. Johnnie P. Fears Scholarship
F.P. and Rachel Feltz, Sr. and F. P. Feltz, Jr. Family Scholarship in Ranch Management
Fine Arts Guild and Foundation Scholarship
First Christian Church of Post, Texas, Disciples Scholarship
First Christian Church of San Angelo Disciples Scholarship
First Christian Church of Sherman, Texas, Scholarship
Bess Fish Athletic Scholarship
Bess Fish Scholarship for Humanities
Bess Fish Scholarship for Nursing
Truett W. and Queenelle Flache Scholarship
Claire Elizabeth Florsheim Scholarship
Sarah and Charlie Florsheim Endowed Scholarship in Business
Charles T. and Mary L. Floyd Scholarship
Jay E. "Gene" Floyd '58 Memorial Scholarship
Ross A. Forrest ' 12 Endowed Athletic Scholarship
Natalie E. Fort Endowed Internship Fund
Fort Worth Oral Surgery Pre-Dental Endowed Undergraduate Scholarship
Fort Worth Star Telegram/George Dolan Memorial Scholarship
Fort Worth Wildcatters Association Endowed Scholarship
Tom and Iva Foster Scholarship
Elizabeth R. Freitag '14 Endowed Athletic Scholarship for Women's Soccer

Charlotte and Kirk French Scholarship for Business
Charlotte and Kirk French Scholarship for Social Work
Cornelia and Bayard Friedman Scholarship
Michael P. Friezo Family Scholarship in Economics
Frog Fam Athletic Scholarship
Bob and Alice Frye TCU Honors College Academic Scholarship
William M. Fuller Ranch Management Scholarship
Mr. and Mrs. H. B. Fuqua Scholarship
Professor Newton Gaines Endowed Scholarship in Physics
Robert E. and Patty Gartman Scholarship
Christine Salmon Gauthier Student Apprenticeship in English and/or Writing
E. K. Gaylord Memorial Scholarship

Vince \& Clo Genovese Memorial Scholarship
David Gentry Memorial Ministerial Scholarship
Albert and Mamie George Scholarship
Thelma Stewart George Memorial Scholarship
Preston M. Geren, Jr. Endowed Scholarship
Barbara Chenault Gholson and Tom D. Gholson Scholarship

Victoria Giachino Women's Equestrian Scholarship
Nick Giachino Women's Golf Scholarship
Timothy Stephen Gideon Education Scholarship Fund
Catherine B. Gillespie Endowed Scholarship
John Gilliland Scholarship
Jeanette and Arthur I. Ginsburg Scholarship
Marcus and Martine Ginsburg Scholarship
Dale Glasscock Football Scholarship
Charles Goodnight Scholarship
Heather Hunt Graham and James R. Graham Endowed Scholarship
Greater Texas Foundation Math and Science Endowed Scholarship
Myrle and Marcella Greathouse Scholarship Fund
Ida M. Green Fellowship
Kay Hubbard Green Scholarship
Mr. and Mrs. W. H. Green Scholarship
Lollie S. Greene Scholarship
Greenville Christian Church Scholarship
Robert P., Jr. and Ann C. Gregory Scholarship
Wilson Griffith Family Scholarship
Robert S. Grimes, Sr. and Maud Fite Grimes Scholarship
Phyllis M. and John M. Grimland, Jr. Middle Income Scholarship
Hardy Grissom Memorial Scholarship
Robert W. Groom Scholarship
A. E. Grugett Memorial Scholarship

Ralph and Lavonne Guenther Endowed Scholarship for the School of Music
William L. Gupton Geology Award
Brian and Angela Gutierrez Endowed Scholarship
Lynn Swann Haag Memorial Scholarship
Mary Scriven and J ames William Haley Endowed Theatre Scholarship
Hall Family Pre-Med Scholarship
June E. Hall Scholarship
Hallberg Foundation Scholarship
Cora Bivins Halsell Scholarship
Betty Hammack Memorial Scholarship
William J. Hammond Memorial Scholarship
Gene Haney Memorial Scholarship
Dick Hanley Memorial Scholarship
Robert and J oyce Harden Memorial Scholarship
Howard Charles Harder Memorial Scholarship
Mr. and Mrs. Stephen H. Hargrove Endowed Scholarship
Craig Harper Scholarship
Roland L. Harper Memorial Golf Scholarship
Harris College Heritage Endowed Scholarship for Nursing
Harris College Scholarship for Nursing
Granville Harrison Scholarship
Hoy and Helen Harrison Scholarship
Albert Ford Hausser Family Scholarship
Ashley Huffman Hawkins Scholarship in Women's Golf
John B. Hawley Memorial Scholarship
Sue Terrell Hawley Memorial Scholarship
Haywood Scholarship
Dick and Judy Hazlewood Loyalty Scholarship
William Randolph Hearst Endowed Scholarship
William Randolph Hearst Endowed Scholarship in Journalism Michelle Tyer Heines Contemporary Dance Scholarship

Danny Waggoner Hemlay Academic Achievement Award
Madeleine Hemley Music Scholarship
Luther A. Henderson Scholarship
Hendrick Home for Children Scholarship
David B. Hendricks II Memorial Scholarship
Harvey and Elizabeth Herd Scholarship
Herlin Family Scholarship
Harold D. and Imogene Herndon Middle Income Scholarship
Molly Hesselbrock Scholarship
Willis G. Hewatt Scholarship
Hewatt-Rankin Pre-Med Scholarship
Larry D. Hickey Memorial Scholarship
Clay and Kristen Hicks First Nighters Scholarship
Hill Family Endowed Scholarship
F. E. Hill Company Ranch Scholarship

James C. Hill Scholarship
R. Hunter Hill Scholarship

Jim and Tammy Hille Endowed Scholarship in Education
TCU Hillel Scholarship
Michael "Hal" Hillman Endowed Scholarship
Kristi McLain Hoban Scholarship
Carol and Richard Hoefs Nursing Scholarship
Charles R. Hoffman Scholarship in Jazz Studies
Ben Hogan Colonial Country Club Endowed Golf Scholarship
Holiday Greeting Fund
Melissa and Scot Hollmann Endowed Swimming Scholarship
Hooks Family Memorial Scholarship
Hop, Skip and Jump Endowed Scholarship Fund
Charles and Mildred Horan Voice Scholarship
Dr. and Mrs. Jeff L. Horn Scholarship
Horton KinderFrogs Endowed Scholarship Fund
Lucile Houston Endowed Scholarship
Houston TCU Women's Club Scholarship
Marshall Howard Endowed Scholarship
Foster Howell Scholarship
Josephine Terrell Hudson and Edward R. Hudson Scholarship Rodney and Linda L. Huey Scholarship for Pre-Med Students

Mr. and Mrs. Charles C. Huff Memorial Ministerial Scholarship
Huffman and Schilling National Merit Scholarship
Kenneth J. Huffman Endowed Scholarship in Nursing
Stephen B. and Lola Lollar Huff Scholarship
Dan Allen and Peggy Hughes Endowed Energy Scholarship
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Willard M. Kirkpatrick Memorial Disciples Scholarship
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Scott Kull, B.B.A., M.A.-Sr. Associate Athletics Director
Mike Sinquefield, B.G.S.-Associate Athletics Director
Ike Ukaegbu-Assistant Athletics Director for Compliance
Jessica Hazard, B.A., J.D.-Compliance Coordinator
Brent Cunningham, B.S., M.S.-Compliance Coordinator
Mark Cohen, B.A.-Assistant Athletics Director for Director of Media Relations
Matt Hoover, B.S., M.S.—Associate Director Media Relations
Brandie Davidson, B.S., M.L.A.-Assistant Director of Media Relations
Kyle Seay, B.S., M.L.A.-Assistant Director of Media Relations
Abigail Norman, B.S.-Assistant Director of Media Relations
Drew Martin, B.A.-Assistant Athletics Director for Marketing
Julie Austin, B.A., M.Ed.-Assistant Director of Marketing
J ackie Torda, B.S., M.Ed.-Assistant Director of Marketing
Rory Rutledge, B.A., M.A.-Assistant Director of Marketing
Lindsay Shoulders, B.A.-Spirit Coordinator
Tommy C. Love, B.A.—Athletics Business Manager
Shawn Worthen, B.B.A., M.Ed.-Assistant Athletics Director for Academic Services
Ray Walls, B.S., M.Ed.-Associate Director of Athletics Academics Services Rosie Tarnowski, B.S.-Academic Advisor
Kristen Price, B.A., M.S., Ed.S., M.B.A.-Learning Specialist
Kathy Raines, B.A., M.A.—NCAA CHAMPS/Life Skills Coordinator
Chris Hall, B.S., M.L.A.—Assistant Athletics Director of Sports Medicine
David Gable, B.S., M.S.—Associate Director of Sports Medicine
Valerie Hairston, B.S., M.S.-Assistant Athletics Trainer
Mike Baum. B.S., M.A.-Assistant Athletics Trainer
Zach LaCross, B.S., M.S.-Assistant Athletics Trainer
Lauren Crawford, B.S, M.Ed.-Assistant Athletics Trainer
Ashley Stone, B.S., M.S.-Assistant Athletics Trainer
Patricia J amison, B.S., M.L.A.-Assistant Athletics Trainer
Brian Coutras, B.S.-Assistant Athletics Director for Equipment
Victor Ignatiev, B.A., M.A.-Assistant Equipment Manager
Danny Wheat, B.S.-Assistant Athletics Trainer
Sean Conner, B.S. —Assistant Athletics Director for Ticket Office Operations
Chip Heiss, Jr., B.S.—Ticket Office Customer Service Manager
Deron Irons, B.S.-Assistant Manager of Athletics Tickets
Jeremy Martin, B.S.-Assistant Manager of Athletics Tickets
Don Sommer, B.S., M.S., M.S.C.C.-Director of Strength and Conditioning Matt Parker, B.S.-Associate Director of Strength and Conditioning Coach
Melissa Mitchell-McBath, B.S., M.Ed.-Sr. Assistant Strength and Conditioning Coach.
Zachariah Dechant, B.S.-Assistant Strength and Conditioning Coach Todd Kensler, B.S.—Assistant Strength and Conditioning Coach Stephen Gephardt, B.S., M.Ed.-Assistant Strength and Conditioning Coach Mike Maples, B.A.-Video Coordinator

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Tim Allmon, B.A.-Assistant Video Coordinator

## IMG College/TCU Sports Network

Jay Fields, B.A., J.D.-General Manager
Rob Muggleston, B.S, M.B.A-Sr. Account Executive
John Finch, B.S.-Account Executive
Laruen Frazier, B.S.-Partner Services Coordinator

## Baseball

Jim Schlossnagle, B.A.—Head Baseball Coach
Bil Mosiellio, B.A.-Associate Head Coach, Baseball
Kirk Saarloos, B.A.-Assistant Baseball Coach
Meredith Montgomery-Director of Operations
Basketball (Men's and Women's)
Trent Johnson, B.S.-Head Men's Basketball Coach
Brent Scott, B.S.-Assistant Men's Basketball Coach
Kwanza Johnson, B.A., J.D.-Assistant Men's Basketball Coach
Chris Tift, B.S, M.Ed.-Assistant Men's Basketball Coach
Matt Read, B.S., M.S.-Director of Operations
Robert Wright. A.A., B. S.-Director of High School Relations
Raegan Pebley, B.S.-Head Women's Basketball Coach
Hanna Howard, B.S.-Associate Head Women's Basketball Coach

## Edwina Brown

Crystal Robinson, B.S.-Assistant Women's Basketball Coach
Angela Gonzaga, B.S., M.A.-Director of Operations, Women's Basketball

## Football

Gary Patterson, B.A., M.A.-Head Football Coach
Doug Meacham, B.S.-Assistant Football Coach
Sonny Cumbie, B.A.-Assistant Football Coach
J arrett Anderson, B.A., M.L.A.-Assistant Football Coach
Demontie Cross
Paul Gonzales, B.A, M.L.A.-Assistant Football Coach
Rusty Burns, B.S., M.Ed.-Assistant Football Coach
Dan Sharp, B.A., M.L.A.-Assistant Football Coach
Matt Lewis, B.A.-Director of Football Operations
Nelly Gonzalez-Assistant Director of Football Operations
Zarnell Fitch, B.A., M.L.A-Director of High School Relations
Jeremy Modkins, B.A., M.L.A.—Analyst, Defense
Hudson Fuller, B.B.A.-Analyst, Offense
Eric Russell, B.A.—Sr. Analyst, Special Teams
Golf (Men's and Women's)
Bill Montigel, B.A., M.S.-Men's Golf Coach
Angie Ravaioli-Larkin, B.A.-Women's Golf Coach

## Rifle

Karen Monez, A.A.—Women's Rifle Coach
Emily Caruso, B.A.—Assistant Rifle Coach

## Soccer (Women's)

Eric Bell, B.A.-Head Soccer Coach
Ryan Higginbotham, B.S.-Associate Head Soccer Coach
Sebastian Vecchio-Assistant Soccer Coach
Swimming (Men's and Women's)
Richard Sybesma, B.S., M.L.A.-Head Swimming Coach
Keegan Ingelido, B.S.-Associate Head Swimming Coach (Men's and Women's)
John Funk, B.A.-Assistant Swimming \& Diving Coach

## Tennis ( Men's and Women's)

Lee Walker Taylor, M.S.-Head Women's Tennis Coach
Ben Stapp, B.S.-Assistant Women's Tennis Coach
David Roditi, B.A.-Head Men's Tennis Coach
Devin Bowen, B.A.-Assistant Men's Tennis Coach

## Track (Men's and Women's)

Darryl Anderson, B.S., M.S.-Director of Track and Field
John Kenneson, B.S., M.Ed.—Associate Head Track Coach

## Volleyball (Women's)

Jill Pape-Kramer, B.B.A.-Director of Volleyball Erick Peterson, B.S.-Head Sand Volleyball Coach Sara Matthews, B.S., M.A.-Assistant Volleyball Coach Brian Wright, B.A.-Assistant Volleyball Coach ShaDare McNeal, B.S.-Assistant Sand Volleyball Coach

## Center for Academic Services

Marsha Ramsey, B.S., M.A.—Director
Deidra Turner, B.A., M.Ed., Ph.D.-Associate Director
Laurel Overby, M.Ed.—Coordinator, Student Disabilities Services
Terence Kennedy, B.S., M.Ed.-Academic Adviser
Ashley Edwards, B.S., M.S.-Academic Adviser
Natasha Waters, B.B.A., M.Ed.-Academic Adviser
Sharon Kassler, B.B.A., M.B.A.—Disabilities Specialist

## Chancellor's Office

Jean Mrasek, B.A., M.A.-Chief of Staff
Andrea M. Nordmann, B.S., B.A., M.B.A.—Chief University Compliance Officer
Michael J. Marshall, B.A., M.L.A.-Chancellor's Intern
Charlotte Hudspeth—Chancellor's Administrative Assistant
Mary Nell Kirk—Chancellor's Executive Assistant
Karin Lewis-Chancellor's Executive Assistant for Operations
Sheri Miller, B.S., M.B.A.—Director of Special Projects for the Chancellor
Dianna King-Executive Assistant
Ann Louden, B.A., M.L.A.—Chancellor's Associate for Strategic Partnerships
Dana Herrin-Executive Program Specialist

## Extended Education

David Grebel, B.A., M.Div., M.A.-Director
Julia Lovett, B.S., M.Ed.—Associate Director
Susan M. Harris, B.S., M.S.-Coordinator, Special Programs

## Finance and Administration

Brian G. Gutierrez, B.B.A., M.P.A., C.P.A.-Vice Chancellor for Finance and Administration
Terry Haney—Executive Assistant and Office Manager

## Budget and Financial Planning

Kenneth J anak, B.S., M.S., C.T.P.-Assistant Vice Chancellor for Finance
Steve Brannan, B.S.--Financial Analyst
Richard (Dick) P. Hoban, B.B.A., C.P.A.—Assistant Treasurer
Megan Soyer, B.B. A., M.S.A., C.P.A.—Assistant Budget Director
Everlyn M. Williams, B.S., M.S.—Financial Analyst
Office of the Chief Investment Officer
James R. Hille, B.S., M.B.A, CFA, CAIA-Chief Investment Officer
M. Keith Garrison, B.B.A., CPM—Director of Alternative Assets

Alaina Parker, B.B.A.-Executive Assistant and Operations Manager
J ason R. Safran, B.B.A, M.B.A., CFA - Senior Investment Analyst

## Financial Services

Alisa Cody, B.B.A., C.P.A.-Director of Accounting
Wendy Crowley, B.S.—Director of Student Financial Services
Brad Davis, B.B.A., C.P.A.—Student Financial Systems and Collections Administrator
Cheryl Kennon, B.B.A., C.P.A.-Assistant Controller
Peg Meroney—Director of Financial Operations
Evelyn H. Richardson, B.A., M.B.A.-Manager of Accountability and Control
Henry Sanchez, B.B.A., M.B.A.-Financial Systems Administrator
Matthew Wallis, B.A., J.D.-Director of Contract Administration

Cheryl Wilson, B.B.A., C.P.A.-Associate Vice Chancellor and Controller

## John V. Roach Honors College Directory

Diane Snow, B.S., M.S, Ph.D.—Dean
Ron Pitcock, B.A., M.A., Ph.D.-J. Vaughn and Evelyne H. Wilson Honors Fellow and Director of Prestigious Scholarships

Dan Williams, B.A., M.A., Ph.D.-Honors Professor of Humanities
Mikio Akagi, B.A., M.S., Ph.D.—Assistant Professor
Mark Dennis, B.B.A., M.A., Ph.D.—Faculty Fellow
Suki John, B.F.A., M.A., Ph.D.-Faculty Fellow
Peter Szok, B.S., M.A., Ph.D.—Faculty Fellow
Lauren Nixon, B.A., B.S., M.Ed.-Coordinator
Colby Birdsell, B.A., M.A.-Academic Adviser
Jason Dunn, B.B.A., M.B.A., Ed.D.-Academic Adviser
Marie D. Martinez, B.A., M.A.-Academic Adviser
Donna Schonerstedt, B.A., M.Ed.—Academic Adviser
Lynn Irving Herrera—Assistant to the Dean
Renda Williams, B.B.A—Administrative Assistant

## Human Resources

Yohna Chambers, B.S., M.P.P.A.-Vice Chancellor for Human Resources
Faith Perkins, B.A., S.P.H.R—Associate Vice Chancellor for Human Resources
Susan Oakley, B.S., M.L.A.—Director of Employee Relations
Shelli Barr—Payroll Tax Coordinator
Jonathan Bartee, B.S., M.L.A—HRIS Manager
Elaine Brown, B.B.A., C.C.P., P.H.R.-Compensation Manager
Jacqulyn Curry, B.A., M.A.T.-Employment Manager
Jenny Dick, B.B.A.—HRIS Manager
Diane Edwards-Compensation Analyst
Matthew Millns, B.A., M.B.A.—Benefits and Compliance Analyst
Dindy Robinson, B.A., M.P.A., S.P.H.R.-Director of Compensation
Tracy R. Thompson, B.S.—Benefits Manager
David Upton, Ph.D.-Wellness Coordinator
Debby Watson, B.S.—Director of Payroll Services
Kim Weber, B.S.—Project Manager

## Information Technology Directory

## Information Technology

Bryan Lucas, B.B.A, M.B.A.-Chief Technology Officer
Walter Wallace, B.S., M.B.A.—Associate Director, Operations
Trey Ivy, B.S.—IT Coordinator, Provost
Andrew Hamer, B.S.-IT Coordinator, Music
Tammy Smetters_Assistant to the CTO

## Technical Services

Travis Cook_Deputy Chief Technology Officer
Darlene Housewright, A.B.A.—Administrative and Telecommunications Assistant
Hollis Mitchell, B.G.S.-Computer Operator

## Network Services

Tony Fleming, B.S.—Associate Director, Network Services
Craig Baugh—Network Engineer
Paul Bibbins—Network Engineer
Caleb Eaton, B.A.A.S.-Network Engineer
Warner Kimbrell—Network Engineer
John Saxton—Network Engineer

## Infrastructure Services

Patti Sellers-Associate Director, Infrastructure Services
Stephanie Polly—Sr. Network Project Coordinator
Glenda Boche, B.S.—Network Projects

Terri Robinett—Communications System Specialist

## Printing and Copying Services

Bob Goode—Manager, Printing Services
Cindy Matthews—Administrative Program Specialist
Brandi Carroll_Digital Copy Operator
Howard Horne—Pre-Press Specialist
Tim Ybarra, H.S.—Printing Cert Offset Press Operator

## Hardware and Purchasing

Joseph Lopez, B.S.—Computer Hardware Supervisor
Kevin Buchanan-Computer Hardware Technician
Austin Counts, B.A.-Computer Hardware Technician
Ken Do—Computer Hardware Technician
Terrie Harbour_Purchasing Specialist

## Information Security Services

James Mayne, B.S., B.A., B.S., M.S.—Director, Information Security Services
David Kinch, B.A.—Information Security Engineer
Lenelda Pennington, B.S.-Information Security Engineer

## Enterprise Application Services

Joshua Harmon, B.A.—Director, EAS
Richard Yantis, B.B.A.-Associate Director , EAS
Stephen Carr, B.A., B.S.-Applications Developer
Ben Crenshaw, B.S.-Applications Developer
Susie Davis, B.B.A., M.B.A., C.P.A.—Applications Developer
Faina Feldman, B.S., M.S.—Application Developer
Cindy McPherson, B.F.A, M.L.A.-Applications Developer
Michael Perales, B.B.A.-Applications Developer
Michael Selman, B.B.A, M.B.A.—Applications Developer
Joel Smith, B.A., M.B.A., J.D.-Applications Developer
Shawn Spangler, B.S.—Applications Developer
Jeffrey Stanley, B.S.—Applications Developer
Steve Taylor, B.S.-Applications Developer
Huy Tran, B.A.-Applications Developer
Yolanda Winston, B.B.A., M.L.A.—Applications Developer
Toby Leonard, B.S.—Applications Developer

## Computer Systems

Craig Carlson, B.B.A.—Associate Director, Computer Systems
Ann Bailey, B.B.A, M.L.A.-Manager of Systems Labs
Mark Cook, B.S.—Client Server Administrator
Jon Eidson, B.S., M.B.A.—Sr. Database Administrator
Sean Gillaspy, B.S.—Administrator, Systems Labs
Jim Gribble, B.S.—Administrator, Systems Labs
Thomas Guidry, B.B.A.—Systems Administrator
Philip Howell—Systems Administrator
David Jewett—System Administrator
Josiah Miller, B.A.-Systems Administrator
Aaron Munoz, B.A., B.S.-Server Security Administrator
Brian Nevius-Systems Administrator
Stephen Meyers_Systems Administrator
Tommy Riley, B.B.A.—Database Administrator
Shelley Shuga, B.B.A. - Systems Administrator

## IT Support

Joshua Tooley, B.S.—Associate Director, IT Support
Rob Allen, B.A, M.A.—Customer Services Consultant
Karen Bowerman, B.S.-Sr. Customer Services Consultant
Carlene Coover, B.A., M.B.A.-IT Technical Trainer
Alan Crume, A.A., B.S., D.D.-Customer Services Consultant

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Cathleen Dawson-J ackson, A.A.-Sr. Customer Services Consultant
Charles Dewar, M.B.A.—IT Coordinator, Harris
Coleman Gee, B.S.-Sr. Customer Services Consultant Jonathan McNair, B.S. - IT Coordinator, Student Affairs Matt Coffer, B.A.—IT Support, Athletics
Rebecca Glass, B.S.-Sr. Customer Services Consultant Michael Glass, B.A., B.A.-Frontline Operations Coordinator Lori Russell, B.A.—Customer Services Consultant
Susan Bartlett, B.B.A., M.L.A.-Customer Services Consultant
Matthew Thomas, B.S.-IT Coordinator, AddRan/Education

## Institute of Behavioral Research

Patrick M. Flynn, Ph.D.-Director and Professor of Psychology and Saul B. Sells Chair of Psychology
Jennifer Edwards Becan, Ph.D.—Associate Research Scientist
George W. Joe, Ed.D.-Associate Director for Process and Outcome Studies
Danica Kalling Knight, Ph.D.—Senior Research Scientist
Kevin Knight, Ph.D.—Deputy Director
Wayne E.K. Lehman, Ph.D.-Senior Research Scientist
Roxanne Muiruri, M.P.H.-Research Associate
Jennifer Pankow, Ph.D.—Associate Research Scientist
Grace A. Rowan, Ph.D.-Research Scientist
Amy M. Johnson, B.S.—Operations Coordinator

## Institutional Research

Cathan L. Coghlan, A.B., M.S.S.W., Ph.D.—Director
Lindsey Millns, M.B.A.—Assistant Director
Melissa Reeves, B.S.W., M.S.S.W.-Senior Research Analyst
Lee-Ann McKay, B.A.-S.P.O.T. Coordinator

## Instructional Services

Larry E. Kitchens, B.S., M.Ed.-Director

## Intensive English Program - Directory

Kurk Gayle, B.A., M.A., Ph.D.-Director
—Assistant Director
-Coordinator
Barbara Alvarez, B.S., M.A., M.B.A.-Instructional Staff
Shannon Burnham, B.S., M.A.—Instructional Staff
Dustin Dirickson, B.A.Ed., M.Ed.-Instructional Staff
Jana Nolan, B.A., M.Ed.-Instructional Staff
—Instructional Staff

## International Studies: TCU Abroad Directory

Jane Kucko, B.S., M.S., Ph.D.—Director
Tracy Williams, B.A., M.A., Ph.D.—Associate Director
Susan Layne, B.A., M.A.—Study Abroad Advisor
Jesica Severson, B.A., M.S.—Study Abroad Coordinator

## Marketing and Communication <br> Tracy Syler-Jones, B.A., M.B.A-Vice Chancellor

Margaret Kelly, B.A.-Executive Director of Community Projects
Norma Martin, M.S.—Director of Editorial Services
Rick Waters, B.S.—Assistant Director of Editorial Services
Dee Dodson, B.A.—Senior Director of Advancement Communications
Ma'lisa Yost, B.S.-Assistant Director of Advancement Communications
Lisa Albert, B.S.—Director of Strategic Communications Management
Holly Ellman, B.S.—Assistant Director of Strategic Communications
Management
Sandra Hawk Record, B.A.-Internal Strategic Communications Manager

Katherine Polenz, B.A., M.A.-Strategic Communications Management Specialist
Megan Murphey, B.A., B.S.-Strategic Communications Management Coordinator

Victor Neil, B.S.—Director of Web site Management
Elaine Tubre, B.A., M.S.-Assistant Director of Web Site Management
Jennifer Zarate, B.F.A.-Web Services Coordinator II
Amy Peterson, B.A.—New Media Specialist
Austin Price, B.A.—Social Media Specialist
Mayra Perales, B.A.-Web Services Developer
Jennifer McAlister, B.A.-Web Designer
Elizabeth Rainwater, B.S.—Director of Admission Marketing
Gorland Mar, B.F.A.—Director of Graphic Design
Liz Parks, A.A., B.A.—Assistant Director of Graphic Design
John K. Maddox, B.A.—Senior Art Director
Tracy Bristol, B.F.A.—Art Director

## Mary Couts Burnett Library - Directory

June Koelker, B.A., M.L.S., M.B.A., Ph.D.-Dean
Cari Alexander, B.A., B.A., M.M., M.L.S.—Head, Music/Media Library
Charles Bellinger, B.S., M.A., Ph.D., M.S.L.S.—Brite Librarian
Walter Betts, B.M., M.L.S.—Systems Librarian
Diana Boerner, B.A., M.L.I.S.-Research Librarian: Business, Economics, Journalism, Strategic Communication and Ranch Management
J effrey Bond, B.S., B.M.E., M.L.S., M.S.—Scholarly Communication Librarian \& Science Research Liaison
Kerry Bouchard, B.A., M.F.A., M.L.S.—Director of Library Systems
Jacob Brown, B.A., M.A., M.L.I.S.—Digital Services Librarian
Shelda Dean, B.A.—Marketing and PR
Sara Dillard, B.A., M.A., M.S.L.S.-Catalog Librarian
Stephanie Folse, B.A., M.A., M.L.I.S.-Web Services Librarian
Dennis Gibbons, B.A., M.L.S.—Head, Collection Development
David Hamrick, B.A., M.M., Ph.D., M.S.L.S.—Music/Media Catalog Librarian
Ammie Harrison, B.A., M.A., M.L.I.S.—Humanities and Theatre Librarian
Boglarka Huddleston, B.A., B.A., M.A., M.S.-Health Sciences Liaison \& Assessment Librarian
Tracy Hull, B.A., M.A., M.S.L.I.S.—Associate Dean
Michael Lampley, B.A., M.L.I.S.-Electronic Serials Librarian
James Lutz, B.A., B.A., M.S.L.S.—Director of Library Administrative Services
Dennis Odom, B.A., M.L.S.—Head, Acquisitions
Roger Rainwater, B.A., M.A., M.L.S.—Special Collections Librarian
Robyn Reid, B.A., M.L.I.S., M.Ed.-Social Sciences Librarian
Laura Ruede, B.M., M.L.S.—Dance Librarian and Van Cliburn Archivist
Mary Saffell, B.A., M.A., M.L.I.S., C.A.-Senior Archivist
Alysha Sapp, B.A., M.L.I.S.-Nursing \& Nurse Anesthesia Librarian
Cheryl Sassman, B.S., M.B.A.-Head, Circulation
Kristen Sharp, B.S., M.L.S.—Access Services Librarian
Laura Steinbach, B.F.A., M.F.A., M.L.S.—Art and Design Librarian
Brad Trussell, A.A., A.S., BAAS, M.S.-Innovation Collaborator

## Physical Plant

Todd S. Waldvogel, P.E., B.S., M.E.—Associate Vice Chancellor for Facilities
Richard T. Bryan, B. Arch, M.U.P.—Director of Operations
Harold J. Leeman, Jr., P.E., LEED AP, B.S., M.S.C.E. (2)—Director, Facility Planning and Construction
David C. Mestemaker, B.S., M.A.-Assistant Director of Physical Plant, Resources
Hollis Dyer, B.S., CEFP—Assistant Director of Physical Plant, Building Maintenance

Robert Sulak, B.S.-Assistant Director of Physical Plant, Landscaping and Grounds
Rex Bell, A.A.—Assistant Director of Physical Plant, Mechanical Systems
George Bates, P.E., B.S., E.E.-Assistant Director of Physical Plant, Electrical Systems
Shelton Riley, CEFP, LEED Green Associate, B.A.F.-Assistant Director, Facility Services
Joseph Laster—Director, Facility Services
Paul Alan Hood, CIE, B.S. Eng. Tech.—Project Engineer
David Hoyler, A.I.A., LEED AP, B.S. Arch.-Project Architect
Donald W. Bruner, Architect—Project Manager
Jesus Rangel, Jr., P.E., LEED Green Associate, B.S., M.B.A.—Project Manager
Patrick Mucker, LEED AP, B.S., M.B.A.—Project Manager
Lisa Aven, RID, IIDA, LEED Green Associate B.S.-Interior Designer
Stephanie McPeak, RID, IIDA, LEED Green Associate B.S. Interior DesignInterior Designer
Roger Fuller, B.A., M.L.A.—Director of Purchasing

## Provost's Office

R. Nowell Donovan, B.Sc., Ph.D.-Provost and Vice Chancellor for Academic Affairs
Terri Gartner—Executive Assistant to the Provost and Vice Chancellor
Cindy Odiorne-Faculty Coordinator for Academic Affairs
Amanda Gonzales-Administrative Assistant

## Registrar

Mary W. Kincannon, B.S., M.L.A.-Registrar
Vanessa Lanzarotti, B.G.S., M.B.A.—Associate Registrar
Tiffany T. Wendt, B.S., M.B.A.—Academic Audit Developer/Analyst
Dustin Gerstenfield, B.A., M.Ed.-Assistant Registrar
Kristi Harrison, B.M., M.L.A.-Manager, Academic Progress Services
Audrey Crist-NCAA Certification Officer

## Risk Management

Jonathan G. Brown, B.S.—Environmental Health and Safety Coordinator Randal L. Cobb, B.S.—Director of Safety
Paul F. Fox, B.S.—Director of Risk Management
Jonathan Roark, B.S.—Director of Emergency Planning \& Business Continuity

## Sponsored Programs

Linda S. Freed-Director
Teresa Miles Hendrix, M.P.A.-Assistant Director Laurie Heidemann—Administrative Program Specialist
Scholarships and Student Financial Aid
Michael H. Scott, B.F.A., M.B.A.-Director
Victoria K. Chen, B.A., M.L.A.—Associate Director
S. Kaye Derrick, B.S.—Assistant Director

Melet Leafgreen, B.M., M.L.A.-Assistant Director
Jolene Alonso, B.S.B.-Assistant Director
Kathryn Blackham, B.B.A., M.L.A.—Financial Aid Adviser
Trudy Conner, B.B.A.-Financial Aid Adviser
Bianca Allen, B.A.-Financial Aid Adviser
Debbie Mar-Graduate Adviser

## Student Affairs Directory

Alcohol and Drug Education
Kimberly "Sparkle" Greenhaw, B.S., M.Ed., Ph.D.—Director of Alcohol and Drug Education
Yvonne Lin Giovannis, B.A., M.Ed.—Assistant Director
Caroline Albritton, B.S., M.Ed.-Program Specialist
Assessment

Angela Taylor, B.S., M.S., Ph.D.—Director of Student Affairs Quality
Enhancement

## Campus Life

David S. Cozzens, Ph.D.—Associate Vice Chancellor for Student Affairs, Dean of Campus Life
Glory Robinson, B.S., M.Ed.—Associate Dean of Campus Life
Leah B. Carnahan, B.A., M.Ed.-Assistant Dean of Campus Life
Nick Whitesell, B.S., M.Ed.-Assistant Dean of Campus Life
Jeremy Steidl, B.S., M.P.A.-Assistant Dean of Campus Life
Jamie Dulle, B.A., M.Ed.-Assistant Dean of Campus Life
Karen Bell, B.S., M.P.H.-Assistant Dean of Campus Life for Health Promotion

## Campus Police

Steve McGee, B.B.A., J.D.-Chief
J.C. Williams-Assistant Chief

DeAnn Jones-Coordinator of Parking and Traffic Services

## Campus Recreation

Jay lorizzo, B.S., M.S.—Director
Mary Ellen Milam, B.S., M.S.—Associate Director
Cristina Carpenter, B.S., M.A.-Associate Director
Sheldon Tate, B.S., M.S.-Assistant Director, Intramural Sports
Aubrey Kettrick, B.S., M.S.-Assistant Director, Aquatics
Ryan Keller, B.S., M.S.-Assistant Director, Fitness
Cameron Potter, B.S., M.S.—Assistant Director, Outdoor Programs
Michael Warren, B.A., B.F.A., M.B.A.—Assistant Director for Marketing

## Career Services

John Thompson, B.A., M.B.A.-Executive Director
Susan Nethery, B.A., M.B.A.-Director of Student Affairs Marketing
Kimberly Satz, B.S., J.D.-Associate Director, Employer Development
Celeste Lindell, B.S., M.B.A.-Employer Development Manager
Karen Lindsey-Lloyd, B.A., M.S.-Associate Director, Career Development
Kathryn Bishop, B.A, M.A.-Career Consultant
Christopher D'Auria, B.A., M.S.-Career Consultant
Terrence Hood, B.A., M.S.-Career Consultant
Shannon Merchant, B.A., M.S.-Career Consultant
Leah Rodriguez, B.A., M.S.-Career Consultant
Jessica Cates, B.A., M.Ed.-Associate Director, Alcon Career Center
Meg Lehman, B.A.-National Employment Recruiter, Alcon Career Center
Susan Sledge, B.B.A.-Internship Development Manager, Alcon Career Center

## Counseling Center

Linda Wolszon, Ph.D.-Director
Eric Wood, Ph.D.-Associate Director
Daralynn Deardorff, D.O.-Consulting Psychiatrist
Cathy Elrod, LCSW, ACP—_Licensed Clinical Social Worker
Cortney Gumbleton, MSSW—Suicide Prevention Outreach Coordinator
Kristin Harris-McDonald, Ph.D.—Psychologist
Amanda Swartz, Psy.D.-Psychologist
Matthew Johnson, Ph.D.-Licensed Professional Counselor
Culture, Community and International Services
Darron Turner, B.S., M.S, Ed.D.-Associate Vice Chancellor for Student Affairs and Title IX Coordinator
Leigh Holland, B.S.-Ad EEO/AA Program Specialist
Cheryl Taylor, Ph.D.-EEO/AA Statistical Analyst

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Brooke Scogin, B.F.A., B.S., M.A.—Director of Fraternity \& Sorority Life
Evan Konecky, B.A., M.S.-Coordinator, Fraternity and Sorority Life
Gaius George, B.A., M.S.-Coordinator for Fraternity and Sorority Life Devin Gregory, B.A., M.A.-Coordinator for Fraternity and Sorority Life

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Jane Torgerson, M.D., F.A.C.E.P.—Physician
Evelyn Tobias-Merrill, M.D.—Staff Physician
Leigh Dixon, M.D.—Physician
Kerri Waldron, M.D.-Staff Physician
Beth Wieser, D.O.-Staff Physician
Johnnie Ireland, R.N.C., W.H.N.P.-Nurse Practitioner
Amy De La Rosa, P.A.C.—Physician's Assistant
Kelle Tillman, M.S.N., R.N.—Associate Director

## Health Services

Jane Torgerson, M.D.—Director
Kelle Tillman, M.S.N., R.N.—Associate Director
Housing and Residence Life
Craig Allen, B.S., M.A.—Director
Dave Cooper, B.S., M.S.—Associate Director of Residence Life
Mindy Hollan, B.A., M.A.—Assistant Director of Administration
Rachel Anne Hopper, B.A., M.Ed.—Associate Director of Residence Life
Jason Titus, B.S., M.A.—Assistant Director of Residence Life
Rachel Siron, B.A., M.Ed.-Assistant Director of Residence Life
Richard Oliver, B.G.S.—Assistant Director of Facilities
Inclusiveness and Intercultural Services
April Brown, B.S., M.Ed.—Assistant Director of IIS
Tamika Gordon, B.A., M.S.—Assistant Director of IIS
Vacant—Program Coordinator
Maleta Hill, B.S.—Administrative Program Specialist

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John Singleton, B.A., M.Ed.—Director of International Student Services
Liz Branch, B.A., M.L.A.-Assistant Director of ISS
Jim English, B.A.—International Student Immigration Coordinator
Office for Community Engagement
Rosangela Klier Boyd, B.A., M.Ed, Ph.D.-Director
Irene Arrellano, Ph.D.—Assistant Director
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Todd Boling, B.A., M.Div.—Associate Chaplain
Allison Lanza, B.A., M.Div.—Associate Chaplain

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Alyssa Stowe, B.A., M.A.-Student Activities Coordinator

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Shawn Wagner, B.S.-Coordinator of Events University Unions

## Kent Mire, B.S., M.S.-Coordinator of University Union Night Operations

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Yvonne Mann, B.B.A.—Director of Special Projects
Veleria Cowsen—Documentation and Training Manager
Michele Anders, B.S.—Gift and Data Entry Manager
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Troy Lewis—Technical Services Analyst
Martha Freeman, B.B.A.-Technical Services Analyst
Mark Rice_Technical Services Analyst
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Kristi Kolpanen, B.B.A.-Web Services Manager
Daniel Carver-Web Developer/Technical Support
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Greg Blackwell, B.A.—Director, Lettermen's Association
Glenda Clausen-Manager, Frog Club Membership
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Jessica Cung, B.S.—Athletic Development Officer
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Ashley Sutton, B.S.-Assistant Director of Donor Relations, E-Stewardship Coordinator

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Kate Marshall, B.A, M.A.—Distance Learning Developer
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## Faculty

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GEORGE DRYMIOTES, Assistant Professor of Accounting. B.B.A. (University of Cyprus), 1999; Ph.D. (University of Florida), 2004. Since 2013.
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ZACH HALL, Assistant Professor of Marketing. B.B.A. (Texas A\&M Corpus Christi); 2005; MBA (Texas Tech University); 2007; M.S. Finance (Ibid.); 2007; Ph.D. Marketing (University of Houston); 2013. Since 2013.
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ELIZABETH PLUMMER, Professor of Accounting. B.A. (Rice University) 1984; M.P.A. (University of Texas at Austin), 1986; Ph.D. (Ibid.) 1994. Since 2007.

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PATRICIA DORAN WALTERS, Associate Professor of Professional Practice in Accounting. B.A. (College of St. Elizabeth), 1970; M.B.A (New York University), 1985; Ph.D. (New York University), 1993. Since 2011.
DAVID WELTMAN, Assistant Professor of Professional Practice in Supply Chain Management. B.S. (Southern Methodist University), 1984; M.S. (Ibid.), 1986 M.S. (University of Texas at Arlington),2006: Ph.D. (Ibid.), 2007. Since 2012

WILLIAM F. WEMPE, Associate Professor of Accounting. BS (McPherson College), 1986; MBA (Wichita State University), 1989; Ph.D. (Texas A\&M University), 1998. Since 2001.
XIAOYAN (WINNIE) WEN, Assistant Professor of Accounting. BS (Tsinghua University), 1998, MS (Ibid.), 2001 and 2003, Ph.D. (Carnegie Mellon University), 2007. Since 2015.
J.CHRIS WHITE, Associate Professor of Marketing. B.B.A. (West Texas State University), 1991; M.B.A. (Texas A\&M University), 1993; Ph.D. (Ibid.), 1998. Since 2007.
BARBARA WOOD, Associate Professor of Professional Practice in Finance and Assistant Director Luther King Capital Management Center for Financial Studies. B.I.E. (Auburn University), 1978; M.B.A. (Baylor University) 1999; Ph.D. (University of Texas at Arlington), 2005. Since 2001.
LAURIE WOOD, Instructor of Accounting. B.B.A. (Texas Christian University), 1999; M.B.A. (University of Texas, Arlington), 2001. Since 2007.
ERIC YORKSTON, Associate Professor of Marketing. B.A. (University of Colorado), 1992; M.B.A (Rutgers University), 1995; Ph.D. (New York University), 2000. Since 2005.

## Bob Schieffer College of Communication Directory <br> Kristie Bunton, Dean

Daxton "Chip" Stewart, Associate Dean
Dorenda Kesler, Assistant to the Dean

## Communication Studies

KRISTIN CARR, Assistant Professor. B.A. (Stonehill College), 2001; M.S. (Texas Christian University), 2009; Ph.D. (University of Nebraska-Lincoln), 2012. Since 2012
AMBER N. FINN, Associate Professor. B.A. (Texas Woman's University), 1999; M.S. (Texas Christian University), 2002; Ph.D. (University of North Texas), 2007. Since 2005.
KATHERINE E. FORSYTHE, Instructor. B.A. (Texas Christian University), 2010; M.A. (Texas Christian University), 2013. Since 2014.

JOHNNY GARNER, Associate Professor. B.A. (Abilene Christian University), 1999; M.A. (Ibid.), 2001; Ph.D. (Texas A \& M University), 2006. Since 2010.
JORDAN HAMON, Instructor. B.S. (Texas Christian University), 2008; M.S. (lbid.), 2010. Since 2015.
AM ORETTE N. HINDERACKER, Assistant Professor. B.A. (South Dakota State University), 1997; M.A. (North Dakota State University), 2009; Ph.D. (lbid.), 2012. Since 2012.

DEBI L. IBA, Instructor II. B.S. (Southwest Missouri State University), 1984; M.A. (Ibid.), 1987; Ph.D. (University of North Texas), 2007. Since 2005.
PAUL E. KING, Professor. (Hardin-Simmons University), 1978; M.S. (Texas Christian University), 1980; Ph.D. (University of North Texas), 1985. Since 1980.

ANDREW LEDBETTER, Associate Professor. B.S. (Wheaton College), 2002; M.A. (University of Kansas), 2004; Ph.D. (Ibid.), 2007. Since 2010.
CARRIE MOORE, Instructor. B.S. (West Texas A \& M University), 2002; M.A. (Texas Tech University), 2004. Since 2011.
MICHAEL PUTNAM, Instructor. B.S. (Arizona State University), 1975; M.S. (Texas Christian University), 1990; Since 2013.

ADAM RICHARDS, Assistant Professor. B.S. (Wake Forest University), 2006; M.A. (University of Montana), 2009; Ph.D. (University of Maryland), 2013. Since 2013.
CHRIS R. SAWYER, Professor. B.A. (Houston Baptist University), 1976; M.S. (Texas Christian University), 1980; Ph.D. (University of North Texas), 1992. Since 1999.
PAUL SCHRODT, Professor. B.A. (University of Texas, Arlington); 1997; M.A. (University of North Texas), 2000; Ph.D. (University of Nebraska-Lincoln), 2003. Since 2006.

MELISSA J. SCHROEDER, Associate Professor and Chair. B.A. (State University of New York), 1991; M.A. (Ibid.), 1993; Ph.D. (Ibid.), 1996. Since 1995.
PAUL L. WITT, Professor. B.M. (University of Houston), 1970; M.M. (Ibid.), 1993; M.A. (University of North Texas), 1997; Ph.D. (Ibid.), 2000. Since 2004.

## Film, Television, and Digital Media.

RICHARD J. ALLEN, Professor. B.F.A. (New York University), 1981; M.F.A. (Indiana University), 1984. Since 1993.
DUSTIN HAHN, Assistant Professor. B.A. (Harding University), 2009; M.A. (Texas Tech University), 2012; Ph.D. (Texas Tech University), 2014. Since 2016.
KYLO-PATRICK HART, Professor and Chair. A.B. (University of California), 1988; M.A. (University of Southern California), 1993; M.A. (Ibid.), 1993; M.A. (Wayne State University), 1999; M.A. (Dartmouth), 2009; Ph.D. (University of Michigan), 1999. Since 2010.
RONALD ANDREW HASKETT, Assistant Professor of Professional Practice in Film, Television, and Digital Media. B.S. (East Texas State), 1979; M.S. (Texas Christian University), 1982. Since 1980.
TRICIA JENKINS, Associate Professor. B.A. (Ambassador University), 1997; M.A. (Western Michigan University), 2003; Ph.D. (Michigan State University), 2007. Since 2008.
CHARLESJ. LAMENDOLA, Assistant Professor of Professional Practice in Film, Television, and Digital Media and Studio/Video Production Supervisor. B.S. (Arkansas State University), 1981; M.S. (lbid.), 1988. Since 1994.
GREG MANSUR, Associate Professor of Professional Practice in Film, Television, and Digital Media. B.A. (Rhode Island College), 1991; M.F.A. (Texas Christian University), 2004. Since 2001.
MICHAEL MARTIN, Assistant Professor of Professional Practice in Film, Television, and Digital Media. B.S. (Kansas State University), 1993; M.S. (University of Oklahoma), 2000; M.S. (Texas Christian University), 2009. Since 2009.

JOAN M. MCGETTIGAN, Associate Professor. B.A. (Temple University), 1981; M.A. (Pennsylvania State University), 1985; Ph.D. (Ibid.), 1994. Since 1997.

KIMBERLY OWCZARSKI, Associate Professor. B.A. (University of Michigan), 1997; M.A. (University of Texas at Austin) 2001; Ph.D. (Ibid.), 2008. Since 2010.
RUSSELL A. SCOTT, Instructor in Film, Television, and Digital Media and Director of KTCU. B.A. (Southwest Texas State University), 1982. Since 2006.
R. COLIN TAIT, Assistant Professor. B.A. (University of Toronto), 2005; M.A. (University of British Columbia) 2007; Ph.D. (University of Texas at Austin), 2013. Since 2013.

JOEL TIMMER, Associate Professor . B.S. (Miami), 1988; J .D. (University of California-Los Angeles), 1993; Ph.D. (Indiana University), 2002. Since 2002.
DAVID E. WHILLOCK, Professor. B.A. (Hendrix College), 1976; M.A. (University of Arkansas), 1979; Ph.D. (University of Missouri), 1986. Since 1991.

## Department of Journalism

JEAN MARIE BROWN, Assistant Professor of Professional Practice in Journalism. B.S. (Northwestern University), 1986; M.S. (Texas Christian University), 2013. Since 2014.
KENT CHAPLINE, Instructor. B.S. (Texas Christian University), 1992; M.S. (Ibid.) 2007. Since 2012.

AARON CHIMBEL, Associate Professor of Professional Practice. B.S. (Texas Christian University), 2002; M.S. (Columbia University), 2003). Since 2009.
MELITA GARZA, Assistant Professor. A.B. (Harvard College), 1983; M.B.A. (University of Chicago Booth School of Business, London, UK), 2007; Ph.D. (University of North Caroline at Chapel Hill), 2012. Since 2012.
UCHE ONYEBADI, Associate Professor and Department Chair. B.S. (University of Benin, Nigeria), 1981; M.S. (University of Lagos, Nigeria), 1983; M.A. (University of Missouri), 2005; Ph.D. (lbid.), 2008. Since 2016.
DAXTON STEWART, Associate Dean and Graduate Program Director. B.A. (Southern Methodist University), 1994; J.D. (University of Texas at Austin),

1998; M.A. (University of Missouri), 2004; LL.M. (Ibid.), 2007; Ph.D. (Ibid.), 2009. Since 2008.
TOMMY G. THOMASON, Professor and Director of the Center for Community Journalism. B.A. (Ouachita Baptist University), 1970; M.A. (Texas A\&M University, Commerce), 1972; Ed.D. (lbid.), 1984. Since 1984.
JOHN R. TISDALE, Associate Professor. B.S. (Lamar University), 1983; M.A. (Ibid.), 1988; Ph.D. (University of North Texas), 1996. Since 2002.

## Department of Strategic Communication

JOSH BENTLEY, Assistant Professor, B.S. (John Brown University), 2002; M.S. (Oklahoma State University), 2010; Ph.D. (University of Oklahoma), 2013. Since 2015.
LAURA BRIGHT, Associate Professor. B.S. (University of Texas at Austin), 2000; M.A. (lbid.), 2004; Ph.D. (lbid.), 2008. Since 2010.

CATHERINE COLEMAN, Associate Professor. B.A. (University of the South, Sewanee), 1998; B.A. (Ibid.), 1998; Ph.D. (University of Illinois), 2009. Since 2009.

ASHLEY ENGLISH, Assistant Professor. B.S. (University of North Texas), 2006; M.S. (Ibid.), 2008; Ph.D. (Ibid.), 2015. Since 2016.

AMISO GEORGE, Associate Professor. B.S. (Ohio University), 1986; M.A. (Ibid.), 1987; Ph.D. (lbid.), 1992. Since 2005.
JONG-HYUOK JUNG, Assistant Professor. B.A. (Korea University, Seoul, South Korea), 2001; M.A. (University of Florida), 2005; Ph.D. (University of Texas at Austin), 2009. Since 2012.
EUNSEON (PENNY) KWON, Assistant Professor. B.A. (Southern Illinois University), 2005; M.A. (Syracuse University), 2012; Ph.D. (University of Missouri), 2016. Since 2016.
JACQUELINE LAMBIASE, Professor and Director. B.A. (North Texas State University), 1984; M.A. (University of North Texas), 1992; Ph.D. (University of Texas, Arlington), 1997. Since 2009.
STEVE LEVERING, Instructor. B.S. (Samford University), 1990; M.S. (Texas Christian University), 2006. Since 2002.
LIANG (LINDSAY) MA, Assistant Professor. B.A. (Dalian University of Foreign Languages, Dalian, China), 2005; M.A. (New Mexico State University), 2011; Ph.D. (University of Maryland), 2016. Since 2016.
WENDY MACIAS. Associate Professor. B.A. (University of Minnesota), 1992; M.A. (University of Texas at Austin), 1997; Ph.D. (Ibid.), 2000. Since 2010.

JULIE O'NEIL, Associate Professor. B.B.A. (University of Texas at Austin), 1992; B.J. (lbid.), 1992; M.A. (St. Mary's University), 1997; Ph.D. (University of Utah), 2001. Since 2001.

MARGARET RITSCH, Instructor. B.A. (University of Wisconsin-Madison), 1980; M.A. (Ibid.), 1987. Since 2012.

BROXON SEARS, Instructor. B.F.A. (Kansas State University), 1977; M.F.A. (Texas A \& M University-Commerce), 2012. Since 2008.

## College of Education Directory

Mary Patton, Dean
Jan Lacina, Associate Dean, Graduate Studies
Elizabeth R. Taylor, Associate Dean, Undergraduate Studies
Jeannie Bosillo, Assistant to the Dean
Lindy Crawford, Director of Alice Neeley Special Education Research and Service (ANSERS) Institute
Melissa Garza, Academic Advisor
J. Steven Hodnett, Director of TRiO Programs
M. Francyne Huckaby, Director of Center for Urban Education

Karrabi Malin, Director of Student Teaching and Community Partnerships
Marilyn Tolbert, Director of Laboratory Schools
Molly Weinburgh, Director of the Andrews Institute of Mathematics and Science Education
Diana Woolsey, Director of Teacher Certification
CURBY ALEXANDER, Assistant Professor Professional Practice. B.S. (Utah State University), 1985; M.A. (Colorado State University), 2001; Ph.D. (University of Virginia), 2009. Since 2012.
SUSAN E. ANDERSON, Associate Professor. B.S.Ed. (University of Virginia), 1983; M.Ed. (lbid.), 1986; Ed.D. (lbid.), 1992. Since 1992.

MICHELLE BAUML, Assistant Professor. B.S. (Texas A\&M, College Station), 1992; M.Ed. (University of St. Thomas), 2004; Ph.D. (University of Texas at Austin), 2010. Since 2010.
VICTOR J. BOSCHINI JR., Professor and Chancellor. B.A. (Mount Union College), 1978; M.A. (Bowling Green University), 1979; Ed.D. (Indiana University), 1989. Since 2003.

LINDY CRAWFORD, Professor, Ann Jones Endowed Chair in Special Education. B.A. (Western Washington University), 1988; M.Ed. (Ibid.), 1994; Ph.D. (University of Oregon), 2000. Since 2010.
AMBER ESPING, Associate Professor. B.M. (California State University), 1996; M.S. (Indiana University), 2007; Ph.D. (Ibid.), 2008. Since 2008.

MICHAEL FAGGELLA-LUBY, Associate Professor. B.A. (College of the Holy Cross), 1998; M.Ed. (University of Notre Dame), 2000; Ph.D. (University of Kansas), 2006. Since 2013.
SARAH QUEBEC FUENTES, Professor. B.A. (Boston College), 1995; M.S.T. (lbid.), 1997; Ed.D. (Montclair State University), 2009. Since 2009.
ROBIN GRIFFITH, Associate Professor. B.S. (Texas Tech University), 1994; M.Ed. (lbid.), 1998, Ph.D. (lbid.), 2006. Since 2011.
HAYAT HOKAYEM, Assistant Professor. B.S. (American University of Beirut), 1996; M.Ed. (Ibid.), 2006; Ph.D. (Michigan State University), 2012. Since 2012.
M. FRANCYNE HUCKABY, Associate Professor. B.A. (Austin College), 1989; M.Ed. (Texas Christian University), 1996; Ph.D. (Texas A\&M University), 2005. Since 2004.

GABRIEL HUDDLESTON, Assistant Professor. B.A. (Denison University), 1999; M.S. (Indiana University), 2009; Ph.D. (Indiana University), 2014. Since 2015.

JO BETH JIMERSON, Assistant Professor. B.A. (Texas State University), 1995; M.Ed. (Trinity University), 1999; Ph.D. (University of Texas at Austin), 2011. Since 2011.
MELODY J OHNSON, Scholar in Residence. B.S. (Phillips University), 1975; M.Ed. (Texas Woman's University), 1981; Ph.D. (University of Texas at Austin), 1990. Since 2011.
KYZAR, KATHLEEN, Assistant Professor. B.S. (Texas Christian University), 1999; M.A. (Gallaudet University), 2001; Ph.D. (University of Kansas), 2010. Since 2015.

JAN LACINA, Professor and AssociateDean. B.S. (Baylor University), 1993; M.Ed. (Texas Woman's University), 1996; Ph.D. (University of Kansas), 1999. Since 2005.

MARLA W. McGHEE, Associate Professor. B.M.Ed. (Texas Tech University), 1978; M.Ed. (lbid.), 1981; Ph.D. (University of Texas at Austin), 1992. Since 2011.

KARRABI MALIN, Director of Student Teaching and Community Partnerships. B.A. (Lyon College), 1992; M.Ed. (Texas Weslyan), 1996. Since 2014

DONALD B. MILLS, Distinguished Professor. A.B. (Harvard University), 1968; M.Div. (Texas Christian University), 1972; Ed.D. (University of North Texas), 1985. Since 1969.

STEFFEN PALKO,Associate Professor Professional Practice. B.W.E.E. (University of Texas at El Paso), 1971; Ed.D. (Texas Christian University), 2009. Since 2009.
MARY M. PATTON, Associate Professor and Dean. B.S. (University of Texas), 1971; M.Ed. (lbid.), 1973; Ph.D. (Ibid.), 1990. Since 1994.
BRANDY QUINN, Assistant Professor. B.A. (Whittier College), 1998; M.A. (Loyola Marymount University), 2003; M.Ed. (California Lutheran University), 2005; Ph.D. (Stanford University), 2013. Since 2013.
DONAL M. SACKEN, Professor. B.A. (University of Texas), 1970; J.D. (Ibid.), 1973; Ph.D. (University of Georgia), 1977. Since 1991.
CECILIA SILVA, Professor. B.A. (Ohio State University), 1975; M.A. (California State University, Los Angeles), 1982; Ph.D. (University of Southern California), 1990. Since 1995.

MARCELLA STARK, Assistant Professor. B.A. (Texas A\&M), 1991; M.Ed.
(University of North Texas); 1993; Ph.D. (Sam Houston State University), 2010.

## Since 2012.

KATHLEEN STRICKLAND-COHEN, Assistant Professor. B.A. (University of North
Texas), 1997; M.S. (University of North Texas), 2004; Ph.D. (University of Oregon), 2012. Since 2015
J. MATTHEW SWITZER, Assistant Professor. B.S. (Indiana State), 1989; M.A. (University of Northern Colorado), 2007; Ph.D. (University of Missouri), 2011. Since 2011.

ELIZABETH R. TAYLOR, Associate Professor and Associate Dean. B.S. (Abilene Christian University), 1975; M.A. (Sul Ross State University), 1979; Ph.D. (St. Mary's University), 1993. Since 1998.
CORNELL THOMAS, Professor. B.M.E. (University of Missouri), 1975; M.M.E. (J ackson State University), 1980; Ed.D. (Texas A\&M, Commerce), 1990. Since 2012.

FRANK N. THOMAS, Professor. B.S. (University of South Dakota), 1975; M.Div. (North American Baptist Seminary) 1980; Ph.D. (Texas Tech University), 1988. Since 2005.
MOLLY WEINBURGH, Professor. B.A. (Agnes Scott College), 1974; M.A.T. (Emory University), 1980; Ph.D. (Ibid.), 1993. Since 2002.
CYNTHIA WILLIAMS, Associate Professor of Professional Practice. B.S.
(Oklahoma State University), 1990; M.Ed. (University of Arkansas), 1992; Ph.D. (University of North Texas), 2007. Since 2006.

## Laboratory Schools

KRISTEN ADAMS, Instructor. B.A. (Trinity University), 1994; M.Ed. (Texas Christian University), 2003. Since 2003.
SHELLEY F. COCHRAN, Instructor. B.S.Ed. (Texas Christian University), 1976; M.Ed. (Texas Woman's University), 1979. Since 2003.

ROBIN N. DAVIS, Instructor. B.F.A. (University of Texas, Arlington), 1974; B.S.Ed. (Texas Christian University), 1976; M.Ed. (University of North Texas), 1979. Since 1984.

NEELY DOUGLAS, Instructor. B.S.Ed (Texas Christian University), 2009; M.Ed. (Ibid.), 2011. Since 2011.
LISA MAY, Instructor. B.S. (Texas Woman's University), 1995; M.Ed. (Texas Christian University), 2004. Since 2011.
ELIZABETH MIDDLETON, Instructor. B.S. (Texas A\&M, College Station), 2003. Since 2008.
SHERRY OLIVER, Instructor. Since 2007.
KIMBERLY PAYNE, Assistant Director of Laboratory Schools. B.S.Ed. (Texas Christian University), 1979; M.Ed (Ibid.), 1981. Since 1996.
MADELINE KING THOMAS, Instructor. B.S.Ed. (Texas Christian University), 1976; M.Ed. (Texas Woman's University), 1979. Since 1985.
MARILYN S. TOLBERT, Director of Laboratory Schools. B.S.Ed. (Texas Christian University), 1996; M.Ed. (Ibid.), 2000; Ed.D. (Ibid.), 2010. Since 2003.
AMANDA YOUNG, Instructor. B.S. (Texas Christian University), 2009. Since 2010.

## TRiO Programs

J . STEVEN HODNETT, Director of TRiO Programs. B.S.E. (Southern Arkansas University), 1982; M.Ed. (Ibid.), Since 1995.
MARGARET FAUST, Director of Upward Bound Program. B.A. (University of North Carolina), 1973; M.A. (Ibid.), 1982. Since 1985.
MARGARITA GARZA, Director of Student Support Services. B.A. (Texas Wesleyan University), 1995. Since 1997.
ROBIN MELTON, Director of Ronald E. McNair Program. B.A. (University of Texas at Arlington), 1985. Since 2010.

## College of Fine Arts Directory

Anne Helmreich, Dean
H. Joseph Butler, Associate Dean and Director of Graduate Studies

Andie Piehl, Assistant to the Dean and Director of Degree Certification

## School of Art

AMANDA ALLISON, Associate Professor, Art Education. B.A. (Louisiana State University), 1996; M.A. (Northwestern State University), 2000; Ph.D. (University of North Texas), 2008. Since 2006.
BABETTE BOHN, Professor, Art History. B.A. (Northwestern University), 1972; M.A. (Boston University), 1975; M.Phil. (Columbia University), 1978; Ph.D. (Ibid.), 1982. Since 1988.

NICK BONTRAGER, Assistant Professor, New Media. B.F.A. (University of Houston), 2008; M.F.A. (The Ohio State University), 2011. Since 2012.
FRANCES COLPITT, Professor and Deedie Potter Rose Chair in Art History. B.F.A. (University of Tulsa), 1974; M.A. (lbid.), 1977; Ph.D. (University of Southern California), 1982. Since 2005.
LORI BOORNAZIAN DIEL, Associate Professor, Art History. B.A. (Emory University), 1992; M.A. (Tulane University), 1996, Ph.D. (Ibid.), 2001. Since 2002.

ADAM FUNG, Assistant Professor, Painting. B.F.A. (Western Washington University), 2005; M.F.A. (University of Notre Dame), 2008. Since 2013. JESSICA FRIPP, Assistant Professor, Art History. B.A. (UC San Diego), 2002: M.A. (Williams College), 2005; Ph.D. (University of Michigan Ann Arbor), 2012.
SUSAN HARRINGTON, Associate Professor, Painting. B.F.A. (Maryland Institute College of Art), 1972; M.A. (Purdue University), 1977; M.F.A. (University North Texas), 1984. Since 1988.
DICK LANE, Associate Professor, Photography. B.F.A (University of Texas at Arlington), 1983; M.F.A (University of Florida), 1985. Since 1989.
RACHEL LIVEDALEN, Assistant Professor, Printmaking. B.A. (University of Virginia), 2010; M.A. (University of lowa), 2013; M.F.A. (University of lowa), 2014. Since 2014.

SALLY PACKARD, Associate Professor and Director of the School of Art, Painting. B.A. (Regent's College, State University of New York), M.F.A. (Texas Christian University), 1997. Since 2011.
CHRIS POWELL, Assistant Professor, Ceramics. B.F.A. (Abilene Christian University), 1980; M.F.A (Bradley University), 1983. Since 1984.

EDITH JANE RILEY, Visual Resources Librarian. B.F.A. (Stephen F. Austin State University), 1974; M.A. (Southern Methodist University), 1983. Since 1983.
CAMERON SCHOEPP, Associate Professor, Sculpture. B.F.A. (Pacific Lutheran University), 1984; M.F.A. (Texas Christian University), 1987. Since 2003.
LUTHER A. SMITH, JR., Professor, Photography. B.A. (University of Illinois), 1972; M.F.A. (Rhode Island School of Design), 1974. Since 1983.
MARK THISTLETHWAITE, Professor and Kay and Velma Kimbell Chair of Art History. B.A. (University of California, Santa Barbara), 1970; M.A. (Ibid.), 1972; Ph.D. (University of Pennsylvania), 1977. Since 1977.

## School for Classical \& Contemporary Dance

LI-CHOU CHENG, Professor of Professional Practice and Ballet Master in Residence. Former ballet master and soloist for the Beijing Central Ballet and principal teacher for the Boston Ballet. Since 1990.
ROMA FLOWERS, Assistant Professor of Professional Practice and Dance Lighting Designer. B.F.A. (Goodman School of Drama, DePaul University), 1983. Since 2005.

ELIZABETH GILLASPY, Professor and Interim Director of the SCCD. B.B.A. (Texas Tech University), 1985. M.F.A. (Texas Christian University), 1991. Secondary Certification-Dance (Ibid.), 1995. Since 1990.

SUKI J OHN, Associate Professor. B.F.A. (University of New Mexico), 1980; M.A. (New York University), 1991; Ph.D. (University of Connecticut), 2007. Since 2007.

CATHLEEN MARTIN, Associate Professor. B.A. (Empire State College, State University of New York), 2006; M.F.A. (Texas Woman's University), 2008; Ph.D. (Ibid.), 2013. Since 2008.
SUSAN DOUGLAS ROBERTS, Professor. B.A. (Texas Christian University), 1979; B.F.A. (Ibid.), 1980; M.F.A. (University of Illinois), 1983. Since 1984.

JESSICA ZELLER, Assistant Professor. B.S. (Butler University), 2000, M.F.A. (Ohio State University), 2008, Ph.D. (The Ohio State University), 2012. Since 2012.

## Graphic Design

JAN BALLARD, Instructor, Graphic Design. B.F.A. (University of Illinois at Urbana-Champaign), 1983.
YVONNE CAO, Assistant Professor, Visual Communication. B.A. (Hunan Normal University), 2009; Exchange Program (Middle Tennessee State University), 2008; M.F.A. (Louisiana State University), 2012. Since 2014.
DUSTY CROCKER, Associate Professor of Professional Practice, Graphic Design. B.F.A. (Texas Christian University), 1982; M.A. (Syracuse University), 1999; Ph.D. (Capella University), 2008. Since 2007.
LEWIS A. GLASER, Professor and Chair of Graphic Design. B.A. (Western Michigan University), 1977; M.F.A. (Syracuse University), 1988. Since 1987.

## Interior Design and Fashion Merchandising

STEPHANIE BAILEY, Instructor II, Fashion Merchandising, B.S. (Texas Christian University),1994; M.A. (Texas Woman's University), 2000. Since 2009.
JULIENNE BALLANTYNE, Instructor II ,Fashion Merchandising and Interior Design. D.A. (Glasgow School of Art), 1974; M.F.A. (Texas Christian University), 1976. Since 2005.

JANACE E. BUBONIA, Professor, Fashion Merchandising and Chair of the Department. B.S (State University of New York at Oneonta), 1991; M.A. (Texas Woman's University), 1994; Ph.D. (Ibid.), 1998. Since 2000.

SALLY L. FORTENBERRY, Associate Professor, Fashion Merchandising. B.S. (Carson-Newman College), 1980; M.S. (Texas Woman's University), 1981; Ph.D. (lbid.), 1985. Since 1989.
ALYSSA HUMPHRIES, Assistant Professor, Interior Design. B.F.A. (Baylor University), 2004; M.F.A. (Parsons The New School for Design) 2007. Since 2015.

ALBERT MARICHAL, Assistant Professor, Interior Design. B.S. (University of Houston), 1996; B.Arch (University of Houston) 1996; M.S, (Columbia University) 1997; M.Arch (Harvard) 1999. Since 2015.
GAYLA JETT SHANNON, Associate Professor of Professional Practice, Interior Design. B.F.A. (Texas Tech University); M.Arch. (University of Texas at Arlington). Since 2010.
SHWETA REDDY, Associate Professor, Fashion Merchandising. B.B.A. (Madras University, India), 2001; M.Sc. (Manchester Metropolitan University, United Kingdom), 2004; Ph.D. (Oregon State University), 2008. Since 2008.
AMY ROEHL, Associate Professor, Interior Design. B.S. (Miami University), 1992; M.F.A. (The Art Institute of Chicago), 1996. Since 2007.

JAY SANG RYU, Assistant Professor, Fashion Merchandising. B.S. (Philadelphia University), 1994; M.S. (University of North Texas), 1996; Ph.D. (Oklahoma State University), 2010. Since 2014
PATRICIA T. WARRINGTON, Associate Professor, Fashion Merchandising. B.A. (Texas Christian University), 1975; M.B.A. (Ibid.), 1984; Ph.D. (University of Arizona), 2002. Since 2006.

## School of Music

ELISABETH ADKINS, Professor of Violin. B.M. (University of North Texas); M.M.A. (Yale University); M.M. (Yale University); D.M.A. (Yale University). Since 2014.

SHEILA M. ALLEN, Professor of Voice. B.M. (Oberlin Conservatory), 1966; M.M. (Eastman School of Music at Rochester), 1967; D.M.A. (Ibid.), 1974. Since 1985.
NEIL ANDERSON-HIMMELSPACH, Assistant Professor of Music Technology and Music Theory/Composition. A.A. (Pierce College), 1997; B.M. (Pacific Lutheran University), 1999; M.M. (Central Michigan University), 2006; D.M.A. (Florida State University), 2009. Since 2015.

CHRISTOPHER ASPAAS, Associate Professor of Music and Director of Choral Activities. B.M. (St. Olaf College), 1995; M.M. (Michigan State University), 1997; PhD (Florida State University), 2004. Since 2015.
SEAN ATKINSON, Assistant Professor of Music Theory. B.M. (Furman University), 2004; M.M. (Florida State University), 2006; PhD (Florida State University), 2009. Since 2014.

DAVID BEGNOCHE, Associate Professor of Trombone. B.M. (New England Conservatory), 1990; M.M. (Manhattan School of Music), 1995; D.M.A. (University of North Texas), 2014. Since 2009.
MARTIN BLESSINGER, Associate Professor of Music (Theory/Composition). B.A. (State University of New York at Stony Brook), 2000; M.A. (lbid.), 2003; D.M. (Florida State University), 2006. Since 2007.
J. DAVID BROCK, Associate Professor of Voice. B.A. (Abilene Christian University), 1974; M.M. (New England Conservatory of Music), 1978. Since 2002.

J ON BURGESS, Associate Professor of Trumpet. B.M. (University of Illinois), 1978; M.M. (University of Kansas), 1980; D.M.A. (University of Arizona), 1988. Since 2000.
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## Theatre

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MICHAEL HEIL, Associate Professor. A.B. (Xavier University), 1974; M.F.A. (Schiller International University), 1980; M.F.A. (University of Texas at Austin), 1992. Since 2008.

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F. Andrew Schoolmaster III, Dean

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## Aerospace Studies

LT COL DARIN GREGG, Professor and Chair of the Department. B.A. (Oregon State University), 1999; M.A. (Troy State University), 2005; M.A. (USAF Air University), 2012. Since 2015.
CAPT PATRICK KERR, Assistant Professor. B.S. (Tarleton State University), 2010; M.S. (Columbia University), 2013. Since 2013.

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## Criminal Justice

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## English

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## History

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## Military Science

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## Modern Language Studies

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SCOTT G. WILLIAMS, Associate Professor. B.A. (Stephen F. Austin State University), 1977; M.A., (Universität Hamburg), 1989; Ph.D. (University of Texas at Austin), 1999. Since 2005.
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## Philosophy

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## Political Science

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JAMES W. RIDDLESPERGER, J R., Professor. B.A. (North Texas State University), 1975; M.A. (Ibid.), 1980; Ph.D. (University of Missouri), 1982. Since 1982.
ADAM SCHIFFER, Associate Professor. B.A. (Chapman University), 1996; M.A. (Arizona State University), 1998; Ph.D. (University of North Carolina), 2003. Since 2003

JAMES M. SCOTT, Herman Brown Chair \& Professor, B.A. (Weaton College), 1986; M.A. (Northern Illinois University) 1988, Ph.D. (Lbid) 1993, since 2011.

MICHAEL STRAUSZ. Associate Professor. B.A. (Michigan State University), 1999; M.A. (University of Washington), 2001; Ph.D. (Ibid.), 2007. Since 2008.

MARY L. VOLCANSEK, Professor. B.A. (Abilene Christian College), 1969; M.A. (Texas Tech University), 1971; Ph.D. (lbid.), 1973. Since 2000

## Religion

D. JAMES ATWOOD, Instructor and Assistant to the Dean of Admissions. B.A. (Texas Christian University), 1970; M.A. (Vanderbilt University), 1975; Ph.D. (lbid.), 1978. Since 1983.

CLAUDIA V. CAMP, John F. Weatherly Professor of Religion. B.A. (Duke University), 1972; M. Div. (Harvard University), 1977; Ph.D. (Duke University), 1982. Since 1980.

MARK W. DENNIS, Associate Professor. B.B.A (University of Wisconsin), 1984; M.A. (lbid.), 2001; Ph.D. (Ibid.), 2006. Since 2007.

PATRICIA A. DUNCAN, Assistant Professor, B.A. (University of Missouri), 1998; M.Div. (University of Chicago), 2003; Ph.D. (Ibid.) 2014. Since 2015.
J. SAGE ELWELL, Associate Professor. B.A. (William J ewell College), 1998; M.A. (University of Kansas), 2000; M.Litt. (University of St. Andrews), 2002; Ph.D. (University of lowa), 2008. Since 2009
ELIZABETH H. FLOWERS, Associate Professor. B.A. (Millsaps College), 1989; M.A. (University of Texas), 1993; M.Div. (Princeton Theological Seminary), 1999; Ph.D. (Duke University), 2007. Since 2006.

ANDREW O. FORT, Professor. B.A. (Amherst College), 1974; Ph.D. (University of Pennsylvania), 1982. Since 1982.
C. DAVID GRANT, Professor. B.A. (Austin College), 1972; M.Th. (Southern Methodist University), 1976; M.A. (Harvard University), 1980; Ph.D. (Ibid.), 1981. Since 1981.

MELANIE L. HARRIS, Associate Professor. B.A. (Spelman College), 1997; M.Div. (Iliff School of Theology), 2001; Ph.D. (Union Theological Seminary), 2006. Since 2005.
JACK A. HILL, Professor. B.A. (Occidental College), 1971; M.T.S. (Harvard University), 1974; M.A. (Vanderbilt University), 1985; Ph.D. (Ibid.), 1988. Since 2000.

NADIA M. LAHUTSKY, Associate Professor and Chair of the Department. B.A. (Hiram College), 1973; M.A. (Vanderbilt University), 1979; Ph.D. (Ibid.), 1984. Since 1981.
SCOTT M. LANGSTON, Instructor. B.A. (Houston Baptist University), 1982; M. Div. (Southwestern Baptist Theological Seminary), 1986; M. S. (University of Texas at Arlington), 2000; Ph.D. (Southwestern Baptist Theological Seminary), 1992.

DARREN J. N. MIDDLETON, Professor. B.A. (University of Manchester, England), 1989; M.Phil. (Oxford University), 1991; Ph.D. (University of Glasgow, Scotland), 1996. Since 1998.
DAVID P. MOESSNER, Professor and A. A. Bradford Chair in Religion. B.A. Princeton University, 1971; M. Div. (Ibid.), 1975; M.A. Oxford University (1980); Dr. Theol. 1983 (University of Basel), Since 2012.
SANTIAGO O. PIÑÓN, Assistant Professor. B.A. (Southwestern Assemblies of God University), 1993; M.Div. (University of Chicago), 2001; M.A. (Abilene Christian University), 2003; Ph.D. (University of Chicago), 2012. Since 2011.
JAN JAYNES QUESADA, Instructor. B.A. (University of North Carolina), 1984; M.A. (Baylor University), 1990; Ph.D. (Ibid.), 1996. Since 1999.

YUSHAU SODIQ, Associate Professor. B.A. (Islamic University, Medina, Saudi Arabia), 1976; M.A. (Ibid.), 1980; M.A. (Temple University), 1988; Ph.D. (Ibid.), 1991. Since 1992.

## Sociology and Anthropology

DAVID AFTANDILIAN, Associate Professor. B.A. (Cornell University), 1990; M.A. (University of Chicago), 1995; Ph.D. (Ibid.), 2007.
MICHELLE EDWARDS, Assistant Professor. B.S. (Rice University), 2005; M.A. (Texas State University), 2009; Ph.D. (Washington State University), 2013.
JEFF FERRELL, Professor. B.S. (Southern Methodist University), 1975; M.A. (University of Texas at Austin), 1977; Ph.D. (Ibid.); 1982. Since 2003.
JEANNINE GAILEY, Associate Professor. B.S.(Mount Union College), 2000; M.A. (University of Akron), 2002; Ph.D. (Ibid.), 2005. Since 2005.
MICHAEL A. KATOVICH, Professor. B.A. (University of Illinois), 1974; M.A. (University of lowa), 1978; Ph.D. (Ibid.), 1983. Since 1983.
MIGUEL C. LEATHAM, Instructor. B.A. (University of New Mexico), 1983; M.A. (Ibid.), 1988; Ph.D. (Ibid.), 1993; M.S.L.S. (University of North Texas), 2005. Since 2000.
DAVID P. SANDELL, Associate Professor. B.A. (Lewis and Clark College), 1987; M.A. (University of Southern California), 1993; M.A. (University of Texas at Austin), 1998; Ph.D. (Ibid.), 2004. Since 2006.
ANGELA L. THOMPSON, Instructor. B.A. (Wellesley College), 1988; M.A. (Brandeis University), 1993; Ph.D. (Ibid.), 1998. Since 1998.
CAROL THOMPSON, Professor. B.A. (Louisiana State University), 1983; M.A. (Ibid.), 1985; Ph.D. (lbid.), 1988. Since 1992.
LISA K. VANDERLINDEN, Associate Professor. B.A. (Concordia University), 1992; M.Phil. (Rutgers University), 1998. Since 2002.

KEITH WHITWORTH, Instructor. B.A. (Oauchita Baptist University), 1983; M.A. (Southwest Baptist University), 1993; Ph.D. (University of North Texas), 2006. Since 2000.

MORRISON G. WONG, Professor and Chair. B.A. (California State University, San Jose), 1972; M.A. (University of California, Riverside), 1975; Ph.D. (Ibid.), 1977. Since 1981.

AMINA ZARRUGH, Assistant Professor. B.A. (University of Texas at Austin), 2008; M.A., (lbid) 2011; Ph.D. (lbid), 2016. Since 2016.

## Spanish and Hispanic Studies

FRANCIS KOMLA AGGOR, Professor and Chair. B.A. (University of Ghana), 1984; M.A. (University of Western Ontario, London, Canada), 1987; Ph.D. (University of California, Los Angeles), 1992. Since 2008.
DAVID BEDFORD, Instructor II. B.A. (Texas Tech University), 1970; M.A. (Ibid.), 1973; M.A. (Southwestern Baptist Theological Seminary), 1994; Ph.D. (University of Texas at Austin), 1976. Since 1996.
REGAN BOXWELL, Instructor. B.A. (Texas Christian University), 2000; M.A. (University of Virginia), 2004; M.A. (University of Texas at Austin), 2006; Ph.D. (Ibid.), 2013. Since 2011.
MARIA DEL PUY CIRIZA-LOPE, Assistant Professor, B.A. (Deusto University, Spain), 2000; M.A. (University of Illinois at Urbana-Champaign), 2003; Ph.D. (lbid), 2009. Since 2016.
LEE A. DANIEL, Professor. B.A. (Tarleton State University), 1968; M.A. (North Texas State University), 1972; Ph.D. (Texas Tech University), 1979. Since 1985.
DONALD H. FRISCHMANN, Professor. B.A. (University of Missouri), 1975; M.A.
(Ohio State University), 1978; Ph.D. (University of Arizona), 1985. Since 1985.
DIANNE R. HOBBS, Instructor II. B.A. (University of Texas at Arlington), 1981; M.A. (Ibid.), 1985; Ph.D. (University of Texas at Austin), 1990. Since 2001.

SOHYUN LEE, Associate Professor. B.A. (Seoul National University), 1994; M.A. (Ibid.), 1998; Ph.D. (University of Arizona), 2009. Since 2009.
KAREN R. MARTIN, Instructor. B.A. (Texas Christian University), 1991; M.A. (University of Texas at Arlington), 1997. Since 2000.
MARY R. N. McKINNEY, Instructor II . B.A. (Texas Christian University), 1975; M.A. (Stephen F. Austin State University), 1976; Ph.D. (University of Texas at Arlington), 1984. Since 2000.
KARLA O'DONALD, Instructor. B.A. (University of Texas at Arlington), 1997; M.A. Ibid.), 2002. Since 2004.

STEVEN SLOAN, Associate Professor. B.A. (University of Nevada, Reno), 1993; Ph.D. (Tulane University), 2003. Since 2003.
RYAN T. SCHMITZ, Associate Professor. B.A. (Moorhead State University), 1998; M.A. (University of Texas at Austin), 2004; Ph.D. (Ibid.), 2009. Since 2009.

## Harris College of Nursing and Health Sciences Directory <br> Susan M. Weeks, Dean

Debbie Rhea, Associate Dean for Health Sciences and Research
Suzy Lockwood, Associate Dean for Nursing
Hylda Nugent, Assistant Dean for Administrative and Clinical Affairs
Chris Watts, Assistant Dean for Strategic Initiatives
June Seely, Assistant to the Dean
Sybil White, Assistant to the Dean for Graduate and Undergraduate Studies

## Davies School of Communication Sciences and Disorders

DANIELLE M. BRIMO, Assistant Professor. B.S. (Florida State University), 2004; M.A. (lbid.), 2006; Ph.D. (lbid.), 2012. Since 2012.

TRACY BURGER, Assistant Professor of Professional Practice. B.S. (University of North Texas), 1994; M.S.-SLP (Ibid.), 1998; M.S., Audiology (Ibid.), 2000. Since 2015.

LYNN K. FLAHIVE, Assistant Professor. B.S. (Marquette University), 1977; M.S. (Ibid.), 1978. Since 1991.
TERESA DENNETT GONZALEZ, Assistant Professor of Professional Practice. B.S. (Texas Woman's University), 1976; M.S. (Ibid.), 1985. Since 1992.
KAREN HENNINGTON, Instructor. B.S. (Texas Christian University), 1996; M.S. (Ibid.), 1998. Since 2014.
EMILY LUND, Assistant Professor. B.A. (Vanderbilt University), 2006; M.S. (Vanderbilt University School of Medicine), 2008; Ph.D. (Vanderbilt University School of Medicine), 2013. Since 2014.

LAUREL T LYNCH, Instructor. B.S. (Baylor University), 1983; M.S. (Texas
Christian University), 1984; Certified Clinical Competence. Since 2012.

DEANN O'LENICK, Lecturer. B.S. (North Dakota State University), 1987; M.S. (Texas Tech University), 1989. Since 2015.
IRMGARD PAYNE, Instructor. B.A. (University of Texas, Arlington), 1986; M.S. (Texas Christian University), 1994. Since 2003.
J ENNIFER BARBER WATSON, Professor. B.S. (Northern Arizona University), 1976; M.A. (Northwestern University), 1979; Ph.D. (Ibid.), 1981. Since 1982.
CHRISTOPHER WATTS, Professor, Assistant Dean for Strategic Initiatives - Harris College and Director of the Davies School of Communication Sciences and Disorders. B.S. (University of South Alabama), 1994; Ph.D. (Ibid.), 1998. Since 2008.

LYNITA A. YARBROUGH, Instructor. B.S. (Texas Christian University), 1994; M.S. (Ibid.), 1996. Since 2012.

## Kinesiology

ROINA BAQUERA, Instructor of Professional Practice. B.S. (University of Texas at El Paso), 1991; M.S. (Ibid), 1999. Since 2016.
PHIL ESPOSITO, Assistant Professor. B.S. (Truman State University), 2005; M.S. (Missouri State University at Springfield), 2008; Ph.D. (University of Michigan, Ann Arbor), 2012. Since 2012.
VALERIE HAIRSTON, Instructor. B.S. (Texas Tech), 2003; M.S. (Bloomsburg University), 2004. Since 2009.
STEPHANIE JEVAS, Associate Professor of Professional Practice and Program Director, Athletic Training Program. B.S. (Texas A\&M University), 1993; M.A. (Western Michigan University), 1994; Ph.D. (University of Houston), 2004. Since 2012.
ADAM KING, Assistant Professor. B.A. (Concordia), 1998; M.S. (University of Pennsylvania), 2008; Ph.D. (Ibid), 2013. Since 2016.
ANDREUS KREUTZER, Instructional Laboratory Coordinator. B.S. (Boise State, 2010; M.S. (Texas Christian University), 2014. Since 2015.
JOEL B. MITCHELL, Professor and Chair of Department of Kinesiology. B.A. (Lewis and Clark College), 1978; M.A. (University of Maryland), 1983; Ph.D. (Ball State University), 1988. Since 1988.
JONATHAN OLIVER, Assistant Professor. B.B.A. (University of North Texas), 2002; M.Ed. (University of Texas), 2006; Ph.D. (Texas A\&M University), 2012. Since 2013.
MELODY D. PHILLIPS, Associate Professor. B.S. (University of Texas at Arlington), 1994; M.S. (Texas Christian University), 1996; Ph.D. (Purdue University), 2001. Since 2004.
DEBORAH J. RHEA, Professor and Associate Dean for Health Sciences and Research. B.S. (University of Texas, Arlington), 1980; M.Ed. (University of Houston) 1990; Ed.D. (lbid), 1995. Since 1999.
MEENA SHAH, Professor. B.Sc. (Robert Gordon's College, Aberdeen, Scotland), 1982; Ph.D. (London University, London), 1986. Since 2001.
GLORIA SOLOMON, Professor. B.S. (Oregon), 1985; M.S. (Oregon), 1987; Ph.D. (University of California at Berkeley), 1993. Since 2009.
BENJ AMIN R. TIMSON, Assistant Professor of Professional Practice. B.S.
(Oklahoma), 2005; M.S. (Kansas), 2007; Ph.D. (lbid), 2014. Since 2015.

## Nursing

LAVONNE ADAMS, Associate Professor. A.S. (Kettering College of Medical Arts), 1985; B.S.N. (Wright State University), 1988; M.S. (Andrews University), 1992; Ph.D. (Ibid.), 2003. Since 2004.
GINA K. ALEXANDER, Associate Professor. B.S.N. (Oklahoma Baptist University), 1998; M.S. Public Health (University of North Carolina at Chapel Hill), 2003; M.S.N. (University of Virginia at Charlottesville), 2008; Ph.D. (lbid.), 2009. Since 2010.

LISETTE ALLENDER, Lecturer. B.S. Psychology (Texas Christian University), 2002; A.D.N. (Tarrant County College), 2005; B.S.N. (Texas Christian University), 2008; M.S.N. (Texas Woman's University), 2012; Certified Inpatient Obstetric Nurse. Since 2012.
MARINDA E. ALLENDER, Assistant Professor and Division Director, Undergraduate Nursing. B.S.N. (University of Virginia), 1978; M.S.N. (University of Texas at Arlington), 1985. Certified Pediatric Nurse. Since 1989.
KATHY BAKER, Associate Professor and Director, Nursing Graduate Studies and Scholarship. B.S.N. (Baylor University), 1981; M.S.N. (Texas Woman's University), 1988; Ph.D. (University of Texas), 2003. Clinical Nurse Specialist (APRN, BC). Since 2007.
LISA BASHORE, Assistant Professor. B.S.N. (Messiah College), 1993; M.S.N. (SUNY at Buffalo), 1997; Ph.D. (University of Texas at Arlington), 2010; Pediatric Nurse Practitioner. Since 2013.

LORI BORCHERS, Instructor. B.S.N. (University of Kansas), 1991; M.S.N. (Georgia State University), 1997. Since 2014.
SUZANNE BRYANT, Instructor. B.S. (Hampton University), 1993; M.S.N. (Ibid.), 2001. Since 2006.

STEPHANIE BUTKUS, Assistant Professor. B.S.N. (Texas Christian University), 1996; M.S.N. (Wright State University), 2004; Ph.D. (University of Northern Colorado), 2014; Pediatric Nurse Practitioner. Since 2014.
SHARON CANCLINI, Assistant Professor of Professional Practice. A.S. (College of Alameda), 1978; Diploma (Samuel Merritt Hospital), 1979; B.S.N. (University of Texas Health Science Center), 1982; M.S. (Wright State University School of Nursing), 1987. Since 2005.
DENNIS CHEEK, Abell-Hanger Professor of Gerontological Nursing. A.S. (Yuba College), 1979; B.S.N. (California State University), 1982; M.S. (University of California), 1988; Ph.D. (University of Nevada), 1996. Since 2003.
GLENDA DANIELS, Associate Professor. B.S.N. (University of Texas), 1975; M.S.N. (Texas Woman's University), 1994; Ph.D. (University of Texas at Arlington), 2009. Since 2009.
CAITLIN KIESTER DODD, Instructor. B.S.N. (Texas Christian University), 2005; M.S.N. (Ibid.), 2010. Since 2010.

KATHY ELLIS, Associate Professor of Professional Practice and Director, Family Nurse Practitioner Program. A.D.N. (Valencia College), 1975; B.S.N. (School of Nursing \& Health Studies University of Miami), 1977; M.S.N. (George Mason University), 1994; D.N.P. (George Washington University), 2010. Family Nurse Practitioner. Since 2015.
DONNA ERNST, Lecturer and Coordinator, Clinical Nurse Leader. A.D.N. (Illinois Central College), 1984; B.S.N. (University of Texas at Arlington), 2010; M.S.N. (lbid), 2012; D.N.P. (Texas Tech University), 2016. Since 2015.
ANDREA ERWIN, Assistant Professor. B.A. (Southern Illinois University), 1995; B.S.N. (University of Texas Medical Branch), 1998; M.S.N. (Baylor University Louise Herrington School of Nursing), 2005; Ph.D. (University of Texas at Arlington), 2013. Since 2014.
SUSAN FIFE, Assistant Professor of Professional Practice. B.S.N. (Texas Christian University), 1991; M.S.N. (State University of New York at Stony Brook), 1997; Certificate of Nurse-Midwifery (Parkland School of Nurse-Midwifery), 1995. Since 2014.
PAMELA JEAN FRABLE, Associate Professor. A.B. (University of Chicago), 1976; N.D. (Case Western Reserve University), 1982. Since 2000.

ASHLEY FRANKLIN, Assistant Professor. B.S.N. (Texas Christian University), 2003; M.S.N. (Ibid), 2010; Ph.D. (Oregon Health and Science University), 2014. Since 2014.
SHEILA GRIFFIN, Instructor. B.S.N. (Texas Christian University), 1985; M.S.N. (University of Texas at Arlington), 1990. Since 2012.
DIANE ACKALL HAWLEY, Associate Professor of Professional Practice. B.S.N. (TCU), 1981; M.S. (Texas Woman's University), 1988; Ph.D. (New Mexico State University), 1998. Clinical Nurse Specialist in Medical-Surgical Nursing. Since 1998.

CAROL HOWE, Assistant Professor. B.A. (University of Pennsylvania), 1983; B.S.N. (Ibid), 1985; M.S.N. (Ibid), 1988; Ph.D. (University of Texas at Arlington), 2014. Since 2014.

LYNNETTE HOWINGTON, Assistant Professor of Professional Practice, Director of Administrative and Clinical Affairs. B.S.N. (Texas Christian University), 1994; M.S.N. (Old Dominion University), 2003. D.N.P. (Texas Christian University), 2011. Women's Health Nurse Practitioner. Since 2007.

LINDA HUMPHRIES, Instructor and Director, Center for Collaborative Practice. B.S.N. (University of Texas at Arlington), 1980; M.S.N. (Texas Christian University), 2004; D.N.P. (Texas Christian University), 2014. Clinical Nurse Specialist in Medical-Surgical Nursing. Since 2014.
HOPE JACKSON, Assistant Professor. B.S. (University of Nebraska), 1999; B.S.N. (Creighton University), 2000; M.S.N. (University of Nebraska Medical Center), 2005; Ph.D. (lbid), 2015. Since 2016.
RHONDA KEEN, W. F. "Tex" and Pauline Curry Rankin Professor of Nursing. B.S.N. (Texas Christian University), 1978; M.N.Sc. (University of Arkansas), 1981; Ph.D. (Texas Woman's University), 1985. Since 1982.
SUZY LOCKWOOD, Professor, Associate Dean for Nursing and Director of Center for Oncology Education and Research. B.S.N. (Texas Christian University), 1983; M.S.N. (University of Texas at Arlington), 1994; Ph.D. (Ibid.), 2001. Since 1997.

KENNETH LOWRANCE, Associate Professor of Professional Practice and Director, Doctor of Nursing Practice and Clinical Nurse Specialists Programs. A.D.N. (University of Texas at Arlington), 1980; M.S.N. (Texas Woman's University),

1983; D.N.P. (Texas Christian University), 2010; Family Nurse Practitioner. Since 2011.
MIRIAM MARSHALL, Instructor. Diploma in Nursing (Providence School of Nursing, Mobile), 1980; B.S.N. (Drexel University, Philadelphia), 2009; M.S.N. (Ibid.), 2012. Since 2013.
LINDA L. MARTIN, Associate Professor of Professional Practice. B.S.N. (University of Texas at Arlington), 1980; M.S.N. (Ibid.), 1997; D.N.P. (Texas Christian University), 2009. Family Nurse Practitioner. Since 2001.
R. LEA MONTGOMERY, Assistant Professor of Professional Practice. A.D.N. (Rochester State J unior College), 1973; B.S.N. (Winona State University), 1979; M.S. (Texas Woman's University), 1983. Since 2005.

PENNY MOORE, Associate Professor. B.S.N. (University of Texas, Houston), 1975; M.S.N. (University of Texas), 1979; Ph.D. (Texas Woman's University), 1997. Since 2009.

BARBARA PATTEN, Assistant Professor of Professional Practice. (B.S.N.) (University of lowa), 1983; M.S. (University of Oklahoma), 1996. Since 2009.
BRENDA REED, Assistant Professor of Professional Practice. L.V.N. (All Saints School of Vocational Nursing), 1982; A.D.N. (Tarleton State University), 1992; B.S.N. (University of Texas at Arlington), 1996; M.S.N. Family Nurse Practitioner (lbid.), 2002; D.N.P. (Ibid.), 2011. Since 2011.
JANIE RANEL ROBINSON, Associate Professor. B.S.N. (Southern University and A\&M College at Baton Rouge), 1996; M.S.N. (Ibid.), 2002; Ph.D. (Ibid.), 2009. Since 2009.
VICKIE ROGERS, Lecturer. B.S. (University of Southern Mississippi), 1982; M.S. (Ibid), 1989; D.N.P. (Case Western Reserve University), 2008. Since 2014.
MARY KAY SCHNELL, Assistant Professor of Professional Practice. B.S. (University of Nebraska at Lincoln), 1994; M.S.N. (Andrews University), 1999. Since 2007.
MELISSA McINTIRE SHERROD, Associate Professor. B.A. (University of Texas), 1975; B.S.N. (University of Texas Health Science Center), 1977; M.S.N. (Ibid.), 1980; Ph.D. (Texas Woman's University), 1997. Since 2004.
LIBBY SLONE, Lecturer. A.A.S. Nursing (Miami University - Oxford, OH), 1983; B.S.N. (Indiana University-Purdue University), 1988; M.S.N. (University of Texas at Arlington), 1997. Since 2015.
MARIE STARK, Assistant Professor of Professional Practice. B.S.N. (Baylor University), 1977; M.S.N. (Loyola University), 1981. Since 2015.
LAURA THIELKE, Assistant Professor of Professional Practice and Director of Health Professions Learning Center. B.S.N. (Valparaiso University at Indiana), 1980; M.S.N. (Texas Woman's University), 1988. Since 2009.
CHARLES ALAN WALKER, Professor. B.S. (Texas Christian University), 1977; B.S.N. (Ibid.), 1983; M.S.N. (University of Texas at Arlington), 1989; Ph.D. (Texas Woman's University), 2000. Since 2001.
DANIELLE WALKER, Assistant Professor. B.S.N. (Texas Christian University), 2003; M.S.N. (Texas Woman's University), 2009. Ph.D. (University of Texas Medical Branch-Galveston), 2015. Since 2009.
JODIE WEATHERLY, Assistant Professor of Professional Practice. B.S.N. (West Texas A\&M University), 1993; M.S.N. (Ibid.), 2005. Since 2007.
SUSAN MACE WEEKS, Professor, Dean of Harris College of Nursing \& Health Sciences, and Executive Director, Health Innovation Institute at TCU. B.S.N. (William Jewell College), 1983; M.S. (Texas Woman's University), 1986; D.N.P. (Texas Christian University), 2009; Clinical Nurse Specialist in Psych-Mental Health Nursing. Since 1994.
JO NELL WELLS, Professor. B.S.N. (University of Central Arkansas), 1974; M.S.N. (Wichita State University), 1981; Ph.D. (Texas Woman's University), 1998. Since 1998.
CATHY L. YOUNG, Associate Professor. A.D.N. (Mississippi County Community College), 1981; B.S.N. (Webster University), 1989; M.S.N. (University of Missouri), 1992; D.N.S. (University of Tennessee), 2002. Family Nurse Practitioner. Since 2015.
LESLIE ZIMPELMAN, Instructor. B.S. (Wake Forest University), 2003; B.S.N. (Texas Christian University), 2005; M.S.N. (Walden University), 2013. Since 2014.

## Social Work

TRACY J. DIETZ, Associate Professor. B.S. (University of Wisconsin at Platteville), 1973; M.S.S.W. (University of Wisconsin at Madison), 1986; Ph.D. (Ibid.), 1993. Since 1992.
NADA ELIAS-LAM BERT, Assistant Professor and Interim Director, MSW Program. B.A. (University of Texas at Austin), 2001; M.S.W. (University of Texas at Arlington), 2004; Ph.D. (University of Texas at Arlington), 2013. Since 2013.
D. LYNN JACKSON, Associate Professor of Professional Practice and Director of Field Education. B.S.W. (University of South Florida), 1979; M.S.W. (Florida State University), 1989; Ph.D. (Ibid.), 2005. Since 2013.
DAVID A. JENKINS, Professor. B.S. (Louisiana State University), 1983; M.S.W. (Ibid.), 1988; Ph.D. (Florida State University), 1992. Since 1991.
AESHA JOHN, Assistant Professor and Interim Director, BSW Program. B.A. (Gujarat University), 1992; M.S.W. (Maharaja Sayajirao University), 1995; Ph.D. (Oklahoma State University), 2011. Since 2015.
J ENNIFER MARTIN, Assistant Professor of Professional Practice. B.S.W. (Pennsylvania State University), 1998; M.S.W. (University of Michigan), 2000; Ph.D. (University of Denver), 2015. Since 2016.
JAMES PETROVICH, Associate Professor. B.S.W (Mississippi College), 2003; M.S.W. (New York University), 2003; Ph.D. (University of Texas at Arlington), 2009. Since 2010.

TEE TYLER, Assistant Professor. B.S.W. (Brigham Young University), 2006; M.S.W. (University of Utah, 2008; Ph.D. (University of Texas at Austin), 2016. Since 2016.

## College of Science and Engineering Directory

Phillip S. Hartman, Dean

J. Richard Rinewalt, Associate Dean for Undergraduate Studies
C. Magnus L. Rittby, Senior Associate Dean for Administration and Graduate Programs

Susan Dolce, Assistant to the Dean
Kathy Ferguson, Assistant to the Dean

## Biology

GIRIDHAR R. AKKARAJ U, Professor. B.S. (University of Bombay, India), 1985; Ph.D. University of Pittsburgh School of Medicine), 1997. Since 2002.
MATTHEW CHUMCHAL, Associate Professor and Director of the Pre-Health Professions Institute. B.S. (Southwestern University), 2001; M.S. (Texas Christian University), 2003; Ph.D. (University of Oklahoma), 2007. Since 2007.
MOLLI CRENSHAW, Instructor. B.S. (Texas A\&M University), 2005; M.S. (Texas Christian University), 2009. Since 2012.

MICHAEL CHUMLEY, Associate Professor and Chair of the Department. B.S. (University of Wyoming), 1987; M.S. (Ibid.), 1994; Ph.D. (University of Colorado Health Sciences Center), 2000. Since 2008.

MEREDITH CURTIS, Instructor. B.A. (Baylor), 2001; Ph.D. (University of Washington), 2009. Since 2015.
MARK DEMAREST, Instructor. B.S. (California State), 1997; M.S. (California Polytechnic), 2000; Ph.D. (University of California), 2009. SINCE 2015.

RAY W. DRENNER, Professor. B.A. (University of Kansas), 1972; Ph.D. (Ibid.), 1977. Since 1977.

AMANDA HALE, Associate Professor. B.S. and B.A. (Purdue University), 1995; M.S. (Ibid.), 1998; Ph.D. (University of Miami). 2004. Since 2007.

MATTHEW C. HALE, Assistant Professor. B.Sc. (Roehampton University), 2001; M.Sc. (Imperial College), 2002; Ph.D. (University of Sheffield), 2007. Since 2014.

PHILIP S. HARTMAN, Professor and Dean. B.S. (Iowa State University), 1975; Ph.D. (University of Missouri), 1979. Since 1981.
JOHN D. HORNER, Professor. B.S. (Louisiana State University), 1979; M.S. (University of New Mexico), 1983; Ph.D. (Ibid.), 1987. Since 1990.

MARLO JEFFRIES, Assistant Professor. B.S. University of Nebraska at Omaha, M.S. (Ibid.), 2005; Ph.D. University of Nebraska Medical Center, 2010. Since 2013.

CLARK A. JONES, Instructor II. B.S. (Texas Christian University), 1989; M.S. (Ibid.), 1992; Ph.D. (Southern Methodist University), 1997. Since 2008.
GAIL I. J ONES, Instructor II. B.A. (Radford University), 1971; M.S. (Texas Christian University), 1979; Ph.D. (University of North Texas), 1992. Since 1997.

GLENN C. KROH, Associate Professor. Associate's Degree (Pennsylvania State University), 1962; B.S. (Ibid.), 1966; M.S. (Ibid.), 1970; Ph.D. (Michigan State University), 1975. Since 1975.
LAURA LUQUE, Instructor. B.S. (Florida International University), 1996; M.S. (University of Texas, Dallas), 2001; Ph.D. (University of Texas, Dallas), 2005. Since 2015.

SHAUNA M. McGILLIVRAY, Associate Professor. B.A. (Concordia College), 1999; Ph.D. (University of California), 2006. Since 2009.

MIKE MISAMORE Associate Professor. B.S. (University of Wisconsin), 1989; M.S. (College of Charleston, S.C.), 1993; Ph.D. (Louisiana State University), 1998. Since 2003.

MICHAEL SAWEY, Instructor II. B.S. (Texas Wesleyan University), 1994; M.S. (Texas Christian University), 2008. Since 2008.
STEPHANIE WALLACE, Instructor. B.S. (University of Texas at Arlington), 2006; M.S. (Texas Christian University), 2009; Since 2013.

DEAN WILLIAMS, Associate Professor. B.A. (Coe College), 1988; M.S. (University of Alabama at Huntsville), 1991; Ph.D. (Purdue University), 2000. Since 2007.

## Chemistry \& Biochemistry

ONOFRIO ANNUNZIATA, Professor. M.S. (University of Naples), 1997; Ph.D. (Texas Christian University), 2001. Since 2004.
JEFFERY L. COFFER, Professor. B.S. (Wofford College), 1982; M.S. (University of Wisconsin-Milwaukee), 1985; Ph.D. (lbid.), 1987. Since 1990.
SERGEI V. DZYUBA, Associate Professor. Diploma in Chemistry (Odessa State University), 1998; Ph.D. (Texas Tech University), 2002. Since 2006.
JULIE A. FRY, Instructor. B.S. (Rice University), 1989; Ph.D. (Texas Christian University), 2011. Since 2009.
KAYLA N. GREEN, Associate Professor. B.S. (Tarleton State University), 2003; Ph.D. (Texas A\&M University), 2007. Since 2010.
BENJAMIN JANESKO, Associate Professor. B.S. (Allegheny College), 1999; Ph.D. (Carnegie Mellon University), 2005. Since 2009.
DAVID E. MINTER, Professor. B.S. (Stephen F. Austin State University), 1968; M.S. (Ibid.), 1970; Ph.D. (University of Texas at Austin), 1974. Since 1980.

JEAN-LUC G. MONTCHAMP, Professor. Diploma of Engineering in Chemistry (School of Industrial Chemistry, France), 1989; Ph.D. (Purdue University), 1992. Since 1998.

ROBERT H. NEILSON, Professor. B.S. (Carnegie Mellon University), 1969; Ph.D. (Duke University), 1973. Since 1978.
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ERIC E. SIMANEK, Robert A. Welch Professor of Chemistry and Chair of the Department. B.S. (University of Illinois), 1991; Ph.D. (Harvard University), 1996. Since 2010.

## Computer Science

LISA B. BALL, Associate Professor. B.A. (University of Texas at Arlington), 1980; M.S. (Ibid.) 1990; Ph.D. (Ibid.), 1995, Since 2001.

JAMES R. COMER, Associate Professor and Chair of the Department. B.S. (University of Texas at Arlington), 1971; M.S. (Ibid.), 1972; Ph.D. (Texas A\&M University), 1979. Since 1981.
BILLY J. FARMER, Assistant Professor of Professional Practice. B.S. (Howard Payne University), 1979; M.S. (East Texas State), 1995. Since 2002.
LIRAN MA, Associate Professor. B.S.E.E. (Hunan University), 1999; M.S. (Beijing Jiaotong University), 2003; D.Sc. (George Washington University), 2008. Since 2010.

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J. RICHARD RINEWALT, Associate Professor and Associate Dean. B.S.E.E. (University of Texas at Arlington), 1969; M.S.E.E. (Ibid.), 1971; Ph.D. (University of Illinois), 1976. Since 1986.
ANTONIO SANCHEZ-AGUILAR, Associate Professor. B.S. (Universidad Iberoamericana), 1975; M.S. (George Washington University), 1977; D.Sc. (Ibid.), 1983. Since 2005.
MICHAEL C. SCHERGER, Associate Professor. B.S. (University of Akron), 1991; B.S. (Ibid.), 1992; M.S. (Kent State University), 1995; Ph.D. (Ibid.), 2005. Since 2012.

## Engineering

BECKY B. BITTLE, Assistant Professor of Professional Practice. B.S. (Oklahoma State University), 1980; M.S. (Purdue University), 1983; Ph.D. (Iowa State University) 1994. Since 1998.

ROBERT R. BITTLE, Associate Professor. B.S. (Oklahoma State University), 1980; M.S. (Purdue University), 1983; Ph.D. (Iowa State University), 1994. Professional Engineer-Texas. Since 1994.
JOHN R. FANCHI, Matthews Professor of Petroleum Engineering. B.S. (University of Denver), 1974; M.S. (University of Mississippi), 1975; Ph.D. (University of Houston), 1977. Since 2009.
CUILING (SUE) GONG, Associate Professor. B.S. (Tsinghua University), 1990; M.S., (University of Minnesota), 1993; M. S. (Massachusetts Institute of Technology), 1996; Ph.D. (Ibid.), 1999. Since 2011.
MORGAN KIANI, Associate Professor. B.S. (University of Texas at Arlington), 2005; M.S., (Ibid.), 2006; Ph.D., (Ibid.), 2009. Since 2011.
EFSTATHIOS E. MICHAELIDES, Moncrief Professor of Engineering. B.A. (Oxford University, 1977); M.S. (Brown University, 1979); Ph.D. (Ibid.) 1980; M.A. (Oxford University), 1983. Professional Engineer - Texas and Louisiana. Since 2011.

TRISTAN J. TAYAG, Professor. B.S.E.E. (Johns Hopkins University), 1986; M.S.E.E. (Ibid.); 1987; Ph.D. (University of Virginia), 1991. Since 1997.
PATRICK L. WALTER, Professor of Professional Practice in Engineering. B.S. (Pennsylvania State University), 1965; M.S. (University of New Mexico), 1967; Ph.D. (Arizona State University), 1978. Professional Engineer-New Mexico. Since 1995.
R. STEPHEN WEIS, Professor. B.S.E.E. (U. S. Naval Academy), 1979; M.S. (Georgia Institute of Technology), 1984; Ph.D. (Ibid.), 1987. Since 1992. Professional Engineer-Texas.
WALTON E. WILLIAMSON, JR. Professor and Chair of the Department. B.S.M.E. (Stanford University), 1966; M.S.A.E. (University of Texas at Austin), 1967; Ph.D. (lbid.), 1970. Since 1999.

## Environmental Science

KRISTI A. ARGENBRIGHT, Instructor. B.S. (Texas Christian University), 2001; M.S. (Ibid.), 2003. Since 2013.
VICTORIA J. BENNETT, Assistant Professor. B.S. (University of Leeds), 1997; M.S. (Ibid.), 1998; Ph.D. (ibid), 2004. Since 2013.
OMAR T. HARVEY, Assistant Professor. B.S. (University of the West Indies), 2001; M.S. (University of Florida), 2004; Ph.D. (Texas A\&M University), 2010, Since 2015.
BECKY JOHNSON, Associate Professor of Professional Practice. M.S. (Texas Christian University), 1996. Since 2007.
TAMIE MORGAN, Assistant Professor of Professional Practice. B.S. (Rice University), 1980; M.S. (Texas Christian University), 1982. Since 2008.
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## Geology

HELGE ALSLEBEN, Associate Professor and Chair of the School of Geology, Energy \& the Environment. B.S. (University of Hamburg), 1996; M.S. (San Jose State University), 2000; Ph.D. (University of Southern California), 2005. Since 2005.

ARTHUR B. BUSBEY, Associate Professor. B.S. (University of Texas at Austin), 1974; M.A. (Ibid.), 1977; Ph.D. (University of Chicago), 1982. Since 1985.
RICHARD A. DENNE, Professor of Professional Practice and Hunter Enis Chair of Petroleum Geology. B.S. (University of lowa), 1985; Ph.D. (Louisiana State University), 1990. Since 2016.
R. NOWELL DONOVAN, Provost and ViceChancellor for Academic Affairs, Charles B. Moncrief Professor. B.Sc. (Newcastle University), 1966; Ph.D. (Ibid.), 1972. Since 1986.

MILT ENDERLIN, Assistant Professor of Professional Practice. B.S. (Sonoma State University), 1977; M.S. (Texas Christian University), 2010. Since 2011.
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JOHN HOLBROOK, Associate Professor. B.S. (University of Kentucky), 1985, M.S. (University of New Mexico), 1992, Ph.D. (Indiana University), 1992. Since 2011.
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KEN M. MORGAN, Professor and Director of the TCU Energy Institute. B.S. (Indiana University), 1973; M.S. (Arizona State University), 1976; Ph.D. (University of Wisconsin), 1978. Since 1978.

XIANGYANG (CHEYENNE) XIE, Assistant Professor. B.S. (Lanzhou University, China), 1998; M.S. (Northwest University, China), 2001; Ph.D. (University of Wyoming), 2007. Since 2013.

## Mathematics

JOSÉ R. CARRIÓN, Assistant Professor. B.S. (University of Puerto Rico), 2004; Ph.D (Purdue University), 2013. Since 2015.
AMY COUSER, Instructor. B.S. (Texas A\&M University), 1998; M.A.T. (Texas Christian University), 2001. Since 2014.
ZE-LI DOU, Associate Professor. B.A. (City University of New York, Queens College), 1987; Ph.D. (Princeton University), 1993. Since 1994.
PENG FAN, Associate Professor. B.A. (National Taiwan Normal University), 1970; M.A. (National Tsing-Hua University, Taiwan), 1972; Ph.D. (Indiana University), 1980. Since 1983.
GREG FRIEDMAN, Associate Professor. B.S. (Brown University), 1996; M.S. (New York University), 1998; Ph.D. (Ibid.), 2001. Since 2005.
GEORGE T. GILBERT, Associate Professor and Chair of the Department. B.A. (Washington University), 1979; Ph.D. (Harvard University), 1984. Since 1990.
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RHONDA L. HATCHER, Associate Professor. B.A. (University of Colorado), 1980; A.M. (Harvard University), 1982; Ph.D. (Ibid.), 1987. Since 1990.

EMILY HERZIG, Instructor. B.A. (University of Texas at Dallas), 2008; M.S. (University of Texas at Dallas), 2010. Since 2016.
DENNIS LEDIS, Instructor. B.S. (Florida International University), 2003; M.S. (University of Florida), 2007; Ph.D. (Ibid.), 2011. Since 2014.
SCOTT NOLLET, Professor. B.S. (University of Minnesota), 1985; Ph.D. (University of California, Berkeley), 1994. Since 2000.
ALLISON C. OWEN, Instructor II. B.A. (Kansas Wesleyan University), 1981; M.L.S. (Texas Women's University), 1983; M.A. (Ibid.), 1987. Since 2000.
EFTON PARK, Professor. B.S. (University of Oklahoma), 1983; Ph.D. (State University of New York, Stony Brook), 1988. Since 1992.
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KEN RICHARDSON, Professor. B.A. (Rice University), 1986; M.A. (Ibid.), 1989; Ph.D. (lbid.), 1993. Since 1994.
LOREN SPICE, Associate Professor. B.S. (Towson University), 1998; M.S. (University of Chicago), 2000; Ph.D. (lbid.), 2004. Since 2009.
SUSAN G. STAPLES, Associate Professor. B.S. (Case Western Reserve University), 1983; Ph.D. (University of Michigan), 1988. Since 1995.
KENNETH STEVENSON, Instructor II. B.A. (Cameron University), 1971; M.S. (Southwest Texas State University), 1980; Ed.D. (Texas A\&M University, Corpus Christi), 1995. Since 2005.
FREDERICO XAVIER, J ohn William and Helen Stubbs Potter Professor of Mathematics. B.S. (Universidade Federal de Pernambuco), 1973; M.S. (Ibid.), 1974; Ph.D. (University of Rochester), 1977. Since 2015.
QIAO ZHANG, Associate Professor. B.S. (Shandong University), 1996; M.S. (Ibid.), 1998; Ph.D. (Columbia University), 2003. Since 2008.

## Nutritional Sciences

LYN DART, Associate Professor. B.S. (Texas Woman's University), 1980; M.S. (Ibid.) 1994; Ph.D. (Ibid.) 2001. Since 2001.
REBECCA DORITY, Associate Professor of Professional Practice. B.S. (University of Maine), 1999; M.S. (Tufts University) 2001. Since 2007.
GINA J. HILL, Associate Professor. B.S. (Texas Tech University), 1998; M.S. (Ibid.), 1999; Ph.D. (lbid.), 2003. Since 2003.
SAMANTHA POWELL, Assistant Professor of Professional Practice. B.S. (University of Wisconsin), 1988; M.S. (Texas Woman's University), 1992. Since 2013.

JADA L. STEVENSON, Assistant Professor. B.S. (Texas A \& M University), 2008; M.S. (Texas Tech University) 2011; Ph.D. (lbid), 2015. Since 2015.

ANNE D. VANBEBER, Professor and Chair of the Department. B.S. (Texas Tech University), 1979; M.S. (Texas Woman's University), 1982; Ph.D. (Ibid.), 1991. Since 1992.

## Physics and Astronomy

KATA. BARGER, Assistant Professor. B.S. (Western Washington University), 2006; M.S. (University of Wisconsin at Madison), 2008; M.A. (lbid.), 2009; Ph.D. (Ibid.), 2012. Since 2014.

HANA M. DOBROVOLNY, Assistant Professor. B.Sc. (University of Winnipeg), 1997; M.A. (Bryn Mawr College), 2000; Ph.D. (Duke University), 2008. Since 2012.

PETER M. FRINCHABOY III, Professor. B.S. (California State University), 2000; M.S. (University of Virginia), 2002; Ph.D. (Ibid.), 2006. Since 2009.

ZYGMUNT KAROL GRYCZYNSKI, W. A. "Tex" Moncrief Jr. Professor. M.S. (Gdansk University), 1982; Ph.D. (ibid.), 1987. Since 2010.
DOUGLAS R. INGRAM, Instructor II. B.A. (University of Texas at Austin), 1990;
M.Sc. (University of Washington), 1991; Ph.D. (Ibid.), 1996. Since 1996.

ANTON NAUMOV, Assistant Professor. B.Sc. (University of Tennessee), 2005; Diploma in Chemical Physics (Kazan State University, Russia), 2006; M.S. (Rice University), 2008; Ph.D. (Ibid.), 2011. Since 2015.
C. MAGNUS L. RITTBY, Professor and Associate Dean. B.S. (University of Sussex), 1980; Ph.D. (University of Stockholm), 1985. Since 1990.
YURI M. STRZHEMECHNY, Associate Professor and Chair of the Department. M.S. (Khrakov Politechnic University), 1988; Ph.D. (City University of New York), 2000. Since 2005.

## Psychology

TIMOTHY M. BARTH, Professor. B.S. (St. Bonaventure University), 1979; M.S. (Wesleyan University), 1982; Ph.D. (University of Texas at Austin), 1986. Since 1990.

GARY W. BOEHM, Associate Professor. B.A. (Utah State University), 1989; M.S. (University of Connecticut), 1992; Ph.D. (Ibid.), 1996. Since 1999.
ELLEN W. BROOM, Assistant Professor of Professional Practice. B.A. (University of Texas at Arlington) 1992; M.Ed. (University of North Texas), 1995; Ph.D. (lbid.), 2000. Since 2011.
BRENT GRANT COOPER, Associate Professor. B.S. (University of New Mexico), 1993; Ph.D. (University of Utah). Since 2007.
CATHY R. COX, Associate Professor. B.A. (University of Colorado, Colorado Springs), 2000; M.A. (Ibid.), 2004; Ph.D. (University of Missouri), 2009. Since 2009.

DAVID R. CROSS, Professor. B.A. (University of California, Fresno), 1977; M.A. (University of Michigan), 1984; Ph.D. (Ibid.), 1985. Since 1985.
NAOMI V. EKAS, Assistant Professor. B.A. (University of California, Davis), 2005; M.A. (University of Notre Dame), 2007; Ph.D. (Ibid.), 2009. Since 2011.

PATRICK M. FLYNN, Professor, Saul B. SellsChair of Psychology, and Director, Institute of Behavioral Research. B.A. (Gannon University), 1972; M.A. (West Virginia College of Graduate Studies), 1975; Ph.D. (University of Miami), 1982. Since 2000.
SARAH E. HILL, Associate Professor. B.A. (University of Wisconsin-Milwaukee), 2000; Ph.D. (University of Texas at Austin), 2006. Since 2008.
KENNETH J. LEISING, Associate Professor. B.S. (Texas Christian University), 2003; M.A. (UCLA), 2004; Ph.D. (lbid.), 2008. Since 2009.
CHARLES G. LORD, Professor. B.A. (University of Rhode Island), 1976; Ph.D. (Stanford University), 1980. Since 1987.
DIANA MCFARLAND, Associate Professor of Professional Practice; Coordinator, Psychology of Leadership Minor. B.S. (Phillips University), 1985; M.S. (Texas Christian University), 1992; Ph.D. (Ibid.) 1996. Since 1994.
MAURICIO R. PAPINI, Professor and Chair of the Department. Licentiate (University of Buenos Aires), 1976; Ph.D. (University of San Luis, Argentina), 1985. Since 1990.

ANNA INGEBORG PETURSDOTTIR, Assistant Professor. B.A. (University of Iceland), 1996; M.A. (Western Michigan University), 2004; Ph.D. (Ibid.). Since 2006.
S. K. UMA TAUBER, Assistant Professor. B.A. (Augustana College), 2004; M.A. (University of Colorado), 2007; PhD (Colorado State University), 2010. Since 2013.

DAVE R. WEISE, Instructor. B.A. (Eastern Illinois University), 2003; M.A.
(University of Colorado at Colorado Springs), 2006; Ph.D. (University of Arizona), 2011. Since 2013.

## University Programs

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## Ranch Management

KERRY L. CORNELIUS, Director of the Ranch Management Program and Burnett Ranches Professor. B.S. (Tarleton State University), 1985; Ranch Management Program (Texas Christian University), 1986; M.S. (Tarleton State University), 1995. Since 1995.
J. CHRISTOPHER FARLEY, Assistant Director of the Ranch Management Program and Southwestern Exposition and Livestock Show Professor. B.S. (Sam Houston State University), 1986; Ranch Management Program (Texas Christian University), 1996. Since 2006.
JASON S. FAUBION, Assistant Director of the Ranch Management Program and John Biggs Professor. B.S. (Tarleton State University), 1993; M.S.T. (lbid.), 1994. Since 2007.
JEFFREY C. GEIDER, William Watt Matthews Director of the Ranch Management Institute. B.G.S. (Texas Christian University), 1981; Ranch Management Program (lbid.), 1981; M.L.A. (Ibid.), 1999. Since 1997.
KEVIN L. JOHNSON, Houston Livestock Show and Rodeo Professor, B.S. (Texas A\&M University), 1979. Since 2011.

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ALISON FINNEY MORELAND, Emeritus Instructor of Nursing

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DOUGLAS ANN NEWSOM, Emeritus Professor of Journalism
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ROGER C. PFAFFENBERGER, Emeritus Professor of Decision Sciences
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JAMES C. WOODSON, Emeritus Professor of Art
B. STEPHANIE WOODS-RAND, Emeritus Associate Professor of Ballet

STUART A. YOUNGBLOOD, Professor of Management
TADEUSZ W. ZERDA, Emeritus Professor of Physics and Astronomy

## AADM - Arts Administration

## AADM 30103-The Arts Organization (3)

This course begins with a historic overview of the non-profit organization, and continues with an exploration of non-profit structure and governance, and the variety of careers and organizations found within the nonprofit sector. Students will analyze the various factors that influence arts organizations, and how arts organizations, in turn, affect the world around us.

## AADM 40103 - Management in the Arts (3)

This course introduces students to the practical skills needed to successfully manage an arts organization. Students will explore internal processes, such as budgeting and accountability, and the external relationships that the arts manager must navigate, such as development and fundraising, marketing and audience development, and education and outreach.

AADM 40903 - Internship in Arts Administration (3)
Prerequisites: AADM 40103, and permission of instructor. Students will be placed in an active role within a local arts organization. 12 hours per week is the expected minimum. Students will also meet monthly with the program administrator.

## ACCT - Accounting

## ACCT 20353 - Fundamentals of Accounting I (3)

3 hours. Prerequisite: Sophomore standing and must be a pre-business major or a student for whom the course is required by their major, minor, or concentration. An introduction to business through the lenses of financial and managerial accounting: an information processing system that communicates relevant data regarding business entities to internal and external decision makers. Emphasizes the basic concepts, principles, and techniques used by decision makers to interpret and use accounting information within all functional areas of business. Students may not receive credit for both ACCT 20353 and ACCT 20653. The course may not be retaken for credit if the student has completed ACCT 30153.

## ACCT 20653 - Introduction to Accounting (3)

Prerequisites: Must have sophomore standing, and be a business minor, or receive departmental approval. Students may not receive credit for both ACCT 20353 and ACCT 20653. An introduction to accounting, financial reporting, and financial decision making for non-business students, including the use of accounting information by parties external to an organization (financial accounting) and by management (managerial accounting). This course is not a substitute for ACCT 20353 and may not be applied to fulfill the lower division business requirements.

## ACCT 20990 - International Residential Study (1.00320.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ACCT 30101 - Professional Program in Accounting Seminar (1)

1 hour. Prerequisites: must be an accounting major and accepted to PPA. This course should be taken the fall semester of a student's junior year. The objectives of this course are to further develop the skills necessary for a successful professional career in accounting. Specific topics to be addressed include professional development, communication, networking, strengths assessment, and career education as it relates to accounting career paths.

## ACCT 30153 - Financial Reporting I (3)

and tools used to measure3 hours. Prerequisites: At least a C-" grade in ACCT 20353 and must be a Business major or an Accounting or Finance minor. Indepth study of the theory, principles, record, and report financial information according to generally accepted accounting principles. Financial Reporting I focuses on assets, their related income counterparts and the financial statements."

3 hours. Prerequisite: ACCT 20353 with a grade of at least a C-" and must be a Business major. Cost accounting fundamentals and the use of costs and costing systems to control operations and inform operational, tactical, and strategic decisions."
ACCT 30253 - Financial Reporting II (3)
3 hours. Prerequisites: at least a C-" grade in ACCT 30153 and ACCT 20353, and must be a Business major. In-depth study of the theory, principles and tools used to measure, record, and report financial information according to generally accepted accounting principles. Financial Reporting II focuses on liabilities and equities and their related income counterparts."

## ACCT 30273 - Audit and Assurance (3)

Prerequisite: ACCT 30153 with a grade of 'C-' or better. Auditing theory, practice, and procedures as applied to the problems of typical financial audits, with special emphasis on the integrated audit of both financial statements and internal controls and compliance with current legislation governing the audit and financial reporting process. Additional consideration is given to understanding relationships with clients, audit documentation, and preparation of audit reports.

## ACCT 30303 - Principles of Taxation (3)

3 hours. Prerequisites: ACCT 20353, and must be a Business major. An introduction to the role of taxes in society, including current tax policy and proposals for reform, and the impact of taxes on individuals and business entitites. Designed to provide students with the knowledge and skills required to successfully evaluate the specific income tax implications of various fact situations.

## ACCT 40013 - Professional Accounting Internship (3)

3 hours. Prerequisites: senior standing and must be an Accounting major. A full-time internship with a public accounting firm, corporation, or governmental agency allowing the student to gain professional experience that will help integrate the theory and practice of accounting. This course is graded on a Pass/No credit basis.
ACCT 40030 - Senior Honors Research Paper (1.00-3.00)
1-3 hours. Prerequisite: Honors Section of MANA 30153, and must be a Business major. Preparation for and completion of a research paper in the student's area of concentration in business under the direction of an assigned staff member. May be taken for up to three credit hours.
ACCT 40163 - Fundamentals of Accounting II (3)
Prerequisites: Must be a Business major or a student for whom the course is required by their major/minor/concentration; at least a C- in ACCT 20353. A continuation of the introduction to concepts, principles, and tools for decision makers to interpret and use accounting information within all functional areas of business. Topics include financial statement analysis, budgeting, performance evaluation, variance analysis, inventory management, and capital budgeting.

## ACCT 40223 - Risks and Controls (3)

3 hours. Prerequisites: ACCT 30153, INSC 20263. At least a grade of C-" in each prerequisite course, and must be a Business major. An introduction to the fundamental concepts related to the design and effectiveness of internal controls in manual and computerized accounting information systems. In addition, students are introduced to methods to evaluate the system of internal controls as part of an integrated audit."

## ACCT 40253 - Financial Reporting III (3)

3 hours. Prerequisites: ACCT 30253 with at least a 'C-' and must be an Accounting major. Intensive study of additional financial reporting topics beyond those encountered in Financial Reporting I and II with an emphasis on helping students to develop an appreciation for ambiguity in the financial reporting for complex issues.

## ACCT 40970 - Special Problems in Accounting (1.00-3.00)

( $1-6$ semester hours) This course may be repeated for credit, and must be a Business major.

## ADRN - AddRan Interdisciplinary

ADRN 20101 - Make Your Major Work (1)
Prerequisites: any AddRan major with at least sophomore standing. This eight-week course will prepare students to enter the job market, and to be
effective in their job search. Students will learn how to articulate their marketable skills, to identify their strengths, and to determine what types of jobs are available for their transferable skills and major. They will learn how to create an effective resume and cover letter, and will practice their networking and interviewing skills. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## ADRN 20103 - Africa through Film (3)

This discussion-based course uses documentaries and movies to highlight the history, traditions, and lifestyles of African societies. Students can't receive credit for both ADRN 20103 and HNRS 20103.

## ADRN 20903 - Ideas of Leadership (3)

An examination of the concept of leadership and various ideals of leadership from various points of view in the humanities and social sciences. Models of the good leader" from a variety of classical and contemporary sources will be analyzed and compared. A number of famous historical leaders will be evaluated in terms of the models presented."

ADRN 30970 - Special Problems in Interdisciplinary Studies (1.00-3.00) Special Problems in Interdisciplinary Studies or experimental course. (1-3 credits)

## ADRN 31903 - Summer Study in Ghana (3)

This course is aimed at introducing participants to the cultural and sociopolitical development of Ghana through a four-week intensive, interdisciplinary study and travel-abroad experience in this West African nation. It is expected that participants will come away with a sense of the vast differences manifest in the way human societies work and, at the same time, develop a sincere respect for these differences. Course is open to students of all majors. Instructor's permission is required.

## AEST - Aerospace Studies

## AEST 10001 - Leadership Lab (1)

Leadership Lab (LLab) is the hands-on" leadership training portion of the Air Force ROTC program. The Leadership Lab (LLab) also includes studying the environment of an Air Force officer and learning about areas of opportunity available to commissioned officers. The AS3000 and AS4000 LLabs consist of activities classified as leadership and management experiences. They involve the planning and controlling of military activities of the cadet corps; and the preparation and presentation of briefings and other oral and written communications. LLabs also include interviews guidance and information which will increase the understanding motivation and performance of other cadets. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)"

## AEST 10211 - Foundation of the United States Air Force (1)

 Air Force AEST 10211 in the fall and 10221 in the spring: A survey course designed to introduce students to the U.S. Air Force and Air Force ROTC. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. Leadership Laboratory 10001 complements this course by providing cadets with followership experiences.AEST 10221 - Foundation of the United States Air Force (1) Air Force AEST 10211 in the fall and 10221 in the spring: A survey course designed to introduce students to the U.S. Air Force and Air Force ROTC. Featured topics include: mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, group leadership problems, and an introduction to communication skills. Leadership Laboratory 10001 complements this course by providing cadets with followership experiences.

## AEST 20211 - The Evolution of USAF Air and Space Power (1)

 Air and Space Power (AEST 20211 in the fall and 20221 in the spring): A survey course designed to examine general aspects of air and space power through a historical perspective. Utilizing this perspective, the course covers a time period from the first balloons and dirigibles to the space-age global positioning systems of the Persian Gulf War. Historical examples are provided to extrapolate the development of Air Force capabilities (competencies), and missions (functions) to demonstrate the evolution of what has become today's USAF air and space power. Furthermore, the course examines several fundamental truths associated with war in the third dimension: e.g. Principles of War and Tenets of Air and Space Power. As a whole, this course provides the student with a knowledge level understanding for the general element and employment of air and space power, from an institutional, doctrinal, and historical perspective. In addition, the students will continue to discuss the importance of the Air Force Core Values with the use of operational examples and historical Air Force leaders and will continue todevelop their communication skills. Laboratory 10001 complements this course by providing cadets with followership experiences.
AEST 20221 - The Evolution of USAF Air and Space Power (1)
Air and Space Power (AEST 20211 in the fall and 20221 in the spring): A survey course designed to examine general aspects of air and space power through a historical perspective. Utilizing this perspective, the course covers a time period from the first balloons and dirigibles to the space-age global positioning systems of the Persian Gulf War. Historical examples are provided to extrapolate the development of Air Force capabilities (competencies), and missions (functions) to demonstrate the evolution of what has become today's USAF air and space power. Furthermore, the course examines several fundamental truths associated with war in the third dimension: e.g. Principles of War and Tenets of Air and Space Power. As a whole, this course provides the student with a knowledge level understanding for the general element and employment of air and space power, from an institutional, doctrinal, and historical perspective. In addition, the students will continue to discuss the importance of the Air Force Core Values with the use of operational examples and historical Air Force leaders and will continue to develop their communication skills. Laboratory 10001 complements this course by providing cadets with followership experiences.

AEST 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## AEST 30113 - Leadership Studies (3)

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. For cadets, Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving cadets the opportunity to apply leadership and management principles of this course.

## AEST 30123 - Leadership Studies (3)

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. For cadets, Leadership Laboratory complements this course by providing advanced leadership experiences in officer-type activities, giving cadets the opportunity to apply leadership and management principles of this course.

## AEST 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.
AEST 40113 - National Security Affairs/Preparation for Active Duty (3) Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. For cadets, Leadership Laboratory complements this course by providing advanced leadership experiences, giving cadets the opportunity to apply the leadership and management principles of this course.

AEST 40123 - National Security Affairs/Preparation for Active Duty (3) Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. For cadets, Leadership Laboratory complements this course by providing advanced leadership experiences, giving cadets the opportunity to apply the leadership and management principles of this course.

## ANTH - Anthropology

ANTH 10433 - Freshman Seminar in Anthropology (3)
Topics may vary each time it is offered.
ANTH 10533 - Freshman Seminar in Anthropology (3)
Topics may vary each time it is offered.

An introduction to the theories and methods of physical anthropology. Scientific study of human origins and evolution as reconstructed from the fossil record; patterns of anatomical, behavioral, and genetic similarities among the primates; applications of physical anthropology, such as forensic anthropology.
ANTH 20623 - Introduction to Cultural Anthropology (3)
An introduction to the theories and methods of cultural anthropology. Comparative study of modern and historic cultures around the globe. Exploration of the meanings ascribed to human experience. Emphasis on such topics as: relativism, culture change, kinship, gender, globalization, identity, religion, sexuality, ritual, social stratification, ethnicity.

## ANTH 20633 - Introduction to Archaeology (3)

An introduction to the theory, methods, and techniques of archaeology and a review of selected findings. History and development of archaeology, field and laboratory methods, the evolution of humanity and culture, reconstruction and processual interpretation.

## ANTH 20643 - Language and Culture (3)

An introduction to linguistic anthropology. Anthropological analysis of the cultural and social aspects of language. Topics may include: linguistic relativism, performance theory and the ethnography of language, bilingualism and multiculturalism, sociolinguistics, legitimate languages and linguistic variation, and language and the constitution of personhood and structures of authority.

## ANTH 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.
ANTH 30003 -Junior Honors Seminar in Anthropology (3)
Prerequisite: Permission of Instructor.
ANTH 30233 - Sustainability: Environmental, Social \& Economic Issues (3)

The purpose of this course is to introduce students to the concept of sustainability from a multidisciplinary perspective. Sustainability includes a focus on the environment, social justice issues, and economic development that provides the basic needs for sustaining an acceptable quality of life. A focus on the global implications will be stressed and students will explore the connections between sustainability and citizenship and social values.
ANTH $\mathbf{3 0 3 2 3}$ - Migration: Crossing Borders, Crossing Cultures (3)
Course undertakes a comparative study in transnational migration to explore migrant life as related to economic condition and politics of public policy, state security, citizenship, identity, religion, and nativism.

## ANTH 30333 - Mexican American Culture (3)

The course examines expressive culture that reflects and shapes the way people think, behave, and give their lives meaning. The expressive culture includes history, literature, and lore considered as resources for people to address their needs and circumstances, especially in relation to social positions, gender, self-identification, politics, and ethics. Other topics include U.S. Mexico relations, social conflict, resistance movements, religion, and cultural poetics.

## ANTH 30373 - Medical Anthropology (3)

Prerequisite: ANTH 20623 or consent of instructor. Cross-cultural survey of cultural diversity and similarity in the interpretation of health, illness, and healing systems. Examines the interrelationship of culture, society, and health from local and global perspectives. Particular emphasis on the interactions of western and other medical systems.

## ANTH 30383 - Qualitative Research and Ethnography (3)

Prerequisites: ANTH 20623 or 20643, or the professor's permission. This course introduces students to the components of qualitative research, including project design, participant observation, interviews, field notes, and the use of oral, archival, and written history. These techniques contribute to student research projects and ethnographic writing.
ANTH 30403 - Perspectives on Human-Animal Relationships (3)
This course examines topics and perspectives on human-animal relationships (HARE) from multiple disciplines within the humanities, social sciences, and natural sciences. We will explore the complex relationships between humans and other animals, past and present, including the socially constructed meanings of animals that shape animal/human interactions and relations within institutions and social, cultural, geographic and interactional
contexts. We will consider many types of relationships between human and nonhuman animals, both beneficial and detrimental, as well as the trends that are impacting the future of animal/human relations on the planet.

## ANTH 30433 - Mexican-American Folklore: Traditions of La Raza (3)

 Analysis and methods in the study of traditional customs and beliefs of Mexican-Americans. Topics may include storytelling and joking, popular religion, ethnomedicine, ethnic identity rituals, and folk art.
## ANTH 30533 - Happiness: Culture, Economics, and Being (3)

Prerequisites: 'C' or better in ECON 30243. Explores anthropological and economic perspectives on happiness and human flourishing: the diverse ways in which well-being is conceptualized and experienced in different cultural contexts, the complex relationship between well-being and economic growth, and cross-disciplinary inquiry into the conditions and activities (such as community, ecology, dignity, creativity, generosity, trust, health, and inequality) that engender or impede human flourishing.

## ANTH 30623 - Urban Anthropology (3)

Development and characteristics of urban societies and the culture of modern cities. Evaluation of theories and methods for understanding the structure, function and change in the social and cultural systems of urban areas.

## ANTH 30633 - Anthropology and Sports (3)

The relationship between social science and the study of sports and other play forms; games and play in cross-cultural contexts; American sports and recreation.

## ANTH 30643 - Anthropology and Education (3)

A comparative study of the teaching and learning processes in societies of differing complexity and cultural variability. Empirical data is examined from an anthropological perspective and in the context of theories about culture and perception, world view, rites of passage, culture and personality, and change.

## ANTH 30653-Sex, Gender and Culture (3)

Prerequisites: ANTH 20623 or WOST 20003, or consent of the instructor. Explores the anthropological significance of sex and gender as multifaceted and diverse categories of human experience across a broad range of cultures. Studies of sexual orientation, gender identity, reproduction, cultural politics, health, and sociocultural inequalities.

## ANTH 30663 - Food J ustice (3)

Discusses the intersection of food and justice. Investigates injustices generated by the current U.S. food system and by global agribusiness against farm workers in Mexico and the U.S. against residents of underprivileged communities in U.S. cities. Explores possible solutions to these injustices, including fair trade, urban agriculture, food banks, and food policy councils. Students will design an experiential, service learning group project in conjunction with TCU and community partners.

ANTH 30673 - Anthropology and Religion (3)
Prerequisites: ANTH 20623, RELI 10023 or RELI 10043 or consent of the instructor. Anthropological findings in the comparative study of religion and culture across a broad range of societies. Studies of sacred experience, myth, ritual, magic, witchcraft, religious language, gender and religion, healing, and relationships between social and religious change.

## ANTH 30703 - Archaeology of Mexico and Peru (3)

An archaeological survey of the ancient cultures of Mexico and Andean South America, from the first human migrations into the Americas to the Aztec and Inka empires. Anthropological perspectives on developmental sequences and achievements of major indigenous civilizations in both culture areas are discussed and compared.

## ANTH 30713 - World Archaeology (3)

Prerequisite: ANTH 20633 or consent of instructor. An in-depth treatment of basic techniques, methods and concepts of archaeology and a continued update in recent archaeological discoveries around the globe. Research using published site reports and professional journals. Site visitations to excavations in process will be initiated whenever applicable.

## ANTH 30723 - Ethnology of Selected Areas (3)

Origin and distribution of the native populations of selected areas. The historical development and current perspectives of institutions, belief and value systems, and comparative organization of cultural areas. Possible areas to be examined include Native North Americans, peoples of South America, and peoples of Africa.

ANTH 30733 - Globalization and Human Impacts: Economics, Development and Social Justice (3)

The course explores globalization's human impacts as understood through the lenses of development, public policy, economics, trade, and migration (among others). The course defines ethics and explores steps toward their realization in three areas in particular: (1) resolutions to social problems, (2) advancement of social justice, and (3) students' career paths.

## ANTH 30743 - Animals, Religion, and Culture (3)

Comparative approach to exploring the roles of animals in world and indigenous religions, past and present, including Christianity, Hinduism, Islam, Judaism, and Native American traditions. Topics include who counts as a religious subject, or person; how focusing on animals can help us better understand religion in general; hunting and farming; animal sacrifice; pets; biotechnology; climate change; conservation; fear \& awe; animal theology; and whether other animals themselves might be religious. Discussion-based, coupled with mini-lectures, video screenings, and experiential meditations.:"

ANTH 30763 - Archaeology of the Biblical World: Syria-Palestine and TransJ ordan, 1550-332 BCE (3)
Prerequisites: Either one RELI or one ANTH course, or permission of instructor. This course studies the cultures of Syria-Palestine and TransJ ordan from approximately 1550-332 BCE by identifying and interpreting the relevant archaeological data and anthropological findings. It will explore various aspects of these ancient cultures, including the region's economic, political, environmental, and social relations, as well as its religious expressions and ethnic identities. Additionally, students will consider the significance of archaeological material and anthropological models for reconstructing and interpreting these cultures and for understanding the Hebrew Bible as a cultural and historical document.

ANTH 30773 - Latin American Pop Culture (3)
Prerequisite: ANTH 20623 or consent of instructor. Anthropological perspectives on the relationship of Latin American pop culture to Latin American societies. Examines everyday cultural productions, such as dance, music, soccer, television, soap opera, Carnival, and other festivals. Particular attention given to popular culture as a key site where national, racial, gender, sexual, and class identities are constructed, commodified, contested, and globally circulated. Cultural case studies may include: Brazil, Mexico, Argentina, and Cuba.

ANTH 30783 - Anthropological Approaches to Nature and the Sacred (3) Explores the complex interrelationships between people's spiritual beliefs and the environment. Comparative, cross-cultural approach to key features of selected work and indigenous religions, such as cosmologies, sacred lands, agriculture, and animals. Also examines emerging approaches to environment and religion, including ecofeminist spirituality; environmentalism as spiritual practice and civic religion; new green religious movements; and contemporary religious responses to the environmental crisis.

## ANTH 30823 - Native American Religions and Ecology (3)

Explores religious beliefs related to the environment and subsistence among Native North American Indian peoples. Investigates topics such as sacred stories and folktales, art and dance, rites of passage, health and healing, and hunting and agricultural rituals. Discusses the changing roles Native American religious beliefs have plays among both native and Euro-American peoples since the time of first contact, from the crafting of pan-tribal native identities to New Age appropriations of sweat lodges and vision quests.

## ANTH 30843 - Practicing Anthropology: Career Applications (3)

 Prerequisites: ANTH 20623, or consent of the instructor. An examination of applied anthropology, the use of anthropological perspectives, values, data, theories, methodologies and skills for practical purposes $n$ the real world. Explores the varied domains in which anthropologists practice, the methodologies employed in their work and the ethical and practical problems they face. Surveys potential work sites for anthropologists, examines the skills necessitated by such jobs and explores resources on career preparation and development.ANTH 30923 - Studies in Anthropology (3)
Topics of interest in anthropology, including substantive areas of the discipline.

## ANTH 30933 - Studies in Ethno-Archeology (3)

An examination of world cultures based on the results of information secured by technologists and archaeologists working in the field. The topical focus may vary each semester.

ANTH 30943 -J apan: Heritage, Culture, and Globalization (3)
An overview of Japanese history and major cultural traditions. Japanese society will be looked at from its origins through the Tokugawa period and onto modern Japan. Religious traditions and cultural perspectives will be
highlighted. Additionally, the place of modern Japan in the global community will be examined.
ANTH 30973 - France Today: Citizenship, Identity, and Nationalism (3)
The course consists of a six-week program, two at TCU and four in Montpellier, France, and explores French and migrant culture. The course incorporates readings, service learning, and site visits to learn about migration history, economies of labor, politics, identity, citizenship, and civic responsibilities. Service learning gives students actual experience with nonnative people to learn about French and migrant culture from divers perspectives.

## ANTH 30983 - Anthropological Field Methods (3)

Prerequisite: ANTH 20623, ANTH 20633 or permission of instructor. This course is offered as either a cultural anthropology or archaeology field school. Phases, methods, and problems of collection and processing in field and laboratory of ethnographic and archaeological data. Issues of public interaction, participant-observation, interviewing, survey, and excavation are addressed as appropriate to the setting.

## ANTH $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ANTH 31990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ANTH 32990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ANTH $\mathbf{3 7 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ANTH 40003 - Senior Honors Research Paper (3)

Senior Honors Research Paper

## ANTH 40214 - Human Osteology (4)

In-depth introduction to human skeletal anatomy including how to identify individual bones, important morphological features on them, and soft tissues that attach to them. Also covers using bones to recover sex, age at death, ancestry, etc., and explores applications in bioarchaeology, forensic anthropology, and other disciplines. Primarily intended for archaeologists and biological anthropologists, but also of interest to students considering careers in forensics, paleontology, or medicine. Weekly laboratory section is required.

## ANTH 40423 - The Anthropology of Violence (3)

Prerequisites: ANTH 20623 or consent of instructor. An anthropological examination of the relationship between violence and culture. Ethnographic cases of violence in many different regions, such as Latin America, subSaharan Africa, South Asia, and Western Europe. Topics may include: civil war, ethnic conflict, crime and the structural 'violences' of poverty, racism, gendered violence, famine and disease, and the cultural construction and social consequences of fear.

[^8]ANTH 40523 - Mass Media and Culture (3)
Prerequisite: ANTH 20623 or consent of instructor. An anthropological examination of the relationship between mass media and culture. Particular emphasis on the impact of mass media on the production and consumption of cultural meaning and identities. Inquiry into representations of gender, sexuality, the body, ethnicity, social race, and nationhood in mass media discourses. Case studies of mass media in local spaces and global contexts.

ANTH 40620 - Directed Reading or Research in Anthropology (1.00-6.00) For upper-division students who undertake projects in anthropology in regular consultation with the instructor, for one to three semester hours credit.

## ANTH 50623 - Advanced General Anthropology (3)

An overview of the field, including archaeology, linguistics, ethnology, and physical anthropology. Description and analysis of the profession, its history, theoretical foci, intellectual leaders and current ethical dilemmas. For advanced undergraduates and graduate students with opportunities to pursue individual interests within the field.

## ANTH 50923 - Kinship and Social Organization (3)

Prerequisite: ANTH 20623 or permission of instructor. Principles of descent, kinship terminology and formation of descent groups, including an examination of specific terminological systems in relation to other features of social organization; the adaptive dynamics of family, groups, kinship, and extra-familial associations in simple and complex societies.

## ARED - Art Education

## ARED 10803 - Basics in Art (3)

This course explores the profession of art education through experimentation in a variety of art media, field trips to various art educationrelated settings (museums, community centers, art therapy studios) and required observations of local elementary art classrooms. (Class meets 6 hours per week; students complete multiple independent visits to a local art classroom; studio art supplies are required.)

## ARED 20970 - Intermediate Studio (1.00-20.00)

Maximum 3 hours per semester. Directed individual problems to strengthen fundamental knowledge and skills required for advanced studio courses. 1-6 hours.

## ARED 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.
ARED 30003 - Junior Honors Seminar (3)
Directed readings in art and art history.

## ARED 30013 - Approaches to Studio Art (3)

Basic craft techniques as a foundation for advanced study and as applicable to the classroom situation.

## ARED 30803 - The Child and Visual Arts (3)

Prerequisites: Junior standing in art, and permission of instructor. Theory and practice in techniques and methods for elementary school art program.
ARED $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARED 31990 - International Residential Study (1.00-20.00)

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ARED $\mathbf{3 4 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific
content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARED $\mathbf{3 7 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARED 38990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARED 39990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARED 40003 - Senior Honors Research (3)

Directed research projects in art and art history.

## ARED 40803 - Essentials of Visual Arts (3)

Prerequisites: Junior standing in art, and permission of instructor. Theory and practice with techniques and methods for secondary school art program.

## ARED 40970-Special Problems (1.00-21.00)

Directed individual problems beyond the scope of regular courses in the concentration. Note: No student may enroll for a Special Problems course without first discussing the nature of the intended studies and obtaining written permission of the instructor. (More than3 hours per class requires permission of instructor. May be repeated up to 21 hours.)

## ARGD - Graphic Design

ARGD 10143 - Introduction to Visual Communication (3)
An introduction to and overview of Visual Communication as a career track in the applied arts and communication professions.

## ARGD 20301 - Professional Development for Graphic Designers (1)

Prerequisite: Permission of instructor. Professional development in Graphic Design, related directly to participation in professionally-sponsored activities in the region. Course may be repeated for additional credit, up to a total of 2 credit hours.

## ARGD 20323 -Typography I (3)

Prerequisites: ARST 10123, ARDG 10143 and ARGD 20453. Basic techniques and applications of standard graphic design methods.

## ARGD 20333 - Typography II (3)

Prerequisite: ARGD 20323. Advanced processes and design problems in graphic design.

## ARGD 20453 - Introduction to Computer Graphics (3)

An introduction to and overview of the use of computers in graphic design. Emphasis on skills, including understanding and using the Macintosh Operating System and current graphic design software. This includes pagelayout, vector-based drawing, scanning and image enhancement/manipulation.

ARGD 20970 - Intermediate Studio (1.00-20.00)
Maximum 3 hours per semester. Directed individual problems to strengthen fundamental knowledge and skills required for advanced studio courses. 1-6 hours.

## ARGD 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

ARGD 30003 -Junior Honors Seminar (3)
Directed readings in art and art history.
ARGD 30301 - Professional Recognition for Graphic Designers (1)
Prerequisites: Successful completion of two semesters of ARGD 20301. Permission of the instructor. Earning adjudicated recognition for upperdivision students in Graphic Design through an experiential process, including participation in designated events and entering work in designated design competitions. Course may be repeated for additional credit, up to a total of 4 credit hours.

## ARGD 30323 - Typography III (3)

Prerequisites: ARGD 20323, 20333 or permission of instructor. Continued exploration of design process with emphasis on visual perception and communication of information.

## ARGD $\mathbf{3 0 4 0 0}$ - Illustration (3.00-15.00)

Prerequisites: ARST 10103 and 10113 or permission of instructor. Introduction to and exploration of current, creative illustration techniques and media. 3-15 hours, 3 hours maximum per semester.

ARGD 30423 - Publication Design (3)
Prerequisites: ARGD 20323 and 20333 or permission of instructor. Complete range of design, layout, illustration, art preparation for book, magazine, news media publication.
ARGD 30433 - Package Design (3)
Prerequisite: ARGD 30323. Exploration of package design, packaging graphics and on-site promotion.

## ARGD 30443 - Corporate Identity (3)

Prerequisites: ARGD 30323 and permission of instructor. An exploration of the theory and practice of corporate identity. This includes logosymbol and logotype design, and their application to various media which may include: stationery systems, signage, website, display and packaging.
ARGD 30453 - Computer Applications to Graphic Design (3)
Prerequisite: ARGD 20323, 20333. A practical study of the most current applications of electronic technology in the field of graphic design that will provide the technical skills necessary to master the computer as an art and communication medium.

ARGD 30473 - Advanced Computer Applications to Graphic Design (3) Prerequisite: ARGD 30453 or permission of instructor. Aesthetic exploration of advanced design and rendering software.

## ARGD $\mathbf{3 0 5 2 3}$ - Advertising Design (3)

Prerequisite: ARGD 20333 or permission of instructor. Creative communication within the limitations of specific media.
ARGD 30533 - Advanced Advertising Design (3)
Prerequisite: ARGD 30523. Exploration of agency procedures with emphasis on problems involving design of print ads and campaigns.

## ARGD $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

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## ARGD $\mathbf{3 1 9 9 0}$ - International Residential Study (1.00-20.00)

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## ARGD 34990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.
ARGD $\mathbf{3 7 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a
student's official transcript have been included in the student's grade point average.

ARGD $\mathbf{3 8 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARGD 39990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARGD 40003 - Senior Honors Research (3)

Directed research projects in art and art history.
ARGD 40143 - Senior Thesis in Visual Communication (3)
Prerequisites: Senior standing in the Graphic Design Program, 3.0 GPA in major and permission of instructor. The capstone course of the Graphic Design program. The class will consist of an intensive, independentlydirected design project, with an accompanying research paper documenting the project.

## ARGD 40300 - Problems in Graphic Design (1.00-6.00)

Prerequisites: Advanced standing in the major and permission of instructor. Special problems in communication graphics. 1-6 hours

## ARGD 40403 - Portfolio Enhancement (3)

Prerequisites: Senior standing in the Graphic Design Program and permission of the instructor. An individually-directed class with a focus on improving the quality of the student's portfolio.

## ARGD $\mathbf{4 0 4 1 0}$ - Graphic Design Internship (3.00-6.00)

Prerequisite: Senior standing and 3.0 GPA in major. On-the-job training in agencies, design studios, in-house departments, etc., which can provide students with valid educational opportunity to extend classroom experience. 3-6 hours

## ARGD 40413 - Portfolio and Marketing (3)

Prerequisite: Senior standing in Graphic Design and permission of instructor. Assembly of portfolio; presentation techniques; competencies; the state of the market and preparation for employment opportunities. This includes participation in a group exhibition of final portfolios.

## ARGD 40503 - The Digital Portfolio (3)

Prerequisites: ARST 20743, ARGD 30323, and permission of instructor. Introduction to techniques used in preparing a digital Graphic Design portfolio. Emphasis on three-dimensional imaging and environmental context.

## ARGD 40970 - Special Problems (1.00-21.00)

Directed individual problems beyond the scope of regular courses in the concentration. Note: No student may enroll for a Special Problems course without first discussing the nature of the intended studies and obtaining written permission of the instructor. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.)

## ARHI - Art History

## ARHI 10043 - Introduction to Art History (3)

A survey of the history of visual arts, with emphasis on (but not limited to) art of the Western tradition. Students are introduced to key monuments, artists, artistic styles and movements, and art historical issues of different periods, as well as with significant relationships between art and its historical and societal contexts. The course also exposes students to different art historical skills, approaches, and methodologies.

## ARHI 20003 - Classical Tradition in Art (3)

Focusing on the visual arts of ancient Greece and Rome, this course surveys the impact, importance and influence of classicism on art from Antiquity to Postmodernism.

## ARHI 20013 - Egyptian Art (3)

A survey of Egyptian art and architecture from the Pre-Dynastic period through the Roman Domination.

## ARHI 20063 - Medieval Art (3)

A survey of major Medieval works - architecture, painting, sculpture, religious objects, and illuminated manuscripts - dating from the 3rd century through the 14th century.

ARHI 20073 - British Art: Medieval-Modern (3)
A survey of British Art from the Middle Ages through the Modern era.

## ARHI 20083 - American Indian Art (3)

This course surveys the indigenous arts and architecture of the three major culture areas of the New World: the Pre-Columbian archaeological traditions of the central Andes (primarily Peru) and Mesoamerica (primarily Mexico and Guatemala) as well as both archaeological and historic traditions of North America. Among the cultures discussed are the Inka, Aztec, Maya, Hopi, Lakota, and Tlingit. All major media are covered.

## ARHI 20093 - Art of Mexico from 1500 to the Present (3)

This course offers a broad overview of the art of Mexico beginning with the joining of Aztec and Spanish traditions in the colonial period, through the independence and revolutionary periods, and continuing until the presentday.

## ARHI 20103-17th and 18th Century European Art (3)

Survey of European art during the 17th and 18th centuries with emphasis on major stylistic and thematic developments in painting, sculpture and architecture. Artists studied include Caravaggio, Poussin, Bernini, Rubens, Rembrandt, Velasquez, Vermeer and Watteau.

ARHI 20113-A New World: Survey of American Art (3)
Survey of American art from its colonial beginnings to the present day. Emphasis is placed on analyzing works of art critically and examining them in light of their historical and social contexts.

## ARHI 20303-19th and 20th Century Art (3)

A survey of the traditions and significant changes that characterized the visual arts during this fertile period in the history of art.

ARHI 20403 - Introduction to Visual Culture (3)
An introduction to modes of critical inquiry in art history through the study of major works of art.

## ARHI 20503 - Survey Topics in Art History (3)

Occasional courses offering broad surveys of topics, such as the history of landscape painting, portraiture, and public sculpture. Courses may relate to and take advantage of special museum exhibitions.

## ARHI 20603 - Art History on Site (3)

This travel course surveys the visual arts from ancient times to the present by examining actual works of art and architecture on site.

## ARHI 20833 - History of Visual Communication (3)

This course surveys the rich history of visual communication, with particular focus on two-dimensional work and visual communication of the twentieth century.

## ARHI 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARHI 30003 -J unior Honors Seminar (3)

Directed readings in art and art history.

## ARHI 30073 - Modern British Art (3)

Prerequisites: ARHI 10043 or one 20000-level course, or permission of instructor. An examination of the visual arts of Britain, focusing on development of modernism in the nineteenth and twentieth centuries.

## ARHI 30113 - American Art to 1913 (3)

Prerequisite: ARHI 10043, or one 20000 level course, or permission of instructor. A study of the visual arts from the colonial period to the advent of modernism with the Armory Show.
ARHI 30123 - American Art, 1913 to the Present (3)
Prerequisite: ARHI 30113 and one 20000 level course, or permission of instructor. A study of 20th-century visual arts in the United States.

ARHI 30143 - Inka and Their Predecessors: Ancient South American Art (3)

Prerequisites: ARHI 10043, or one 20000-level course, or permission of instructor. The course surveys the art and architecture of the major cultures of the Pre-Columbian central Andes (Peru, Bolivia, Ecuador, and Chile).

## ARHI 30153 - The Aztec, Maya, Olmec (3)

This course surveys the art and architecture of the major cultures of PreColumbian Mesoamerica (Mexico, Guatemala, Belize, Honduras), ranging from the Olmec, whose great tradition in stone sculpture emerged in about 1200 B.C., to the Triple Alliance of the Mexica Aztec, which the Spaniards conquered in the mid-sixteenth century. All major media are covered.

ARHI 30163 - Maya Art and Architecture (3)
Prerequisites: ARHI 10043, or one 2000-level Art History course, or permission of instructor. This course is an in-depth study of the art and architecture of the ancient Maya.

## ARHI 30173 - Early Italian Renaissance Art (3)

Prerequisites: ARHI 10043 or one 20000 level course, or permission of instructor. Painting, sculpture, and architecture in 14th and 15th century Italy. Emphasis on Giotto, Masaccio, Donatello, Ghiberti, and Brunelleschi. Creative abilities of the Renaissance artist of the 14th and 15th centuries.

## ARHI 30183 - High and Late Italian Renaissance Art (3)

Prerequisites: ARHI 10043 or one 20000 level course or permission of instructor. 16th century art and architecture in Italy. Special attention to Michelangelo, Leonardo, Raphael, and Titian, with consideration of the changing role of the artist in Italian society.
ARHI 30193 - NorthernRenaissance Painting: Van Eyck - Bruegel (3) Prerequisite: ARHI 10043 or one 20000 level course, or permission of instructor. Painting and printmaking in Germany and the Netherlands from the 14th through the 16th centuries. Artists studied include Jan van Eyck, Rogier van der Weyden, Breugel, Holbein, and Durer.

## ARHI 30203-17th Century Italian and Spanish Art (3)

Prerequisite: ARHI 10043 or one 20000 level course, or permission of instructor. Examination of stylistic, cultural, historical aspects of painting, sculpture and architecture of Italy and Spain in the 17th century. Artists studied include Caravaggio, the Carracci, Bernini, Borromini, and Velasquez.

## ARHI 30213 - Drawing as Artistic Invention (3)

Prerequisite: ARHI 10043 or one 20000 level course, or permission of instructor. This history and technique of drawings from the 15th through 18th centuries. Emphasis on Leonardo, Raphael, Michelangelo, Elisabetta Sirani, Rubens and Rembrandt.

ARHI 30333 - Modern Art I: Romantic Classicism to Impressionism (3)
Prerequisites: ARHI 10043 or one 20000 level course or permission of instructor. Movements in European art from 1750 to the 1880's.
ARHI 30343 - Van Gogh to Dali: Modern Art II (3)
Prerequisite: ARHI 10043 or one 20000 level course, or permission of instructor. European art movements from the 1880s to the 1940s.

## ARHI $\mathbf{3 0 3 5 3 - P i c a s s o : ~ A r t i s t ~ o f ~ t h e ~ C e n t u r y ~ ( 3 ) ~}$

Prerequisite: ARHI 10043 or one 20000 level course, or permission of instructor. Examination of the art, life and influence of Pablo Picasso, who altered the course of the visual arts in our century.

## ARHI 30363-17th Century Flemish-Dutch Painting (3)

Prerequisite: ARHI 10043 or one 20000 level course, or permission of instructor. A study of Netherlandish painting during the Golden Age of Rembrandt and Rubens.

ARHI 30413 - Women and the Visual Arts, 1500-1800 (3)
Prerequisites: ARHI 10043 or one 20000 level course, or permission of the instructor. This class will examine the evolving roles of women as artists, patrons, and subjects in the visual arts in Europe during 1500-1800, with emphasis on the social, economic, and political context that shaped attitudes towards gender.

## ARHI 30500 - Special Topics in Art History (1.00-6.00)

Prerequisite: ARHI 10043 or one 20000 level course, or permission of instructor. Independent studies and occasional courses are offered. Such courses may include: Indigenous Arts of the Americas, British Painting, American Architecture, History of Art Criticism, and European Study. 1-6 hours
ARHI 30510 - Special Topics in Art History (1.00-6.00)
Prerequisites: ARHI 10043 and one 20000-level course, or permission of the instructor. Writing Emphasis course on art historical topics and museum exhibitions and collections.

## ARHI 30600 - Art Study Abroad (1.00-12.00)

Prerequisite: ARHI 10043 or one 20000 level course, or permission of instructor. An intensive, on-site study of art and architecture in foreign lands. Sites have included Europe, the former Soviet Union, Greece, Egypt, China and the South Seas. Includes pre-travel lectures with slides. (1-12 hours) Note: Art history and art studio majors should consult with their advisors before enrolling, since credit hours applicable to their degrees may be limited.

## ARHI 30603 - Art Since 1945 (3)

Prerequisite: ARHI 10043 or one 20000 level course, or permission of instructor. Aspects of recent styles in relation to historic origins.

ARHI 30613 - Modern Architecture: 1750 to the Present (3)
Prerequisite: ARHI 10043 or one 20000 level course or permission of instructor. Architectural styles, movements, and personalities from 1750 to the present

## ARHI 30623 - History of the Print (3)

Prerequisite: ARHI 10043 or one 20000 level course, or permission of instructor. Examination of historical development of the graphic arts from earliest phases to modern prints.

ARHI 30633 - Art in the Metroplex (3)
Prerequisite: ARHI 10043 or one 20000 level course, or permission of instructor. Focus on exhibitions and collections in the Metroplex galleries and museums.

## ARHI 30823 - History of Photography (3)

Prerequisite: ARhi 10043 or one 20000 level course, or permission of instructor. History of photography with emphasis on its development

## ARHI 30833 - History of Graphic Design (3)

Prerequisite: ARhi 10043 or one 20000 level course, or permission of instructor. History of graphic design with emphasis on 19th and 20th centuries.

## ARHI 30963 - Art Historical Methods (3)

Prerequisites: Art History major or minor of junior-standing or above, or permission of instructor. This seminar focuses on the current theories and methodologies employed by the discipline of art history in order to prepare students to undertake advanced work in art historical research and writing.

ARHI $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)
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## ARHI 31990 - International Residential Study (1.00-20.00)

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## ARHI 34990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARHI 37990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARHI 38990 - International Residential Study (1.00-20.00)

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ARHI $\mathbf{3 9 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARHI 40003 - Senior Honors Research (3)

Directed research projects in art and art history.

## ARHI 40970 - Special Problems (1.00-21.00)

Directed individual problems beyond the scope of regular courses in the concentration. Note: No student may enroll for a Special Problems course without first discussing the nature of theintended studies and obtaining written permission of the instructor. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.)

ARHI 40980 - Directed Study in Art History (3)
Prerequisites: Permission of instructor. Study under faculty supervision which will emphasize writing. Weekly meetings with instructor. (3-6 semester hours, maximum 3 hours per semester.)

ARHI 40993 - Art Professions Internship (3)
Prerequisites: Junior or senior art history majors and minors, with permission of the instructor. The objective of the internship is to provide the student with the practical experience of working with professionals in an art museum, gallery, or other art-related venue.

## ARST - Studio Art

## ARST 10103 - Drawing I (3)

Drawing as a primary art form offers a thorough exploration of the art elements: shape, value, line and texture and the spatial relationship of these art elements. Analytic drawing, perspective drawing as well as expressive approaches are employed. The keeping of a sketchbook is required.

## ARST 10113 - Drawing II (3)

Prerequisite: ARST 10103. Creative drawing based on visual experience and imagination. Assigned problems and experiments with a wide range of drawing materials, the use of mark-making tools and inventive exploration of media.

## ARST 10123 - Design and Color (3)

Study and application of basic principles of creative design.

## ARST 10133 - Three Dimensional Design (3)

Emphasis on use of three dimensional media, exploration of materials and introduction to some of the most widely used technical processes relative to contemporary 3-D artists.

## ARST 20143 - Painting (3)

Prerequisites: ARST 10103, 10113. Basic painting procedures in oil and/or acrylic mediums. Introduction to techniques and material use.

## ARST 20163 - Printmaking (Etching) (3)

Introduction to traditional and contemporary intaglio and relief materials as applied to metal plate etching, single and multi-plate color, collograph and photomechanical processes.

## ARST 20173 - Printmaking (Lithography) (3)

Traditional and contemporary drawing materials used as an introduction to black and white lithographic printing from stones to plates. Emphasis on conceptual and expressionistic aspects of work.

## ARST 20183 - Printmaking (Screenprinting) (3)

Introduction to basic applied and photomechanical stencil techniques. Emphasis on conceptual and expressionistic aspects of work.

## ARST 20213 - Ceramics (3)

Introduction to materials, methods and firing techniques. Wheel thrown and hand-built ceramics.

ARST 20243 - Sculpture (3)
Prerequisite: ARST 10133. Basic introduction to concept and creation of sculpture with emphasis on bronze casting, welded steel, ceramics and wood.

ARST 20503 - Video Art: Beginning New Media (3)
An introduction to the concepts, tools and techniques of new media. Students will explore several forms of time-based media while studying related historical and contemporary artists.

## ARST 20743 - Photography (3)

Basic introduction to equipment, materials and processes of photography. Emphasis on creative use of materials and visual imagination.

ARST 20970 - Intermediate Studio (1.00-20.00)
Maximum 3 hours per semester. Directed individual problems to strengthen fundamental knowledge and skills required for advanced studio courses. 1-6 hours.

## ARST 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARST 21103 - Life Studies (3)

Prerequisites: ARST 10103, 10113, or permission of instructor. Drawing, painting, figure or portrait modeling from the live model.

ARST 30003 - Junior Honors Seminar (3)
Directed readings in art and art history.
ARST 30100 - Life Studies (1.00-21.00)
Prerequisite: ARST 21103 (20100) or permission of instructor. Continuation of ARST 21103 (20100). (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.

ARST $\mathbf{3 0 1 4 0}$ - Advanced Painting (1.00-21.00)
Prerequisite: ARST 20143. Advanced problems in painting with emphasis on individual direction. More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.

ARST $\mathbf{3 0 1 5 0}$ - Artists' Books (1.00-21.00)
Prerequisites: Any 20000 level Art or Art History course or permission of instructor. Examination of the historical development of Artist Books. It will include hands-on application of visual/verbal statements and present a mixed media alternative for artists from concept through execution. More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.

ARST 30160 - Printmaking (Etching) (1.00-21.00)
Prerequisites: ARST 20163 or 20173 or 20183, or permission of instructor. Intaglio and relief techniques used with emphasis on individual development of conceptual and experimental concerns through printmaking as a medium. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.
ARST 30170 - Adv Printmaking (Lithography) (1.00-21.00)
Prerequisites: ARST 20163 or 20173 or 20183, or permission of instructor. Stone and plate lithographic technique employed with emphasis on individual development of expression. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.)

ARST $\mathbf{3 0 1 8 0}$ - Advanced Printmaking (Screenprinting) (1.00-21.00)
Prerequisites: ARST 20163 or 20173 or 20183, or permission of instructor. Applied and photomechanical stencil techniques used with emphasis on individual development of expression. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.)

## ARST $\mathbf{3 0 2 1 0}$ - Advanced Ceramics (1.00-21.00)

Prerequisite: ARST 20213 or permission of instructor. Advanced ceramic technique; clay bodies, glazes, kiln operation, raku. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.)

## ARST 30220 - Ceramic Sculpture (1.00-21.00)

Prerequisite: ARST 20213 and/or permission of instructor. Use of ceramic materials on a greater scale as sculptural media. Problems of handling, glazing, firing; scale as sculptural media. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.
ARST 30240 - Advanced Sculpture (1.00-21.00)
Prerequisites: ARST 10133 and 20243. Sculptural concepts, technical processes and translation of ideas into three dimensional situations. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.)

ARST 30510-3d Modeling and 3D Printing: Advanced New Media (3) Prerequisites: ARST 20503 or permission of instructor. An advanced exploration of the concepts, tools and techniques of new media. This course will explore the creation of digital sculptures, virtual worlds, and experimental studies with fabrication technology.

## ARST 30610 - Interactive Robotics and Kinetic Sculpture: Advanced New

 Media (3)Prerequisites: ARST 20503 or permission of instructor. An advanced exploration of the concepts, tools and techniques of new media. This course will explore the Arduino microcontroller and its ability to control our physical world. Students will learn how to control motors, read environmental sensors, and utilize fabrication technologies such as laser engraving and 3D printing.

## ARST 30710 - Color Photography (3)

Prerequisite: ARST 20743, or JOUR 30233, or permission of instructor. Color photographic principles, theory, processes and practice. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.)

## ARST $\mathbf{3 0 7 2 0}$ - Landscape Photography (1.00-21.00)

Prerequisite: ARST 20743 and 30710 or permission of instructor. Techniques, methods for producing photographs under outdoor and field" conditions. Emphasis on history and practice of landscape photography, its role in the history of the American West and its position in contemporary American Art Photography. (More than 3 hours per classes requires permission of instructor. May be repeated up to 21 hours.)"

## ARST $\mathbf{3 0 7 3 0}$ - Zone System Photography (1.00-21.00)

Prerequisite: ARST 20743 and 30710 or permission of instructor. Use of sensitometry to produce negatives using the zone system. Production of materials using non-silver as well as photo silver processes. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.)

## ARST 30743 - The Photographic Portrait (3)

Prerequisite: ARST 20743 and 30710 or permission of instructor. Portrait photography fundamentals including lighting, equipment, social and psychological aspects of human representation, and business aspects of professional photography.

## ARST 30753 - Photographic Illustration (3)

Prerequisite: ARST 20743 and 30710 or permission of instructor. Taking, printing, layout and presentation of photographic materials related to projects in commercial art.
ARST $\mathbf{3 0 7 6 0}$ - Alternative, Non-Silver Photo Processes (1.00-21.00) Prerequisites: ARST 20743 and ART 30710. This course will investigate an extensive range of non-silver, alternative, and post print manipulative processes. (More than 3 hours per class requires permission of instructor. May be repeated.)

## ARST $\mathbf{3 0 7 7 0}$ - Documentary Photography (1.00-21.00)

Prerequisites: ARST 20743 and ARST 30710 or permission of instructor. An exploration of the concepts, tools, and techniques of documentary photography. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.)

## ARST 30780 - Stages, Fabricated and Directed Studio Photography

 (1.00-6.00)Prerequisites: ARST 20743 and 30710 or permission of instructor. An exploration of the concepts, tools, and techniques of studio art photography. All photographs for this class will be staged, fabricated and directed. (More than 3 hours per class requires permission of instructor. May be repeated with permission of instructor up to 21 hours.)

## ARST $\mathbf{3 0 7 9 0}$ - Interactive Media for Artists (1.00-21.00)

Prerequisites: ARST 20743 and ARST 30710, or permission of instructor. An introduction to the concepts tools and techniques of interactive multimedia for artists. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.)

## ARST 30903 - Seminar in Art Professions (3)

Prerequisite: J unior standing in Art. The seminar will address specific professional issues such as photography of fine art, compiling slide portfolios, resume formats, exhibition preparation, exhibition venues, the role of museums and galleries, financial concerns and graduate school.

## ARST 30913 - Seminar in Art Criticism and Theory (3)

Prerequisites: Junior standing in Art or instructor permission. An exploration of major approaches to art criticism and theory with emphasis on developments since 1900.

## ARST $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a
student's official transcript have been included in the student's grade point average.

ARST 31990-International Residential Study (1.00-20.00)
This course represents credit earnedthrough a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARST 34990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARST 37990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARST $\mathbf{3 8 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARST 39990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ARST 40003 - Senior Honors Research (3)

Directed research projects in art and art history.
ARST 40710 - Advanced Digital Photography (1.00-21.00)
Prerequisites: ARST 20743 and ARST 30710, or permission of instructor. An explorations of the concepts, tools and techniques of advanced digital photography. (More than 3 hours per class requires permission of instructor. May be repeated with instructor approval up to 21 hours.

## ARST 40893 - Senior Art Exhibition (3)

Prerequisite: Graduating Senior in Studio Art or Art Education, or permission of instructor. Preparation of senior qualifying exhibition. All majors are required to exhibit selected work from their concentration. The successful completion of this requirement is a prerequisite to graduation.
ARST 40970 - Special Problems (1.00-21.00)
Directed individual problems beyond the scope of regular courses in the concentration. Note: No student may enroll for a Special Problems course without first discussing the nature of the intended studies and obtaining written permission of the instructor. (More than 3 hours per class requires permission of instructor. May be repeated up to 21 hours.)

## ART - Art

ART 20913 - Experiencing Art and Music in Central Europe (3)
An experiential approach to appreciating art and music in central European countries from the period of the Enlightenment to today.

## ASST - Asian Studies

## ASST 20003 - Introduction to Asian Studies (3)

This course is an introduction to the themes and intellectual approaches that comprise the broad field of Asian Studies. It is an interdisciplinary course that aims to introduce students primarily to the study of the peoples and cultures of East and South Asia.

This course is an introduction to Asian culture and society through a cinematic lens. During the semester we will explore films from China, India, Japan, and Korea and examine some of the key issues and themes in the study of Asian cinema. In addition we will study the development of different Asian civilizations in a historical context, and then focus on some of the key issues facing these countries today.

## BIOL - Biology

## BIOL 10003 - Contemporary Issues in Biology (3)

Two hours lecture and one two-hour laboratory period per week. A study of biology spanning contemporary issues in the biological sciences from the cellular and molecular to the ecosystem and biosphere levels of biological organization. Laboratory experiences are conducted in the biology computer lab. Designed for non-science majors.

BIOL 10433 - Freshman Seminar in Biology (3)
Topics may vary each time it is offered.

## BIOL 10501 - Introductory Biology Lab I (1)

Prerequisites: BIOL 10503 or concurrent enrollment. One laboratory period per week. This laboratory course introduces the basic principles of evolution, molecular organization and function of the cell, cell structure, cell cycle, mitosis, meiosis, metabolism, and Mendelian and molecular genetics. This laboratory course is required for each student declaring a major interest in Biology and/or with an interest in pre-health programs.

## BIOL 10503 - Introductory Biology I (3)

Prerequisite: A senior high school course in Biology or Chemistry. Topics include understanding organisms from the molecular level to that of the eukaryotic cell. This course introduces the basic principles of evolution, molecular organization and function of the cell, cell structure, cell cycle, mitosis, meiosis, metabolism, Mendelian and molecular genetics. This course is required for each student declaring a major interest in Biology and/or with an interest in pre-health programs.

## BIOL 10511 - Introductory Biology Lab II (1)

Prerequisites: BIOL 10501, 10503 and completion of or concurrent enrollment in BIOL 10513. One laboratory period per week. This is a laboratory introduction to the diversity, evolution, anatomy and physiology of eukaryotic organism (protists, fungi, plants, and animals.) Topics covered include the principles of evolution by natural selection, population genetics, speciation, anatomy, physiology, and taxonomy. This course is required for each student declaring a major in Biology and/or with an interest in prehealth programs.

## BIOL 10513 - Introductory Biology II (3)

Prerequisite: BIOL 10501 and 10503. This course is an introduction to the diversity, evolution, anatomy and physiology of eukaryotic organism (protists, fungi, plants, and animals). Topics covered include the principles of evolution by natural selection, population genetics, speciation, and taxonomy. This course is required for each student declaring a major in Biology and/or with an interest in pre-health programs.
BIOL 10970 - Special Problems: Lower Division (1.00-20.00)
Special problems.

## BIOL 20204 - Anatomy and Physiology (4)

Three hours lecture and one laboratory period per week. The structure and function of cells and tissues; the architectural plan of the human body, and the integumentary, skeletal, muscular systems and nervous systems. This course is intended for science majors that require Anatomy and Physiology as a prerequisite for application to graduate or professional school as well as Nursing, Health and Fitness, and Athletic Training majors.

## BIOL 20214 - Anatomy and Physiology (4)

Three hours lecture and one laboratory period per week. Prerequisite: BIOL 20204 with a grade of C or better and permission of instructor. Structure and function of the nervous, circulatory, digestive, respiratory, excretory, reproductive and endocrine systems of the human body. This course is intended for science majors that require Anatomy and Physiology as a prerequisite for application to graduate or professional school as well as Nursing, Nutrition, Health and Fitness and Athletic Training majors.

## BIOL 20234 - Basic Microbiology (4)

Three hours lecture and one laboratory period per week. Microorganisms and the manner in which they affect health; characteristics, growth requirements, methods of transfer, and reactions of the body toward invading organisms and the principles underlying immunity. This course is intended for Nursing, Nutrition, and Secondary Education Life Science majors or majors that require microbiology for professional school. This course
cannot be applied to the Biology major and is not intended for pre-health students applying to professional schools such as medical, dental, physician's assistant or veterinary schools. Credit will not be given for both BIOL 20234 and 30304.

## BIOL 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## BIOL 30003 - Biological Issues in Public Health (3)

Prerequisites: BIOL 10501, 10503, 10511 and 10513. Examination of the biological basis behind a variety of current issues in public health. Critical analysis of these issues through lectures, class discussion and debate.

## BIOL 30104 - Invertebrate Biology (4)

Three hours lecture and one laboratory period per week. Study of the diversity of invertebrate animals including their morphology, physiology, development, evolution, and natural history. Emphasis on their role as model organisms in biological and biomedical research.

## BIOL 30233 - Economic Botany (3)

Prerequisite: 10501, 10503, 10511, 10513. The economic importance of plants for food, building, material, clothing, fuel, medicine, oils, dyes and other products.

## BIOL 30304 - Microbiology (4)

Prerequisite: BIOL 10501 and 10503 and either CHEM 10123, or CHEM 10124, or CHEM 10125. A general course in microbiology intended for Biology majors or pre-health students applying to professional schools such as medical, dental, physician's assistant or veterinary schools. Three hours lecture and one laboratory period per week. Credit will not be given for both BIOL 20234 and 30304.

## BIOL 30403 - Ecology and the Environment (3)

Prerequisites: BIOL 10501, 10503, 10511, and 10513. Three hours lecture per week. Principles and concepts of ecology and their application to environmental biology and conservation. Topics will include human impacts on the environment and current issues of importance to global sustainability.

## BIOL 30404 - Comparative Vertebrate Anatomy (4)

Three hours lecture and one laboratory per week. This course focuses on the form and functional significance of anatomical structures in vertebrate animals. The objectives of the course are to introduce students to the anatomical evidence for evolution and to help students develop an understanding of vertebrate anatomy that will prepare them for graduate or medical gross anatomy courses.

BIOL 30463 - Introductory Neuroscience (3)
Three hours lecture per week. Prerequisite: PSYC 10213, 10514, 10524 or its equivalent. Study of the nervous system, action systems, and sensory systems as background for the physiological bases of discrimination, motivation, emotions, and learning. (Crosslisted as BIOL/PSYC 30463.)

## BIOL 30504 - Plant Biology (4)

Three hours lecture and one laboratory period per week. Study of the morphology, life history, physiology, ecology, evolution and socio-economic aspects of plants. Coverage includes the cyanobacteria, fungi and algae.

BIOL 30603 - Cellular, Molecular, and Developmental Biology (3) Prerequisites: BIOL 10501, 10503, 10511, and 10513. Three hours lecture per week. Basic structure and function of plant and animal cells; molecular genetics of cells and organisms; mechanisms governing cell reproduction and differentiation.

## BIOL 30613 - Natural History (3)

Two hours lecture and one laboratory per week. A survey of some of the diverse habitats and lifeforms on earth, with an emphasis on North American ecosystems. Arctic tundra, forests, swamps, aquatic habitats, deserts, and mountains are considered in light of the unique adaptations required for associated fauna and flora, and especially, some of the challenges they face in the modern world. The course is designed for students with broad interests in science, especially environmental science and education majors and is also suitable for non-science majors. This course cannot be applied toward the biology course requirements for a biology major.

BIOL 30703 - Plant Systematics (3)
Two hours lecture and one laboratory period per week. Characteristics of the major groups and families of flowering plants. Basic history and general
principles of taxonomy and fundamental concepts of phylogeny and plant evolution. Identification of plants represented in the local flora.

## BIOL 30803 - Human Parasitology (3)

Prerequisites: BIOL 10503 and 10501. In this course, human ecto- and endoparasites will be discussed along with their associated diseases. Students will gain knowledge of parasite life cycle, molecular mechanisms of entry, mechanisms of immune evasion and current and potential therapies. Public health strategies for control and elimination of parasitic diseases will also be explored.

## BIOL 30843 - Biomedical Imaging (3)

Prerequisites: PHYS 20484 or10164. An introduction to image formation for molecular and medical applications. This course covers the fundamentals of optic, $x$-ray and MRI, image creation, detectors, basics of image processing, quantitative analysis and a variety of applications in biophysics and in medicine. Includes off-campus lab work. (Crosslisted as BIOL/PHYS 30843.)

BIOL 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## BIOL 33990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## BIOL 36690 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## BIOL 39990 - International Residential Study (1.00-21.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## BIOL 40001 - Honors Seminar (1) <br> Honors Seminar.

## BIOL 40011 - Honors Seminar (1)

Honors Seminar.

## BIOL 40033 - Senior Honors Research in Biology (3)

This course is only for students in the Honors College. Field and laboratory research experiences for advanced students. Nine clock hours per week are required for a total of 135 hours. The results will be written in the form of a senior honors research thesis to be presented to the Honors College. A student may receive credit for this course only one time. Credit will not be given for both 40033 and 40803 for the same project. This course will count as one laboratory course towards the B.S. degree in biology.

## BIOL 40111 - Topics in Medicine (1)

Prerequisites: BIOL 30603. The focus of this one-hour course is on a variety of topics relevant to students who are interested in careers in the health professions. The course may not be repeated for credit.

BIOL 40123 - Genetics (3)
Prerequisites: BIOL 10501, 10503, 10511, and 10513, 30603; pre- or concurrent enrollment in CHEM 30123. Three hours lecture per week. Survey course in the study of mechanisms of inheritance with particular emphasis on molecular genetics.

## BIOL 40133 - Molecular Biology of Eukaryotes (3)

Prerequisites: BIOL 10501, 10503, 10511, and 10513, 30603; CHEM 30123 (or concurrent enrollment) or permission of instructor. Two hours lecture and one laboratory period per week. A study of the molecular mechanisms of basic biological processes in eukaryotes with emphasis on gene regulation,
the structure and function of macromolecules, cell growth and differentiation, mechanisms of diseases and applications in biotechnology.

## BIOL 40143 - Genetics Laboratory (3)

Two three-hour laboratories plus associated lectures each week. Prerequisites: BIOL 30603 and 40123. Experiments that illustrate the basic principles of transmission and molecular genetics.

## BIOL 40153 - Conservation Genetics (3)

Prerequisites: BIOL 10501, 10503, 10511, 10513, 30403, and 30603. Genetics plays an important and diverse role in the preservation of biological diversity. This course consists of two one-hour lectures and one three-hour laboratory each week and covers genetic theory and methods that are utilized in modern conservation efforts. Laboratory exercises focus on 1) the practical aspects of DNA extraction methods, molecular markers, PCR, sequencing, and capillary electrophoresis, and 2 ) analyzing the resulting genetic data.

## BIOL 40163 - Avian Biology (3)

Prerequisites: Six semester hours in Biology. This course consists of two onehour lectures and one three-hour laboratory each week. Lectures cover the evolution, anatomy and physiology, life histories, behaviors, and conservation of birds. The laboratory portion of the course includes identifying birds with molecular methods and field trips to identify common species of Texas birds. Five Saturday morning field trips are required.

## BIOL 40173 - Mammalogy (3)

Prerequisites: six semester hours in Biology. Two hour lectures and two hours of laboratory per week. This course introduces advanced undergraduate students to mammals. Lectures will examine the major topics of mammalian biology, including the evolutionary history, classification, adaptations, ecology, and natural history of mammals. Field techniques for the study of mammalian biodiversity and abundance will also be covered in this course. Field trips will be required. (Crosslisted as BIOL/ENSC 40173.)

## BIOL 40203 - Histology (3)

Prerequisite: BIOL 30603 or permission of the instructor. Two hours lecture and one laboratory period per week. Study of basic tissues of the vertebrate body and how they differentiate.

## BIOL 40224 - Developmental Biology (4)

Prerequisite: BIOL 30603 or permission of the instructor. Three hours lecture and one laboratory period per week. An introduction to developmental biology and embryology. Modern molecular and genetic techniques will be combined with classic anatomical embryology.

## BIOL 40254 - Immunology (4)

Prerequisites: CHEM 30123, BIOL 30304 or 20234 or permission of instructor. Three hours lecture and one laboratory period per week. The immune system; characteristics of antigens; antibodies and their reactions; cellular and humoral aspects of immunity; immune disorders.

## BIOL 40273 - Genomics (3)

Prerequisite: BIOL 40123. This class will consist of two hours of lecture and one laboratory per week. The course focuses on the ways in which information at the genome level has become integral to Biology. The labs are designed to give students hands on experience analyzing genomic data to ask and answer specific questions. Contemporary primary literature will be discussed.

## BIOL 40300 - The Teaching of Biology

Prerequisite: Written permission of the instructor of the course in which the student plans to serve. Students attend laboratory-staff meetings and serve as laboratory instructors of one section per week in various courses. For 1.5 semester hours credit.

## BIOL 40303 - Medical Microbiology (3)

Prerequisite: Permission of the instructor. This course focuses on advanced topics in medical microbiology including disease mechanisms of major human pathogens, the host response, and antibiotic development and resistance. Scientific approaches used to investigate these topics are emphasized through reading and discussion of the primary literature.

## BIOL 40313 - Biogeography (3)

Prerequisite: BIOL 30403 or permission of instructor. Three hours lecture per week. An ecological approach to the study of the distribution of plant and animal communities.

BIOL 40320 - Teaching of Introductory-Level Biology (1-2)
Prerequisite: Written permission of the instructor of the course in which the student plans to serve. Students serve as laboratory instructors of one
section per week in introductory-level biology courses. Students receive 1 credit for serving as laboratory instructors for one section per week and one additional credit for each three hours of additional duties per week including laboratory staff meetings. May be repeated once.

## BIOL 40330 - Teaching of Advanced Biology (1-8)

Prerequisite: Written permission of the instructor of the course in which the student plans to serve. Students receive one credit hour for serving as laboratory instructors of one section per week and one additional credit hour for each three hours of additional duties per week including laboratory staff meetings. This course is intended only for undergraduate Teaching Assistants in courses above the freshman level. Not to exceed 6 hours credit on the major and eight hours credit total.

## BIOL 40332 - Teaching of Biology

Prerequisite: Written permission of the instructor of the course in which the student plans to serve. Students attend laboratory staff meetings and serve as laboratory instructors of one section per week in various courses. This course is intended only for undergraduate Teaching Assistants in courses above the freshman level. Not to exceed four hours credit on the major and six hours credit total.

## BIOL 40353 - Wildlife Ecology and Management (3)

Prerequisite: Six semester hours in Biology. Two hour lectures and a three hour laboratory each week. This discussion-oriented course introduces advanced undergraduate students to the general principles of wildlife ecology and how those principles can be applied to wildlife management and conservation. The objectives of this course are 1) to provide an introduction to the major concepts of Wildlife Ecology and Management and 2) to allow you to learn the application of the scientific method to ecological problems. Laboratory exercises are required. (Crosslisted as BIOL/ENSC 40353)

## BIOL 40403 - Mammalian Physiology (3)

Three hours lecture per week. Prerequisites: BIOL 30603 and CHEM 30123, 30122,30133 , or permission of instructor. Basic functions of the major mammalian systems will be studied in terms of physical and chemical principles and system interactions.

## BIOL 40453 - Principles of Toxicology (3)

Prerequisites: BIOL 40403. This course focuses on the underlying principles of toxicology including dose-response curves, routes of contaminant exposure, contaminant fate in the environment and in organisms, and xenobiotic metabolism. Discussions of both historical and contemporary primary literature will be used to explore the specific effects of contaminants on various physiological systems.

## BIOL 40473 - Vertebrate Endocrinology (3)

Prerequisite: BIOL 40403. Two hours of lecture and one laboratory period per week. The course will focus on the structure and function of hormone signaling systems in vertebrate organisms. Contemporary primary literature will be discussed and the laboratory will expose students to the experimental design and methods utilized in modern endocrinology research.

## BIOL 40503 - Basic Biochemistry (3)

Prerequisite: CHEM 30123 or equivalent. Three hours lecture per week. Fundamental chemical properties, analysis techniques, metabolism and clinicopathology of proteins, lipids, carbohydrates, enzymes and hormones. Available for chemistry credit only to majors in Nutritional Sciences. (Crosslisted as BIOL/CHEM 40503.)

## BIOL 40603 - Virology (3)

Prerequisites: BIOL 10501, 10503, 30603, 40123. Three hours lecture per week. Survey of viruses, molecular biology of virus life cycles, viral pathogenesis and gene therapy using viral vectors.

## BIOL 40800 - Special Topics in Biology (3-4)

Prerequisites: BIOL 30403 and BIOL 30603, or permission of the instructor. This three or four credit course will deal with a specific topic in Biology that is appropriate for Biology majors.

## BIOL 40803 - Biological Research and Writing (3)

Field and laboratory research experiences for advanced students. Nine clock hours per week are required total 135 hours per semester. Upon completion of an independent research project, the results will be written in a format suitable for publication in the scientific literature. A student may receive credit for this course only one time. Credit will not be given for both BIOL 40803 and BIOL 40003 for the same project. This course will count as one laboratory course towards the B.S. degree in biology.
BIOL 40900 - Independent Research in Biology (1-3)

Field and laboratory problems for advanced students. Three clock hours per week of laboratory and/or field work are required for each semester hour of credit, for up to three semester hours credit in any given semester. This course can be repeated or taken in combination with 40803 or 40033 . This course will count as one laboratory course towards the B.S. degree in biology.

## BIOL 50103 - Terrestrial Ecosystems (3)

Three hours lecture per week. Prerequisite: BIOL 30403 or permission of instructor. Concepts, principles, and mechanisms of the function of terrestrial ecosystems, including ecophysiology of component species, nutrient cycling, energy flow, ecosystem stability and global ecology.

## BIOL 50123 - Biostatistics (3)

Prerequisites: BIOL 30403 and 30603 or permission of instructor. Two hours lecture and two hours of computer lab per week. Students will gain knowledge and understanding of how statistical methods are applied to biological research. The course will emphasize hypothesis testing, study design, and the concepts, application, and interpretation of statistical results. Basic probability theory, parametric statistics, correlation, regression, analysis of variance, and non-parametric statistics will be introduced.

## BIOL 50133 - Biochemistry I (3)

Prerequisite: CHEM 30133 and 40123 or permission of instructor. Three hours lecture per week. A general survey of structure and function of biologically important compounds with methods of analysis. (Crosslisted as BIOL/CHEM 50133.)

BIOL 50143 - Biochemistry II (3)
Prerequisite: BIOL/CHEM 50133. Biosynthesis, replication of DNA, synthesis and processing of RNA and proteins, and special topics e.g. brain and muscle functions, hormones and signal transduction, cancer, development, etc. (Crosslisted as BIOL/CHEM 50143.)

## BIOL 50153 - Medicinal Chemistry (3)

Three hours lecture per week. Prerequisites: BIOL/CHEM 50143, or permission of instructor. Molecular mechanism of drug actions, and methods of drug design, discovery and development. (Crosslisted as BIOL/CHEM 50153.)

## BIOL 50246 - Biodiversity

Prerequisites: Two semesters of college-level biology courses. This course introduces skills to describe and study the diversity of life. It is immersion, field-intensive instruction. General concepts include patterns of global biodiversity, biogeography of the Southern Plains, conservation biology, pressures on biodiversity, and national/international biodiversity protection efforts and policies. Field skill instruction starts with context description, emphasizing vegetation structure, followed by plant community description. Subsequent modules focus on inventorying animal communities, starting with insects and continuing with freshwater invertebrates, fish, amphibians, reptiles, birds and mammals. The field skill component of the course concludes with a week-long exercise in habitats outside of north-central Texas. Biodiversity information management is learned by developing a relational database coupled with a local Geographic Information System.

BIOL 50303 - Evolution (3)
Three hours lecture per week. Prerequisite: BIOL 10501, 1050310511 and 10513. Concepts and principles of organic evolution. Topics include natural selection, adaptation, quantitative genetics, sexual selection, kin selection, life history characters, speciation, and phylogeny.

## BIOL 50401 - Neurobiology of Aging (1)

Prerequisites: permission of instructor. The current literature associated with the neurobiology of aging, modern research techniques and recent developments in neuroscience and aging research are discussed. This is a participation course in which advanced undergraduate and graduate students will present manuscripts, explain research hypotheses and methodologies and explain results. Open discussion of these papers will include faculty from Biology and Psychology. Topics presented will differ by semester. The course may be repeated three times (taken a maximum of four semesters in all.) (Crosslisted as BIOL/PSYC 50401.)

## BIOL 50463 - Functional Neuroanatomy (3)

Prerequisite: Graduate or senior standing or permission of instructor. The fundamentals of functional neuroanatomy and neurophysiology with an emphasis on experimental and theoretical analysis of the basic brain behavior relationships. (Crosslisted as BIOL/PSYC 50463.)

BIOL 50502 - Biochemistry Laboratory (2)
Two four-hour laboratory periods per week. Prerequisite: CHEM 50143 or concurrent registration. (Crosslisted as BIOL/CHEM 50502)

BIOL 50703 - Ecology of Lakes and Streams (3)
Prerequisite: BIOL 30403 or permission of instructor. Two hours lecture and one laboratory period per week. Study of the physical, chemical and biological factors affecting the ecology of lakes, ponds and streams.

## BIOL 50903 - Tropical Biology (3)

Two hours lecture per week, one week of field work in the tropics and a terminal project. Prerequisites: Six semester hours in Biology; travel costs are exclusive of tuition; permission of instructors. This course provides an introduction to the animals, plants, and ecosystems of the New World tropics. Lecture topics will include tropical climate and ecosystems, evolutionary patterns in the tropics, and conservation of biodiversity. The field experience will expose students to coastal ecosystems (coral reefs, mangroves, and seagrass beds) as well as tropical, lowland rainforest.

## BIOL 50910 - Biology Seminar (1)

1. The primary goal is to acquaint the student with the preparation and presentation (oral and/or written) of scientific information from the biological literature. May be repeated for credit with different topics to a maximum of 3 times (one semester hour per topic). 2. Acquainting the student with the preparation and presentation (oral and/or written) of scientific information from the biological literature. May be repeated for credit with different topics to a maximum of 3 times. (One semester hour per topic.)

## BRST-Brit-Col-Post-Col-Studies

## BRST $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## BRST 40003 - Senior Seminar: British Colonial/Post-Colonial Study (3)

 This is a capstone course for the minor, and includes readings in British and colonial/postcolonial studies and an independent project. The independent project is pursued in consultation with the program director, and aims to reflect on the student's work in the minor, to synthesize the skills developed through the student's coursework, and to consider how they might be applied after graduation. Projects may include: an original creative performance; a scientific investigation; a portfolio of critical writing; or a U.S.based internship with an employer with substantial interests in Britain or the former colonies. All projects also require a journal documenting and reflecting on the student's progress.BRST 40900 - Internship in Political Science/British Studies (1.00-20.00) Washington Center or at the TCU in London Program. Full-time internships with a public or private agency in Washington, D.C. or in London, England, offered either through the Washington Center or through the TCU in London Program. The internship will allow students to integrate theory and practice in a supervised professional setting, up to 12 semester hours credit. (Offered as BRST or POSC credit.)

## BRST 40920 - London Internships (1.00-12.00)

3-day or 4-day per week interns with public or private agencies in London, England, offered through the TCU in London Program. Offered during the fall and spring terms, these internships accommodate students' long-term professional objectives. Internships are offered for either 9 or 12 semester hours credit. Most of the London interns also take one or two classroom courses while in London. (Offered either for BRST or POSC credit.)

## BUSI - Business

## BUSI 10013 - Contemporary Perspectives in Business (3)

3 hours. Prerequisite: 54 hours or less. Provides an overview of the theories, principles, practices and institutions that produce the goods and services and create most of the economic activity in modern societies.

BUSI 10970-Special Topics in Business (1.00-6.00)
Special Topics in Business. (1-6 semester hours) This course may be repeated for credit.

## BUSI 20173 - Foundations in Business (3)

3 hours. Prerequisites: Sophomore standing, and must be a Pre-Business major. This course will provide business majors with key fundamental skills necessary for success in upper division business courses as well as a career in business. Topics to be covered include: career aptitude assessment, job
search skills, business research writing skills, business history, teaming skills and interdependence of business functional areas.

## BUSI 20283 - Global Business Practicum:Focus on the European Union

 (3)The course is designed to give students an opportunity to experience firsthand the complexities, challenges, and opportunities of global business, with particular emphasis on the European Union. Students will be assigned a project with an international company and will be responsible for experiential learning about global business, specifically in the European Union. Course will take place in a European Union country.

## BUSI 20383 - Global Business Mindset (3)

This course focuses on global business and developing a global mindset from an intellectual, psychological and social perspective. Topics include the global mindset framework, unique characteristics of the global trade environment, globalization of the economy, the role of culture in global business, and financial and regulatory implications for global business. The student will engage in a cross cultural experience.
BUSI 20970 - Special Topics in Business (1.00-6.00)
Special Topics in Business. (1-6 semester hours) This course may be repeated for credit.

## BUSI 20990 - International Residential Study (1.00-6.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## BUSI 30153 - Ethical Decision Making (3)

Prerequisites: Junior standing, MANA 20153 and must be a Business major. This course will provide business majors with awareness of ethical issues likely to be encountered in a business context and understanding of the ethical frameworks and tools available to address ethical issues in business. One key focus will be on applying those frameworks to resolve ethical conflicts in business.
BUSI 30223 - International Business Study Abroad Honors (3) Prerequisite: Neeley Fellows, junior standing. This course entails the examination of both macro and micro issues from a multidisciplinary integrative perspective to provide a broad understanding of the fundamental components of international business. The overall goal in this course is to provide students with a comprehensive exposure to, and understanding of, the complex nature of the scope, nature, opportunities, and problems involved in conducting business in a dynamic global environment

## BUSI 30833 - Foundations of Leadership (3)

3 hours. Prerequisite: must be a Business major. Changes in the business environment have underscored the vital role that effective leadership plays in not only helping organizations survive, but to be self-determining and prosperous as well. This course is designed to help students learn both about leadership and about how to be more effective as a leader of others.

## BUSI 30843 - Interpersonal Leadership Skills (3)

3 hours. Prerequisite: BUSI 30833 with a grade of at least C, and must be a Business major. A developmental approach to building skills essential for effective leadership of individuals in today's organizations. This course will focus on cultivating such skills as self-awareness, stress and time management, empowerment and delegating, communication and listening, performance coaching and counseling, motivation, feedback and discipline, and responding to conflict. Learning through discussion, active application, and experiential exercises will be emphasized.

## BUSI 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## BUSI 39990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## BUSI 40010 - Business Internship (1.00-3.00)

Variable credit hours 1-3. Course may only be taken for a maximum of three credit hours. Pass/No Credit grade type only. Prerequisites: Must be a declared Business major or Finance or Accounting minor, and permission of instructor. Students gain practical exposure to business through participation in an internship in a business or community organization. Emphasis is placed on the development of applied skills in one or more of the business disciplines. Students learn about organizational realities and work demands.

## BUSI 40301 - Business Honors Seminar (1)

Prerequisites: Honors section of MANA 30153 or equivalent. Must be a business major; senior standing; mandatory thesis workshop in spring Junior year or summer before Senior year. This one credit course in the Neeley School of Business will provide direction and instructional tools for students to complete a senior honors thesis in their major department. The goal of the course will be to develop the first part of the thesis (introduction, literature review, research questions/hypothesis), prepare for data collection if applicable,and make significant progress toward the end product due in the spring. This course is offered in the fall semester only for spring graduates.

## BUSI 40833 - Team Leadership Skills (3)

3 hours. Prerequisites: BUSI 30833 with a grade of at least C, and must be a Business major. A developmental approach is taken in this course to build critical skills that support effective team leadership in today's organizations. This course will focus on introducing and cultivating skills such as team building, group process facilitation, dialogue, meeting management, and conflict resolution. Learning through active application and experiential exercises will be emphasized.

## BUSI 40843 - The Leadership Challenge (3)

3 hours. Prerequisites: A business major, and BUSI 30843, and BUSI 40833 with at least a grade of C " and departmental permission. This course is the capstone for the Leadership Emphasis program. It will cover content associated with what it takes to successfully lead change efforts. As such, it will cover topics such as overcoming complacency, creating and communicating new direction, development support for leadership initiatives, dealing with resistance, among others. In addition, students will be given a "leadership challenge" in an assigned field placement where they will be expected to use what they've learned in leadership courses to lead a project to a successful completion. Class sessions will help students relate their field experience to topic coverage in this course as well as to other courses in the Leadership emphasis program."

## BUSI 40853 - Leading in a Complex World (3)

Prerequisite: BUSI 40843 with a grade of at least C, and must be a Business major. This course is designed to help students understand the complexity of the contexts in which leadership occurs. The course will extend learning regarding leading self, leading others and leading change (covered previously in the BNSF Neeley Leadership Program) to complex business and societal contexts. Students will gain a better understanding of: 1) the nature of complexity in business and social systems, 2) the implications of complexity for how organizations must think differently about leadership and followership (e.g., regarding organization structure, culture, power and communication), and 3) how each student personally needs to lead and follow inorganizational contexts to be successful as they transition into and advance in their careers.

## BUSI 40970 - Special Problems in Business (1.00-6.00)

Special Problems in Business

## BUSI 50833 - Team Leadership Skills (3)

, and must be a Business major. A developmental approach is taken in this course to build critical skills that support effective team leadership in today's organizations. This course will focus on introducing and cultivating skills such as team building, group process facilitation, dialogue, meeting management, and conflict resolution. Learning through active application and experiential exercises will be emphasized. 3 hours. Prerequisites: BUSI 30833 with a grade of at least C

## BUSI 50843 - The Leadership Challenge (3)

3 hours. Prerequisites: A business major, and BUSI 30843, and BUSI 40833 with at least a grade of $C^{\prime \prime}$ and departmental permission. This course is the capstone for the Leadership Emphasis program. It will cover content associated with what it takes to successfully lead change efforts. As such, it will cover topics such as overcoming complacency, creating and communicating new direction, development support for leadership initiatives, dealing with resistance, among others. In addition, students will be given a "leadership challenge" in an assigned field placement where they will be expected to use what they've learned in leadership courses to lead a
project to a successful completion. Class sessions will help students relate their field experience to topic coverage in this course as well as to other courses in the Leadership emphasis program."

## CHDV - Child Development

CHDV 25053 - Children in the Global Community (3)
This course is designed to increase awareness about children's issues in the global community both historically and currently. It will focus on children's issues as well as intervention efforts across the globe. Along with class lectures, readings, and video supplements, students will be expected to participate in class discussions and presentations about current global issues. This course is designed to build insight and competency in students who desire to work with children in their future careers.
CHDV 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.
CHDV 35053 - Professional Development in Careers with Children (3) This course is designed to prepare students with professional competencies and knowledge in working with children and families. The course will be taught as a seminar style course with visiting professionals and professors teaching on topics such as: Crisis Prevention Intervention (CPI), Child CPR, Child Abuse Prevention and Reporting, Cultural Competencies, Communication Skills, Professional Ethics, Therapeutic Boundaries. At the end of the course, students will have skills and preparation for a variety of careers with children.

## CHDV 40223 - Fundamentals of Child Life Practice (3)

Prerequisites: PSYC 30503. This child life course will focus on children in the healthcare environment. It will include study in the following areas pertaining to child life specialists; documentation; scope of practice; impact of illness, injury, and health care of patients and families; family-centered care; therapeutic play; and preparing children for healthcare encounters and life-changing events.

## CHDV 40263 - Child Development Internship (3)

Prerequisites: PSYC/CHDV 50433 and PSYC/CHDV 50443. This experiential course provides advanced opportunities to work with children through internship positions. Service environments will provide experiential learning through which the student will utilize their knowledge of child development. Students can obtain their own positions (e.g., women shelter volunteer; Child Life Specialist shadowing) or can take part in internships facilitated by the instructor. Students spend six (6) hours a week, for twelve weeks, in their internship placement, for a total of 72 internship hours. Further, students attend a weekly two-hour seminar for the duration of the semester to discuss their experiences with peers and faculty and learn about working in helping professions.

## CHDV 40993 - Senior Seminar in Child Development (3)

Prerequisites: must be a CHDV major, senior standing, and credit for or concurrent enrollment in CHDV 35053. This course is designed for seniors to promote an integrated understanding of the discipline and to examine the significance of research and policy in child development. The emphasis is on assisting the student in developing the ability to critically evaluate methods, problems ad findings of research in the field of child development and to evaluate contrasting views of major issues within the discipline.
CHDV 50433 - Vulnerable Child I: Theory (3)
The Vulnerable Child is a two-part series of multidisciplinary courses which investigate the challenges faced by families and professionals who work with children who have emotional, behavioral, and/or physiological challenges. The Vulnerable Child I: Theory will focus on the theory and research which is the basis of these challenges. If our Hope Connection summer camp for adopted children is taking place, both Vulnerable Child courses are required before students can work in it. (Crosslisted as CHDV/PSYC 50433.)

## CHDV 50443 - Vulnerable Child II: Practice (3)

Prerequisites: PSYC/CHDV 50433. The Vulnerable Child is a two-part series of multidisciplinary courses which investigate the challenges faced by families and professionals who work with children who have emotional, behavioral, and /or physiological challenges. The Vulnerable Child II: Practice will focus on the training students need to evaluate and apply intervention strategies for these families and children based on the theory and research learned in the first course. Both Vulnerable Child I II are required for students wishing
to apply for Independent Studies' hours to work in The Hope connection summer camp for at-risk adopted children. (Crosslisted as CHDV/PSYC 50443.)

## CHDV 50533 - Case Studies in Child Development (3)

This course is designed to present an integrated and comprehensive overview of numerous issues in child development as well as treatments/solutions for those issues. This diverse array of developmental problems will be presented in a series of case-studies by professors from several departments as well as by community professionals who specialize in children's issues. This course is a requirement for the Child Development Minor as well as an elective course in Psychology. (Crosslisted as CHDV/PSYC 50533.)

## CHEM - Chemistry

CHEM 10113-General Chemistry I (3)
Three lecture hours per week. Introduction to the principles of chemistry, illustrating the central position of the discipline among the sciences.

CHEM 10114 - General Chemistry I (Honors) (4)
Three hours lecture and one 3-hour laboratory per week. A study of chemical structure, states of matter and chemical dynamics with emphasis on the quantitative nature of the science of chemistry.

## CHEM 10122-General Chemistry II Laboratory (2)

One lecture and one 3-hour laboratory session per week. Prerequisites: CHEM 10113 and prior or concurrent enrollment in CHEM 10123.

## CHEM 10123 - General Chemistry II (3)

Prerequisite: CHEM 10113 with a grade of C- or better. Three lecture hours per week. Introduction to the principles of chemistry, illustrating the central position of the discipline among the sciences.

## CHEM 10124 - General Chemistry II (Honors) (4)

Three hours lecture and one 3-hour laboratory per week. A study of chemical structure, states of matter and chemical dynamics with emphasis on the quantitative nature of the science of chemistry.

## CHEM 10125 - General Chemistry II with Laboratory (5)

Prerequisite: CHEM 10113 with a grade of C- or better. Three hours lecture, one 3 -hour laboratory, and one 1 -hour lab lecture per week. The second of a two-semester sequence in introductory chemistry. Selected concepts regarding chemical equilibria, kinetics, electrochemistry, and introductory organic chemistry.
CHEM 10163 - General Chemistry for Non-Science Majors (3)
Three hours lecture, and one three-hour laboratory period per week. Topics of interest to students e.g. drugs, AIDS, etc. and national and international problems such as air and water pollution will be examined to understand their chemical origins and potential solutions.

## CHEM 20123 - Quantitative Analysis (3)

Prerequisites: CHEM 10113, and prior or concurrent enrollment in CHEM 10123. One hour lecture and two laboratory periods per week. Exposure to techniques, theory, and laboratory practice of quantitative chemical analysis, focusing on gravimetric and volumetric analysis. Students will also gain an introductory understanding of instrumental methods of chemical analysis.

## CHEM 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## CHEM 30121 - Organic Chemistry I Laboratory (1)

One hour of lecture per week and seven 4-hour laboratory periods during the semester. Prerequisite: CHEM 10122-10123, 10124, 10125, or 20123 and prior or concurrent registration in CHEM 30123. Techniques of purification, characterization, and synthesis of organic compounds.

## CHEM 30123 - Organic Chemistry I (3)

Three hours lecture per week. Prerequisite: CHEM 10122-10123, 10124, 10125, or 20123. A survey of the classes of organic compounds with regard to nomenclature, structure, and reactions.

CHEM 30133 - Organic Chemistry II (3)
Three hours lecture per week. Prerequisite: CHEM 30123. Stereochemistry, organic reaction mechanisms, and synthesis of organic compounds.

CHEM 30143 - Organic Qualitative Analysis (3)
Two one-hour lectures and one 4-hour laboratory per week. Prerequisite: CHEM 30123, 30121 and 30133 or concurrent registration. Chemical and instrumental means of identifying unknown organic substances.

CHEM $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## CHEM 33990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## CHEM 40003 - Senior Honors Research Project (3)

A project in chemical research carried out under the direction of a member of the chemistry faculty and designed to partially fulfill the requirements for Departmental Honors in Chemistry. Hours arranged.

## CHEM 40013 - Senior Honors Research Paper (3)

A project in chemical research carried out under the direction of a member of the chemistry faculty and designed to partially fulfill the requirements for Departmental Honors in Chemistry. Hours arranged.

## CHEM 40091 - Senior Seminar (1)

The chemical literature, modern research techniques and recent developments in chemistry are discussed. This is a capstone course to be taken by Chemistry and Biochemistry majors in the fall semester of their senior year.

CHEM 40121 - Physical Chemistry I Lab (1)
One 4-hour laboratory period per week. Prerequisite: Prior or concurrent enrollment in CHEM 40123. Laboratory experiments designed to convey fundamental principles of physical chemistry, especially measurements relevant to selected biomolecules.
CHEM 40123 - Physical Chemistry I (3)
Three hours lecture per week. Prerequisite: CHEM 10125, prior or concurrent enrollment in MATH 10524. Studies of the fundamental physical principles relating to the field of chemistry, with an emphasis on thermodynamics and electrochemistry.

## CHEM 40131 - Physical Chemistry II Lab (1)

Prerequisites: Prior or concurrent enrollment in CHEM 40133. One 4-hour laboratory period per week. Laboratory experiments designed to establish the principles of physical chemistry and methods of physical chemical measurements.

## CHEM 40133 - Physical Chemistry II (3)

Three hours lecture per week. Prerequisites: CHEM 40123, MATH 20524, PHYS 20484 or PHYS 10164 (or concurrent enrollment). Continuation of studies of the fundamental physical principles relating to the field of chemistry, with an emphasis on quantum chemistry, spectroscopy, and kinetics.

## CHEM 40172 - Chemical Instrumentation (2)

One hour lecture and one four-hour lab period per week. Prerequisite: CHEM 40123 and CHEM 40121. Theory and application of instrumental methods relevant to the analysis of small molecules and useful macromolecules. Includes electronic, vibrational, NMR, and mass spectroscopic techniques.

## CHEM 40200 - Undergraduate Research (1-4)

A project in chemical research carried out under the direction of a member of the chemistry faculty. The student must have permission from the supervising faculty member prior to registration. (1-3 semester hours).

## CHEM 40503 - Basic Biochemistry (3)

Prerequisite: CHEM 30123 or equivalent. Three hours lecture per week. Fundamental chemical properties, analysis techniques, metabolism and clinicopathology of proteins, lipids, carbohydrates, enzymes and hormones. Available for chemistry credit only to majors in Nutritional Sciences.
CHEM 50001 - Laboratory Safety (1)
This course deals with the safe handling of chemicals, the inventory and safe disposal of chemicals, safe handling of radioactive materials and lasers as
well as details of federal, state and city regulations that apply to safety in academic and industrial laboratories. (This course is only offered P/NC.)

CHEM 50111 - Laboratory Glassblowing (1)
One 4-hour laboratory period per week. An introduction to the preparation of laboratory research equipment constructed of sodium and borosilicate glass.

## CHEM 50120 - Teaching of Chemistry (1-3)

Prerequisite: Permission of instructor. Members of this class act as Chemistry laboratory assistants. Techniques of laboratory instruction are illustrated and the importance of laboratory safety is stressed. 1-3 semester hours.

## CHEM 50133 - Biochemistry I (3)

Prerequisite: CHEM 30133 and 40123 or permission of instructor. Three hours lecture per week. A general survey of structure and function of biologically important compounds with methods of analysis. (Crosslisted as BIOL/CHEM 50133.)

CHEM 50143 - Biochemistry II (3)
Prerequisite: BIOL/CHEM 50133. Biosynthesis, replication of DNA, synthesis and processing of RNA and proteins, and special topics e.g. brain and muscle functions, hormones and signal transduction, cancer, development, etc. (Crosslisted as BIOL/CHEM 50143.)

## CHEM 50153 - Medicinal Chemistry (3)

Three hours lecture per week. Prerequisites: BIOL/CHEM 50143, or permission of instructor. Molecular mechanism of drug actions, and methods of drug design, discovery and development. (Crosslisted as BIOL/CHEM 50153.)

## CHEM 50162 - Advanced Inorganic Chemistry Laboratory (2)

One hour lecture and one 4-hour laboratory per week. Prerequisite: CHEM 50163 or concurrent registration. The laboratory emphasizes the synthesis, characterization and transformations of inorganic species.

## CHEM 50163 - Advanced Inorganic Chemistry (3)

Three hours lecture per week. Prerequisite: CHEM 40123 or permission of instructor. A survey of topics in modern inorganic chemistry with emphasis on synthesis, bonding and the mechanisms of reactions.

## CHEM 50182 - Biophysical Chemistry Laboratory (2)

Two 4-hour laboratory periods per week. Prerequisite: Prior or concurrent registration in CHEM 50183. Physical chemical principles applied to biochemical systems.

## CHEM 50183 - Biophysical Chemistry (3)

Three hours lecture per week. Prerequisite: CHEM 40123 and prior or concurrent registration in CHEM 50143. Biological systems are discussed from the viewpoint of physical chemical theories and methods.

## CHEM 50223-Advanced Organic Chemistry (3)

Three hours lecture per week. Prerequisite: CHEM 30143, 30133 or permission of instructor. A detailed study of stereochemistry, important organic reactions and mechanisms, organic syntheses and fundamentals of synthetic design.

## CHEM 50230 - Special Problems in Chemistry (1.00-20.00)

Advanced work in biochemistry, inorganic, organic and physical chemistry to be determined by the previous preparation and interests of the individual student.

## CHEM 50263 - Physical-Organic Chemistry (3)

Three hours lecture per week. Prerequisite: CHEM 30133 and prior or concurrent registration in CHEM 40123. An introduction to modern structural theory and reaction mechanism. Includes a discussion of physical methods.

## CHEM 50273 - Inorganic Reactions (3)

Three hours lecture per week. Prerequisite: CHEM 50163 or permission of the instructor. An advanced study of the preparative and derivative chemistry of important classes of transition metal and main group element compounds.

## CHEM 50282 - Advanced Physical Chemistry (2)

Two hours lecture per week. Prerequisites: CHEM 40133. An introduction to Quantum Chemistry and Statistical Thermodynamics is presented.
Continuation of Chemistry 40123-40133.
CHEM 50290 - Chemical Thermodynamics (1.00-6.00)
Prerequisite: CHEM 40133 or permission of instructor. An introduction to the applications of thermodynamics in chemistry. 1-3 hours of variable credit
CHEM 50303 - Chemical Kinetics (3)

Three lecture hours per week. Prerequisite: CHEM 40133. Phenomenological and theoretical aspects of the subject are stressed. Emphasis is placed on the study of rates of reaction as a means of elucidating reaction mechanisms. The study of specific gas phase and solution reactions is undertaken to illustrate basic theoretical principles as well as to distinguish molecular, ionic and free radical pathways, applications of isotope effects, activation parameters, medium effects and linear free-energy relationships are considered. Selected topics in conventional and enzyme catalysis are discussed.

CHEM 50502 - Biochemistry Laboratory (2)
Two four-hour laboratory periods per week. Prerequisite: CHEM 50143 or concurrent registration. (Crosslisted as BIOL/CHEM 50502)
CHEM 50763 - Experimental Methods in Biochemistry and Biophysics (3) Prerequisite: Permission of instructor. This course will introduce students to experimental techniques developed and used to investigate biological systems. It will discuss modern techniques used in the biomedical sciences, drug discovery and other biophysical and biochemical fields. The course includes lectures, demonstrations, and hands-on exercises in the TCU Biophysics Laboratory and on instrumentation at the Center for Commercialization of Fluorescence Technologies (CCFT) at the UNT Health Sciences Center campus. (Crosslisted as CHEM/PHYS 50763.)
CHEM 50783 - Environmental Chemistry (3)
Prerequisites: CHEM 10123 or 10124 or 10125 or 20123 or permission of instructor. Three hours lecture per week. Chemistry of water, soil, energy, and air as related to environmental problems. Subjects include: nutrients and eutrophication, fluorocarbons, sulfur and nitrogen oxides, Eh-pH relationship, natural carbonate reactions, and cation exchange phenomena. (Crosslisted as CHEM/ENSC/GEOL 50783.)

## CHEM 50993 - Neurochemistry (3)

Three lecture hours per week. Prerequisite: CHEM 50133 or permission of instructor. The elucidation of biomedical phenomena that subserve the characteristic activity of the nervous system or are associated with neurological diseases.

## CHIN - Chinese

## CHIN 10153 - Beginning Chinese I (3)

This is an introductory Chinese course for students with no or little prior experience in standard Mandarin. It provides students a solid training in all four skills -- listening, speaking, reading and writing, with emphasis on practicing pronunciations and building vocabulary, as well as acquiring fundamental grammatical structures. In addition, Chinese cultures will be briefly taught throughout the class. No prerequisite.
CHIN 10163 - Beginning Chinese II (3)
Prerequisite: CHIN 10153 with a C- or better. This course continually covers basic Mandarin Chinese to students who have already taken a semester in Chinese. It continues strengthening integrated training in all four skills -listening, speaking, reading and writing, but more efforts will be given to spoken and reading practicing. In addition, Chinese cultures will be briefly noted throughout the class.

CHIN 20053 - Intermediate Chinese I (3)
Prerequisite: CHIN 10163 with a C- or above, or approval of instructor. CHIN 20053 will develop listening, speaking, reading, and writing skills at the intermediate level. Working with familiar topics, students will learn to comprehend short paragraph-level utterances; interact effectively in a variety of straightforward, concrete conversational situations; and read short paragraphs and write short, well-focused descriptive or narrative works.

## CHIN 20063 - Intermediate Chinese II (3)

Prerequisite: CHIN 20053 with a grade of C- or better, or approval of the instructor. CHIN 20063 will develop speaking, listening, reading, and writing skills at the intermediate-mid level. Students will learn to understand paragraph-level utterances on familiar topics; speak with confidence in everyday interactions; read paragraphs (in characters) on learned or familiar topics; handle practical writing tasks (in characters) as short letters and memos that relate to personal and learned topics.
CHIN 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

CHIN 30053 - Intermediate Chinese III (3)
Prerequisites: CHIN 20063 with a grade of C- or better, or permission. CHIN 30053 will develop students' speaking, listening, reading, and writing skills at the intermediate-high level. Upon the completion of this course, students should have acquired the following abilities: 1) Listening: can understand interpersonal conversations on practical and social topics; follow presentation on social topics or topics of personal interest and individual relevance; 2) Speaking: can engage in conversations on topics of personal interest and individual relevance and present ideas and opinions with a level of clarity and precision that native speakers can understand; 3) Reading: can comprehend text materials on non-specialized topics with the help of dictionaries; 4) Writing: can produce most kinds of informal correspondence; can present ideas and opinions at paragraph level with a level of clarity and precision that native speakers can understand.

CHIN 30063 - Intermediate Chinese IV (3)
Prerequisite: CHIN 30053 with a grade of C - or better, or approval of the instructor. CHIN 30063 continues to develop speaking, listening, reading, and writing skills at the intermediate-high level. Upon the completion of this course, students should have acquired the following abilities: 1) Listening: can understand interpersonal conversations on practical and social topics with ease; can follow presentations on social topics or topics of personal interest and individual relevance; 2) Speaking: can engage in conversations on topics of personal interest and individual relevance; can present ideas and opinions with a level of clarity and precision that native speakers can easily understand; 3) Reading: can comprehend text materials on non-specialized topics with the help of dictionaries; can appreciate the differences between formal and informal styles; can extrapolate meanings from context; 4) Writing: can produce most kinds of informal correspondence; can present ideas and opinions in well-connected paragraphs with a level of clarity an precision that native speakers can easily understand.

## CHIN 30113 - Chinese Civilization and Culture (3)

This course provides an overview of Chinese culture and civilization. Major topics such as the Chinese language, history, philosophy, religion, literature and the arts, as well as contemporary issues, will be studied. The course encourages students to become maximally involved in class discussions about topics assigned or lectured. No prerequisite is required. This course is taught in English.
CHIN 30970 - Directed Study in Chinese (1.00-6.00)
Prerequisites: permission of instructor. Opportunity for independent study in Chinese language or culture. Topic and credit hours to be determined at time of registration

## CHIN $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

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## CITE - Computer Information Technolgy

## CITE 10003 - Applying Technology to Disasters, Failures, and Other Dangerous Things (3)

This course focuses on how we can develop technological solutions to problems by applying the scientific method to the study of major technological accidents and failures. The lecture material will be augmented by laboratory experiences where the student will be able to experiment with some common everyday complex systems and study their failures under carefully controlled conditions.
CITE 20970 - Topics in Computer Information Technology (1.00-3.00) Prerequisite: COSC 20203. Topics of current interest. May be repeated for credit when the topic changes. (1-3 semester hours)

## CITE 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## CITE 30023 - The Digital Explosion: A Cultural Transformation (3)

Prerequisites: Junior standing or consent of instructor. This course examines the cultural, social, ethical, and legal implications of the transforming power of the explosive growth of data and the technologies involved in producing,
storing, utilizing, and communicating that data. The associated distinctions of age, gender, ethnicity, and class along with their impact on the propensity to access and utilize the products created from various technologies will be explored as well. These technological products include but are not limited to online/offline computer games, blogs, wikis, instant messaging, text messaging, as well as web sites for online dating and social networking.
CITE 30103-Unix/Linux System Administration (3)
Prerequisites: COSC 10403 or 10503. This course will cover various operating system services and objectives. Topics include installation, management, and maintenance of Unix/Linux operating systems.

## CITE 30133 - Advanced System and Network Administration (3)

Prerequisites: CITE 30103. The topics of this course include advanced study of installing, configuring, upgrading, and managing network services in both Linux and Windows environments. Students will also be exposed to system integration, and performance analyzing and tuning.
CITE 30153 - Interface Design and Scripting Fundamentals (3)
Prerequisites: COSC 20203. Fundamental principles of interface design and scripting languages. Topics include user interface evaluation and basic development, scripting language programming (e.g. Python), and the study of existing programs written in selected languages.

## CITE 30333 - Database Administration (3)

Prerequisite: COSC 30603. Introduction to the database administration in both small and large-scale database operations. Course focuses on the setup, analysis and maintenance of relational databases used in modern applications.

## CITE 30363 - Web Technologies (3)

Prerequisite: CITE 30153 and COSC 30603 or consent of instructor. This course will provide an overview of current web technologies. The student will study both client-side and server-side technologies and will learn about web authoring, site management, and distributed web-based applications. The course will include a review of XHTML, CSS, client and server-side processing followed by in-depth coverage of JSP and Java Servlets, database connectivity, and distributed web applications. XML, web streaming technologies, topics on the wireless web will also be included. Projects will be required that demonstrate the student's understanding of these technologies and that utilize several of the commercially available software packages.
CITE 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## CITE 40133 - Operations Research I (3)

Prerequisites: MATH 10524 and a course in statistics (either MATH 10043 or MATH 30853 or MATH 30803) additionally either COSC 30603 or ENGR 20613 is required. The principles and practice of Operations Research Methods as a tool for decision-making are studied. In particular, the course focuses on deterministic mathematical programming techniques such as linear programming (the Simplex Method, concepts of duality and sensitivity analysis), network optimization (transportation and assignments problems), and dynamic, and integer programming.

## CITE 40353 - Computer Hardware Concepts (3)

Prerequisites: COSC 30203 and MATH 20123. Introduction to the design and operation of hardware systems that include embedded microcontrollers and/or microprocessors, and the programming techniques required to control hardware systems. After providing an overview of analog and digital circuit theory, the course focuses on the design and operation of the interfaces between the controller(s)/processor(s) and the rest of the hardware.

## CITE 40453 - Computing Internship (3)

Prerequisites: Junior standing, 2.5 GPA in major, and approval of department chair. Practical experience in computer and information science. Must include a minimum of 260 work hours in approved practical experience situation. Includes $7-8$ hours of class meetings. This course may only be taken pass/no credit. Open to CITE and COSC majors only.

## CITE 40643 - Issues in Project Management (3)

Prerequisites: Credit for, or concurrent enrollment in COSC 30603. This course presents an introduction to the issues involved in managing projects that are technology-based. Principles of project development, trade-off
issues through the project life-cycle, and professional ethics will be covered. Team projects are included.
CITE 40913 - Advanced Topics in Computer Information Technology (3) Prerequisite: Permission of the instructor. Advanced topics of current interest. Students will study current literature. May be repeated for credit when the topic changes.

## CITE 40993 - Senior Development Project (3)

Prerequisite: CITE 40643. Senior computer information technology majors are required to demonstrate their mastery of several computer science and information technology topics and their ability to communicate the results of their efforts to others. They are required to identify and analyze a computer development task, develop and implement a workable solution for its development, and then document the results of their efforts.

## COMM - Communication Studies

## COMM 10123 - Communicating Effectively (3)

In this course, students will learn communication skills, such as how to construct and deliver messages, listen actively, and communicate ethically; emphasis will be on developing public speaking skills.

## COMM 20113 - Interpersonal Communication (3)

Consideration of effective speech communication strategies in interpersonal situations. Practice in the development of appropriate communication skills in face-to-face interactions.

## COMM 20173 - Interpretive Speaking (3)

Prerequisites: COMM 10123 or 10133. This course will study elements of performance theory and techniques. Students will analyze and interpret academic texts, current events, and various styles of literature to formulate an argument in a performance.

## COMM 20223 - Communication Theory (3)

Applies communication theory and practice to a broad range of communication phenomena in intrapersonal, interpersonal and public communication settings.

## COMM 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## COMM 30003 - Honors Seminar: Current Developments in

 Communication Studies (3)Offered as an honors tutorial and to selected majors who are not honors candidates. Study of current issues in Speech Communication and related fields with opportunity for development of an area of specialization.

## COMM 30101 - Forensic Team (1)

Prerequisites: Instructor permission required and restricted to recognized members of the TCU Forensic Team. Participation credit for members of the competitive forensics team. Course members will practice and engage in intercollegiate competition in public address, oral interpretation, and debate. Repeatable a maximum of 8 times. A maximum total of 4 credits may be applied toward a Communication Studies major, 3 credits toward a minor.

## COMM 30103-Argumentation and Debate (3)

Prerequisite: COMM 10123 or 10133 or permission of instructor. Training in clear, logical, and persuasive communication; analysis, exposition, reasoning, and use of evidence; practice in effective delivery; classroom participation in debates.

## COMM 30123 - Parliamentary Debate (3)

Students will investigate British origins of contemporary parliamentary debate and decision-making, will visit important sites such as the Houses of Parliament and Hyde Park Speaker's Corner, and will learn to conduct parliamentary debates and employ rules of parliamentary procedure in meetings.

## COMM 30133 - Group Communication (3)

Prerequisites: COMM 20113. Participation in decision-making groups to develop skills related to effective group communication. Factors affecting group interactions are considered.
COMM 30143- Mediation (3)

Students will develop knowledge and skills necessary to facilitate conflict conversations in interpersonal and organizational settings.

COMM 30153-Interviewing (3)
Prerequisite: COMM 20113. Applies dyadic communication principles to specialized interviewing situations. Skills development is stressed.

COMM 30163-Organizational Communication (3)
Prerequisite: Combined GPA of 2.5 in COMM 20113 and 20223
Communication channels and networks in organizations; analysis of barriers to effective communication; solving practical communication problems communication and dynamics in work groups.
COMM 30173 - Advanced Public Speaking (3)
Prerequisite: COMM 10123 or 10133 or permission of instructor. Training in speech performance and speech evaluation skills. Theory and practica experience related to the formulation, presentation, and evaluation of informative and persuasive public speeches.

COMM 30183 - Issues in Organizational Communication (3)
Prerequisites: COMM 20223 and COMM 30163. Explores organizational communication within special contexts. Included theoretical concepts applicable to conflict, culture, media, etc. Repeatable for maximum of 6 hours.

## COMM 30193 - Listening (3)

Prerequisites: COMM 20113 with a C" or better and MATH 10043 or INSC 20153 with a "C" or better. Introduction to the reception and processing of information. Examines theory and research in areas such as attention, cognitive capacity, and attribution. Examines the role of listening in a variety of contexts, including therapeutic communication, learning, and critical thinking."

COMM 30203 - Nonverbal Communication (3)
Prerequisite: COMM 20113 with a C" or better and MATH 10043 or INSC 20153 with a "C" or better. Introduction of the conceptual foundations of nonverbal communication. Theoretical perspectives, research methods, and applications of nonverbal communication are also explored in a variety of contexts."

COMM 30213 - Special Issues in Interpersonal Communication (3) Prerequisite: COMM 20113. Explores interpersonal communication within special contexts. Includes theoretical concepts applicable to gender, aging, and health. Repeatable for maximum of 6 hours.

COMM 30223 - Power and Influence in Interpersonal Communication (3) Prerequisite: COMM 10123 or 10133 and COMM 20113, and COMM 20223 or permission of the instructor. Explores theory and research related to social influence in relationships and communication processes.

COMM 30233 - Social Networking Sites and Personal Relationships (3) Prerequisites: COMM 20113 and COMM 20223. Explores history, theory, and research related to interpersonal uses of communication technology. Students will critically examine current forms of mediated interpersonal communication in light of the history of communication technology.

COMM 30253 - Intercultural Communication (3)
Prerequisite: COMM 20113 and COMM 20223. This survey course examines the influence of culture on our communicative interactions with others. Emphasis is placed on identifying the relationship between communication and culture, developing intercultural communication competence, and understanding the elements that constitute and separate cultures.

COMM 30263 - Gender and Communication (3)
Prerequisites: COMM 10123 or 10113. Examination of the relationship between gender and communication. Critical analysis of how communication creates, maintains, and transforms views of gender in cultural, social, and historical contexts.

COMM 30273 - Great British Orators (3)
Investigate great British orators, orations, and persuasive techniques used to compel audiences at the actual sites where these famous speeches took place.

COMM 30283 - Communication Inquiry (3)
Prerequisites: COMM 20113 and 20223 both with a C" or better and MATH 10043 or INSC 20153 with a "C" or better. Explores fundamental principles of communication research. Students will develop as critical consumers of communication research and will learn to design, conduct, analyze, and report individual research projects."

COMM 30293 - Training \& Development (3)

Prerequisites: COMM 10123 or 10133. The purpose of this course is to introduce students to training and development in organizational settings. Students will learn the art and science of designing, delivering, and assessing training programs. Emphasis will be placed on teaching communication skills to adult learners and exploring potential career opportunities in training and development.

COMM 30970 - Independent Study (1.00-3.00)
Prerequisite: Permission of instructor. Independent work in specially designed projects not covered by regular course offerings. (1-6 semester hours, 3 hours maximum per semester.)

## COMM 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

COMM 31213 - Rhetoric: From Ancient Rome to Modern Oratory (3) Prerequisites:COMM 10123 or COMM 10133. Examination of the major concepts in rhetorical theory. By studying on location, emphasis is placed on understanding the conceptions of rhetoric in antiquity, identifying how these inform historical and contemporary rhetorical acts, and evaluating the persuasive techniques used to compel audiences in a variety of social, political, and religious contexts.

COMM 34490 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## COMM 40003 - Honors Research Paper (3)

A research paper developing from the student's specialization in the Honor's Seminar.

## COMM 40103-Communication in Business and the Professions

 A research paper developing from the student's specialization in the Honor's Seminar.
## COMM 40113-Conflict Management (3)

Prerequisites: COMM 30163 with a C" or better and MATH 10043 or INSC 20153 with a "C" or better. Seminar designed to acquaint students with the factors affecting interpersonal conflict and to provide students with appropriate communication skills necessary for successful conflict resolution and negotiation in a variety of contexts, both personal and professional. Emphasis is on exploring practical, theoretical and critical analyses of conflict and negotiation in an active learning environment."

## COMM 40123 - Internship (3)

Prerequisite: Complete 15 hours in Communication Studies; junior or senior standing; COMM 30163 with a C" or better. Participation in professional internship experience approved by course instructor. Weekly online forums and writing assignments (WEM) focus on analysis of communication observations and issues in professional environments."

COMM 40133 - Communication and Character (3)
Prerequisites: COMM 30163 with a C" or better. The development and use of communication skills to manifest positive character traits for the benefit of self, others, and society at large."

## COMM 40143 - Communication and Career Success

Prerequisites: COMM 20113 and COMM 20223. The development and use of communication skills to manifest positive character traits for the benefit of self, others, and society at large

## COMM 40203 - Communication and Civic Engagement

 Prerequisite: COMM 10123 or 10133 and COMM 20113. Explores communication skills critical to career success. Understanding, assessment, and improvement planning are stressed with a strong emphasis upon application of theory and research in pragmatic career development and organizational contexts.COMM 40213 - Perspectives on Ethics in Communication (3)
Prerequisite: COMM 30163 with a C" or better and MATH 10043 or INSC 20153 with a "C" or better. Examination of contrasting models and standards of communication ethics. Students apply standards to specific problem situations in politics, advertising, writing, and interpersonal communication
in making reasoned and informed personal judgments concerning the ethics of public and private communication."

## COMM 40223 - Family Communication (3)

Prerequisites: COMM 30163 with a C" or better and MATH 10043 or INSC 20153 with a " C " or better. This course is designed to investigate the nature of family communication patterns and the extent to which different communication activities contribute to, and change, familial identity. Students will explore complex definitions of "family, family interaction from different theoretical lenses, the role of family rituals, narratives, and storytelling in constructing family identity, and the role of family power, conflict, and stress on family interaction.

## COMM 40233 - Communication in Group Leadership (3)

Prerequisite: COMM 30163 with a C" or better. Understanding the role of speech communication in the leadership process. Development of practical leadership communication skills and consideration of communication behavior demonstrated by leaders."

COMM 50243 - The Dark Side" of Interpersonal Communication" (3) Prerequisites: COMM 20113. This advanced seminar is designed to provide an introduction to the various messages and message strategies that fall within the purview of the dark side" of interpersonal communication. Students will examine a variety of interpersonal communication behaviors that problematize that is considered ethical, moral, and/or functional in healthy relationships, including jealousy, envy, revenge, conversational dilemmas, fatal attractions, deception, infidelity, and abuse, among others."

COMM 50970 - Special Problems in Communication Studies (1.00-20.00) Prerequisite: Senior or graduate standing. Specialized work in student's area of concentration. 1-6 semester hours, 3 hours maximum per semester.

## COSC - Computer Science

## COSC 10203 - Computer Literacy (3)

Two hours lecture and one and a half hours of laboratory per week. Introduction to the history of computers, computer organization, and principles of operation. Hands-on experience utilizing a variety of computer software tools including word processing, database management, graphics, spreadsheet, and Internet applications.

COSC 10403 - Introduction to Programming (3)
Prerequisite: Two years of high school algebra or Math 10023. Introduction to computers, problem solving, algorithm design, and programming techniques. Includes what a computer is and is not, problem organization, data representation, and how to utilize the computer to solve problems. Numerical and non-numerical problems are solved in a high-level programming language.
COSC 10433 - Freshman Seminar in Computer Science (3) Topics may vary each time it is offered.
COSC 10503 - Introduction to Programming for Engineering and Science (3)

Prerequisite: MATH 10524 or concurrent. Introduction to computer
programming and to problem solving techniques using computer programs with applications in engineering and the physical sciences.

COSC 10533 - Freshman Seminar in Computer Science (3)
Topics may vary each time class is offered.

## COSC 20101 - Assembler Fundamentals (1)

Prerequisite: COSC 10403. Computer structure, machine language, instruction execution, addressing modes, and internal representation of data. Several assembler language programming assignments are required.

## COSC 20203 - Techniques in Programming (3)

Prerequisites: COSC 10403 with a C- or better. A study of program design, development and programming techniques. Structured programming with problems selected from list processing, string processing, and file manipulation.

## COSC 20803 - Data Structures (3)

Prerequisites: COSC 20203 with a C- or better. Basic concepts of data. Linear lists, strings, and arrays. Representation of trees and graphs. Storage systems and structures. Symbol tables and searching techniques, sorting techniques. Formal specification of data structures and data structures in programming languages.

COSC 20970 - Topical Studies in Computer Science (1.00-6.00)

Prerequisites: COSC 20203. Courses dealing with a particular area of investigation in computer science. The topics will be changed from semester to semester and the course may be repeated when the topic is different. (13 semester hours.)

## COSC 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## COSC 30203 - Computer System Fundamentals (3)

Prerequisite: COSC 20803. Introduction to stored program computer architecture, machine representation of data, and assembly language programming. Followed by a discussion of operating system topics with an emphasis on issues related to multiprogramming.

## COSC 30253 - Computer Organization (3)

COSC Prerequisites: COSC 30203 (may be concurrent) and MATH 20123, or, ENGR prerequisites: ENGR 30444. Corequisite: COSC 20101. Treatment of sequential and combinatorial circuits including flip-flops, multiplexers, decoders, adders, registers, counters. Design of functional components, of a computer including memory, ALU, control unit, busses. The tradeoffs of alternative architectural features such as word size, instruction sets, addressing modes. (Crosslisted as COSC 30253/ENGR 30573.)

COSC 30353 - Microprocessor Based Digital Systems (3)
Prerequisite: COSC 30253. Introduction to the design of microprocessor based digital systems including the study of processor control signals, address decoding and memory interfacing, interfacing to serial and parallel ports, A/D conversion, and interrupt processing. Features of state-of-the-art microprocessors will be discussed. Both hardware and software assignments will be required. (Crosslisted as COSC 30353/ENGR 30583.)

## COSC 30403 - Programming Language Concepts (3)

Prerequisite: COSC 20803. A study and comparison of the concepts and constructs of major programming language paradigms. Topics include evolution of programming languages, formal definition (syntax and semantics), data types, scope, subprograms, data abstraction. Students will review a published paper in the area of programming languages. Lab assignments are given in languages selected to illustrate paradigms.

## COSC 30453 - Computer Architecture (3)

Prerequisite: COSC 30253. The logical organization and functional behavior of digital computers are studied. Fundamental principles in the design of the CPU, memory, I/O devices, and bus structures are presented. Performance enhancement topics such as caching, memory interleaving, interconnection schemes, pipelining, memory management, reduced instruction sets (RISC) and multiprocessing are discussed. (Crosslisted as COSC 30453/ENGR 30593.)

COSC 30503 - Systems Programming (3)
Prerequisite: COSC 20203. An overview of the UNIX operating system focused on command-line and server interfaces. An introduction to the $\mathrm{C} / \mathrm{C}++$ programming language, UNIX commands, shell programming, process management, memory management, I/O, network communication, and systems programming in $\mathrm{C} / \mathrm{C}++$ with low-level kernel calls.

## COSC 30603 - Database Systems (3)

Prerequisite: COSC 20803, and MATH 20123. Introduction to the design, implementation, and use of relational database systems. Topics include entity-relationship modeling, relational algebra, normalization, SQL, external data structures, query optimization, non-relational models, and applications.
COSC 30703 - ADA Software Development and Programming (3)
Prerequisite: COSC 20803. Introduction to the problems associated with the development of large software systems and the features of the Ada programming language that can be used to attack many of these problems. Emphasis will be on those features of Ada that distinguish it from most other programming languages including the use of packages, formal specifications of interfaces, use of private types, operator overloading, tasking, representation clauses, exception handlers, and generics.

## COSC 30803 - Simulation Techniques (3)

Prerequisites: COSC 20803. Discrete event simulation programming and analysis techniques for simulation experiments. Includes experimental sampling and model development in a special purpose simulation language.
COSC 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## COSC 40003 - Computer Networks (3)

Prerequisite: COSC 30203. Introduction to basic data communications concepts, including hardware and software aspects of protocols, asynchronous and synchronous communication, network configurations, and error detection. This course includes the study of both local area networks and long haul networks, the 7 layer ISO network model, the architecture of networks, and network communication protocols. Local and wide area networks including the internet and world wide web will be discussed.
COSC 40023 - Data Mining and Visualization (3)
Prerequisites: MATH 10283 or MATH 10524, and MATH 10043 or MATH 30853, and COSC 30603. Students will study the principles and practices of data mining. Both descriptive (i.e. profiling, classification, association, and clustering) and prescriptive (i.e. prediction, regression, and estimation) algorithms will be studied to obtain and analyze patterns in large datasets. In addition, students will study the importance of applying data visualization practices to facilitate exploratory data analysis.

## COSC 40033 - Wireless Networks and Security (3)

Prerequisites: COSC 30203 or CITE 30103. This course will cover the fundamental principles, architectures, and standards of modern wireless communications systems, as well as specific applications and uses of these systems.
COSC 40053 - Computer and Network Security (3)
Prerequisites: MATH 20123, and COSC 30203 or CITE 30103. This course will cover the fundamental principles in computer systems and network security. Key topics will include security architectures, standards and protocols, cryptographic systems, and security related software tools.

## COSC 40103 - Graphics (3)

Prerequisites: COSC 30253 and a knowledge of linear algebra MATH 30224. A basic course in graphics systems. Considers the equations of lines, planes, and surfaces; hidden line algorithms; rotations, scaling, and cutaway transformations; 3-D images and the use of shading and perspective; animation; and color graphics.
COSC 40203 - Operating Systems (3)
Prerequisites: COSC 30253. Introduction to operating systems concepts, principles, and design. Topics include: processes and threads, CPU scheduling, mutual exclusion and synchronization, deadlock, memory management, file systems, security and protection, networking, and distributed systems. Selected existing operating systems are discussed, compared, and contrasted.

## COSC 40303 - Image Processing Fundamentals (3)

Prerequisites: MATH 10524 and COSC 10403 or 10503, and either COSC 20803 or ENGR 40574. The study and practice of the principles, the algorithms and the techniques of image processing such as editing, analysis, segmentation, recognition and classification. Students will use Java to implement and test various image processing algorithms.

COSC 40403 - Analysis of Algorithms (3)
Prerequisites: COSC 20803, MATH 30123, and a knowledge of probability and statistics. Topics concerning what can and cannot be proven about computational complexity, including algorithm design methodology, techniques for analysis of space and time requirements, and P and NP completeness.

## COSC 40503 - Artificial Intelligence (3)

Prerequisite: COSC 30603. Introduction to knowledge representation and methods for intelligent search. Fundamental topics include state space search, logic, and inference engines. Al languages Prolog, Lisp, and Clips will be used to explore additional topics selected from two-person games, expert systems, automated theorem proving, planning, and machine learning.

## COSC 40603 - Compiler Theory (3)

Prerequisites: COSC 30203, COSC 30403, and MATH 30123. Formal description of algorithmic languages, such as Pascal, and the techniques used in writing compilers for such. Topics include syntax, semantics, storage allocation, code generation, error handling and diagnostics, code optimization, etc. Includes the definition and writing of a compiler for a simple programming language.

COSC 40703 - High Performance and Parallel Computing (3)
Prerequisites: COSC 40203. An introduction to hardware and software topics in high performance and parallel computing. Students will be introduced to a variety of high performance and parallel computing paradigms including message passing, threading models, and shared-memory programming techniques. Topics include motivation and history, parallel architectures, parallel algorithm design, and parallel performance analysis.

## COSC 40803 - Advanced Topics in Computer Hardware (3)

Prerequisite: Permission of instructor. Advanced topics of current interest in computer hardware, such as computer design, computer networks, advanced computer graphics. Students will study current literature. May be repeated for credit when topic changes.

## COSC 40903 - Advanced Topics in Computer Software (3)

Prerequisite: Permission of instructor. Advanced topics of current interest in computer software, such as natural language programming, advanced operating systems, advanced compiler design, file structures, advanced database. Students will study current literature. May be repeated for credit when topic changes.

## COSC 40943 - Software Engineering (3)

Prerequisite: COSC 30603 or concurrent enrollment and senior standing in COSC or CITE (24 hours in the major.) Stages of the software development lifecycle (requirements analysis, specification, design, implementation, testing), evolution, and quality assurance. Classical and alternative process models and techniques are described and discussed. Management issues, professional responsibilities, and ethics of the profession are covered. Includes team projects and individual requirements analysis effort.

## COSC 40993 - Senior Design Project (3)

Prerequisite: COSC 40943. Senior computer science majors are required to demonstrate their mastery of several computer science topics and their ability to communicate the results of their efforts to others. They are required to identify and analyze a computer science problem, develop and implement a workable solution to the problem, and then document the results of their efforts.

## COSC 50123 - Object-Oriented Design and Programming (3)

Prerequisite: COSC 30403 or permission of instructor. Introduction to objectoriented techniques including design methodologies and programming language support. Survey of new languages and extensions to existing languages which provide support for encapsulation, inheritance, and polymorphism.

## COSC 50133 - Formal Languages (3)

Prerequisites: COSC 40603. Languages and grammars which can be characterized in formal terms, for the purpose of constructing models for artificial (computer) Ianguages. Topics will include finite automata, push down automata, Turing machines, solvable and unsolvable problems, etc.

COSC 50970 - Special Topics in Computer Science (1.00-20.00)
Prerequisite: Permission of instructor. (1-6 semester hours).

## COSD-Comm-Sciences-Disorders

## COSD 10303 - Survey of Communication Disorders (3)

Survey of disorders of articulation, language, stuttering, voice and hearing.

## COSD 10343 - Basic Sign Language (3)

An introductory course in signing expressively and understanding basic sign language, receptively. Included is basic information on hearing loss and its effects on children and adults. Recommended for students majoring in special education and service-oriented fields.

## COSD 20303 - Speech and HearingScience

An introduction to acoustic and physiological aspects of the speech and hearing mechanisms.

## COSD 20313 - Voice and Articulation Improvement (3)

Practical application of techniques for articulation, pronunciation, and efficient voice production for effective speech. Emphasis on acceptable standards of speech for students preparing for professional careers.

COSD 20324 - Clinical Methods in Speech-Language Pathology (4) Prerequisite: COSD 10303, 20333, and 30333, with a grade of C or higher in all COSD coursework, cumulative GPA of at least 3.00 , and a cumulative 3.00 GPA in COSD courses or permission of instructor. Principles and procedures in the assessment and treatment of communication disorders.

COSD 20333 - Phonetics (3)

Required of all majors and elective to others. Emphasis on speech perception and sound discrimination. Intensive work in transcription using the International Phonetic Alphabet.

## COSD 20343 - Intermediate Sign Language (3)

Prerequisite: COSD 10343 with a grade of $C$ or higher or permission of instructor. Further development and refinement of receptive and expressive skills in Signed English and American Sign Language. Emphasis on vocabulary development for classroom use, ability to sign fluently, and the psycho-social aspects of deafness, including the sociolinguistics of sign language.
COSD 20353 - Neurological Substrates of Communication and Swallowing
This course will focus on the structure and function of the central and peripheral nervous systems in relation to normal and disordered communication and swallowing. Nervous system anatomy and physiology will be studied within the context of how structures, pathways, and systems support speech, language, cognition, hearing and swallowing.
COSD 20363 - Evidence-Based Practice in Communication Sciences and Disorders (3)
This course will focus on identifying the fundamental concepts related to scientific inquiry in communication sciences and disorders to allow students to become critical readers of peer-reviewed journal articles. The course will consider identification of research literature relevant to a specific topic or disorder, basic concepts involved in the formulation of research questions and methodology, and levels of research evidence available to audiologists and speech language pathologists.

COSD 20503 - Anatomy and Physiology of the Speech and Hearing Mechanisms (3)
Structure and function of the normal mechanisms required for speech and hearing.

## COSD 30003 - Junior Honors Seminar (3)

Prerequisite: Junior standing and membership in the Honors Program. Under the guidance and supervision of a faculty member, current issues in communication sciences and disorders are explored.

COSD 30303 - Anatomy and Physiology of the Speech and Hearing Mechanisms (3)
Structure and function of the normal mechanisms required for speech and hearing.

## COSD 30324 - Speech Sound Disorders (4)

Prerequisites: COSD 10303 and 20333, with a grade of $C$ or higher in all COSD coursework, cumulative GPA of at least 3.00, and a cumulative 3.00 GPA in COSD courses or permission of instructor. Basic principles of diagnosis and treatment for individuals with developmental or functional speech sound disorders of articulation.
COSD 30334 - Language Development in Children (4)
Normal acquisition and development of language in children from infancy through adolescence.

## COSD 30343 - Aural Rehabilitation (3)

Prerequisite: COSD 30363 with a grade of C or higher in all COSD coursework, cumulative GPA of at least 3.00 , and a cumulative 3.00 GPA in COSD courses. Overview of management and rehabilitation of persons with hearing loss.
Focus on amplification, cochlear implants, assistive devices, speech training, speech reading, auditory training and language development.

COSD 30353 - Teaching Elementary School Subjects to DHH Children (3)
Prerequisite: Permission of instructor. Curriculum materials and teaching methods for meeting specialized needs of DHH children, in the learning of reading and developing concepts and relationships in arithmetic and science.

## COSD 30363 - Audiology (3)

Prerequisite: COSD 20303 and 30303 , both with a grade of C or higher. Basic audiometric techniques and interpretation of audiograms as related to problems of communication of persons with hearing loss.

COSD 30373 - Language Disorders in Children (3)
Prerequisite: COSD 30333 with a grade of C or higher in all COSD coursework, cumulative GPA of a least 3.00 , and a cumulative 3.00 GPA in COSD courses. Introduction to the causes, characteristics, assessment and treatment of children with language disorders.

COSD 30383 - American Sign Language I (3)

Prerequisite: COSD 10343 or permission of the instructor. An introductory course in American Sign Language ASL which will introduce students to the grammatical aspects of ASL, inclusive of receptive and expressive signing skills with laboratory practice. Recommended for students in special education and service related fields of study.

## COSD 30393 - Language Development of DHH (3)

Prerequisite: COSD 30333 with a grade of C or higher, or permission of instructor. Principles of language development as applied to DHH students; survey of principal methods in use; methods used in beginning language development with young DHH children.

## COSD 30970 - Independent Study (1.00-6.00)

Prerequisite: Permission of instructor. Independent study of specially designed topics not addressed in regular course offerings. 1-6 hours, 3 hours maximum per semester.

## COSD 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## COSD 40003 - Senior Honors Research Project (3)

Prerequisite: COSD 30003, with a grade of C or higher, senior standing, and membership in the Honors Program. The completion of a research project related to a current issue in normal and/or disordered communication.

## COSD 40300 - Clinical Practicum in Speech-Language Pathology I (1.00-

 20.00)Prerequisite: COSD 20323, 30323, 30373, all with a grade of C or higher, senior standing, a cumulative TCU GPA of 3.0 or higher, MATH 10043, one physical science course, one social/behavioral science course and biological sciences, and permission of instructor. One semester is required. Supervised clinical experiences in the management of speech and language disorders.

## COSD 40323 - Advanced Language Development for DHH (3)

Prerequisite: COSD 30393 with a grade of C or higher, or permission of instructor. Language principles and usage for intermediate and advanced levels with the deaf and hard of hearing.

## COSD 40333 - Teaching Spoken Language to Persons with Hearing Loss

 (3)Prerequisite: COSD 30363 with a grade of C or higher or permission of instructor. Development of spoken languages, including articulation, prosody, and voice production for children and adults with hearing loss.

COSD 40340 - Clinical Practicum in Teaching DHH Students I (1.00-6.00) Prerequisite: COSD 30393 and 40333, both with a grade of $C$ or higher , a cumulative TCU GPA of 2.5 or higher, and permission of instructor. A minimum of two semesters required. Observation and supervised clinical teaching of DHH children and adults in an individual setting.
COSD 40350 - Clinical Practicum in Teaching DHH Students II (1.0020.00)

Prerequisite: COSD 40340 with a grade of $C$ or higher and a cumulative TCU GPA of 2.5 or higher. Students must be recommended for enrollment by COSD faculty. Observation and supervised clinical teaching of DHH students.

COSD 40353 - Neurological Substrates of Communication and Swallowing (3)
This course will focus on the structure and function of the central and peripheral nervous systems in relation to normal and disordered communication and swallowing. Nervous system anatomy and physiology will be studied within the context of how structures, pathways, and systems support speech, language, cognition, hearing and swallowing.

## COSD 40383 - American Sign Language II (3)

Prerequisite: COSD 30383 with a grade of C or higher, or permission of the instructor. This course is a continuation of the ASL I COSD 30383 with emphasis on deaf cultural aspects and the grammatical structure of ASL. This course utilizes extensive sign productions. Recommended for students in special education and service-related fields of study.

COSD 50300 - Clinical Practicum in Speech-Language Pathology II (1.006.00)

Prerequisite: COSD 40300 with a grade of C or higher, senior standing, and a cumulative TCU GPA of 3.0 or higher, MATH 10043, one physical science course, one social/behavioral science course and biological sciences. Student must be recommended for enrollment by COSD faculty. A minimum
of one semester required for undergraduate students. Supervised clinical experience in management of the most common speech and language disorders.

COSD 50323 - Counseling Special Populations and Their Families (3) Prerequisite: Senior or graduate standing. Theories, principles and practices in counseling special populations and their families with a focus on the communicatively impaired. Appropriate counseling strategies and techniques are explored with practical application experiences included.
COSD 50342 - Advanced Aural Rehabilitation (2)
Prerequisite: Senior standing and COSD 30343 and 30363, both with a grade of C or higher, or graduate standing, or permission of instructor. Theories of assessment and intervention in identification and aural rehabilitation of hearing-impaired and deaf children and adults. Includes methods of evaluation and training in the areas of audition, amplification, speech, language, speech-reading, assistive listening devices, cochlear implants, and communication modes and strategies.

COSD 50350 - Clinical Practicum in Audiology (1.00-3.00)
Prerequisites: Senior or graduate standing. Students must be recommended for enrollment by the Communication Disorders CD faculty. Such recommendations are based on the student's: 1) performance in COSD coursework with a grade of $C^{\prime \prime}$ or better expected in all COSD courses; and 2) previous clinical experience and performance with students expected to complete two semesters of COSD 40300 with a grade of " C " or better. A laboratory course in basic audiological testing techniques involving assessments and evaluation of the hearing function. 1-3 semester hours."

## COSD 50363 - Seminar on Stuttering (3)

Prerequisite: Senior (with permission of instructor) or graduate standing. A study of fluency development and breakdown in children and adults. Descriptions and development of speech fluency, onset and development of stuttering, characteristics of stuttering and people who stutter and theories of stuttering are reviewed.

## COSD 50383 - Voice and Resonance (3)

Prerequisite: Senior (with permission of instructor) or graduate standing. A study of theories, classification systems and etiologies, with emphasis on respiration, phonation, resonance and articulation factors as they relate to disorders of voice, resonance and compensatory articulation.

COSD 50413 - Advanced Speech Sound Disorders (3)
Prerequisite: Graduate standing. A study of theories, diagnostic materials, etiologies, and intervention models with emphasis on the phonological productions of children with highly unintelligible speech, childhood apraxia or speech, and mild-moderate articulation errors.
COSD 50850 - China: Global Perspectives on Communication Health (1.00-6.00)

Prerequisite: COSD 10303. This course will enhance students' global perspectives about communication health in a culture strikingly different from the US. Specifically, students will increase their understanding of the nature and treatment of communication disorders in China. Students will be exposed to the unique delivery of speech language pathology services in a country where there are very few established degree granting programs in a country of 1.33 billion people (Liu, 2014).

COSD 50860-COSD Study Abroad - Scotland, England, and Ireland (1.00-20.00)

Prerequisite: COSD 10303. The course will look at the practice of SpeechLanguage Pathology in Ireland, Scotland and Great Britain. Students will visit numerous sites throughout these countries and compare/contrast the practices at these facilities to the United States. Additionally, cultural and semantic differences will be observed and discussed.

COSD 50870 - COSD Study Abroad - Australia (1.00-20.00)
Prerequisites: permission of instructor(s) and meeting criteria, established by the TCU Center for International Studies. The purpose of this course is to increase students' knowledge of and skills in evidence-based clinical practice (EBP) in the field of speech-language pathology. Course content includes background learning in preparation for study abroad followed by travel to Sydney, Australia and Christchurch and Wellington, New Zealand. Students will visit universities and a variety of practice sites conducting and implementing EBP with children and adults with communication disorders. Students must meet the criteria established by the TCU Center for International Studies as well as departmental requirements.

COSD 50970 - Directed Studies in Communication Disorders (1.00-6.00)
Prerequisites: Senior or graduate standing; permission of instructor. Directed study focusing on specialized topic in communication sciences and disorders. (1-6 semester hours.)

## CRJ U - Criminal Justice

## CRJU 20123 - Career Planning, Ethics, and Professional Development in

 Criminal Justice (3)Prerequisites: Must be a CRJU major or minor. An exploration of career planning strategies and resources designed to prepare students for effective job searches and overall professional and career development. Students will apply research and evaluation skills with regard to job search and career advancement approaches. Among the topics addressed in the course are: ethics, report writing and other forms of communication, interviewing, resume preparation, networking, and public speaking.

## CRJU 20413 - Introduction to Criminal Justice (3)

An examination of the history, theory, and structure of the criminal justice system in the United States, with an emphasis on the various components of the criminal justice process including police, the courts, corrections.

## CRJU 20423 - Critical Issues in Crime and J ustice (3)

An examination of the major controversies and issues confronting the criminal justice system. Emphasis is on development of critical thinking skills and their application to justice-related problems.

CRJU 20873 - Criminal J ustice Research Methods I (3)
An introduction to criminal justice research procedures.
CRJU 20883 - Criminal J ustice Research Methods II (3)
An introduction to criminal justice research procedures, with emphasis on the analysis and interpretation of data.

## CRJU 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## CRJU 30003 - Honors in Criminal Justice (3)

For Honors students and other selected superior students with permission of the Chair of the Criminal Justice Department. Studies, reports, and discussions of the literature of criminal justice. Examination of significant problems and trends.
CRJU 30223 - Contemporary Topics in Criminal J ustice (3)
An examination of topics of current interest in crime and justice. Topics change, therefore this course may be taken more than once.
CRJU 30233 - Sustainability: Environmental, Social \& Economic Issues (3) The purpose of this course is to introduce students to the concept of sustainability from a multidisciplinary perspective. Sustainability includes a focus on the environment, social justice issues, and economic development that provides the basic needs for sustaining an acceptable quality of life. A focus on the global implications will be stressed and students will explore the connections between sustainability and citizenship and social values.

## CRJU 30313 - Criminology (3)

Prerequisite: An examination of sociological and criminological theories of crime, criminality, and crime control. (Offered as CRJU or SOCl credit.)

## CRJU 30323 - Cultural Criminology (3)

This course offers an overview of the field of cultural criminology, from its theoretical and historical foundations to its current developments. The course explores the various intersections of culture, crime, and crime control, including criminal subcultures, crime and consumer culture, crime as pleasure and performance, and crime and crime control as public display. (Offered as CRJU or SOCl credit.)

## CRJU 30393 - Sociology of Corrections (3)

An examination of correctional agencies and programs, including the social structure of prisons and its impact on the offender, deterrent and treatment effects of correctional practices, probation and parole, and an examination of various experiments in institutional and community based corrections. (Offered as CRJU or SOCl credit.)

## CRJU 30423 - Courts and Judicial Process (3)

An examination of the American court system. Special topics will include a comparison of state and federal court systems, socialization processes within the legal profession, and an evaluation of the impact of politics on the judicial process.
CRJU 30433 - Criminal Law (3)

Prerequisites: CRJU 20413. An examination of the major issues in criminal law and procedure emphasizing the basic elements of crime, search and seizure, interrogation, right to counsel, evidentiary concepts, pretrial release, and the appeals process.

## CRJ U 30443 - Cyber Law

Prerequisites: CRJU 20413. An introduction to legal issues in the Internet environment. Sociological and criminological perspectives are used to examine the challenges that the American legal system today faces in this new crime environment.

## CRJU 30453 - Juvenile Justice (3)

An examination of the law in relation to juvenile delinquency and the administration of the juvenile justice system. The historical development of the concept of delinquency, the special status of juveniles before the law, and juvenile justice procedural law are amond the topics covered.

## CRJU 30523 - Crime Scene Investigation (3)

An introduction to the recognition, collection and evaluation of physical evidence arising from a crime or suspicious incident, concentrating on the various techniques of crime scene investigation including crime scene search, note-taking, sketching, photography, and preservation of evidence.

CRJ U 30533 - Social Work in the Criminal Justice System (3) Prerequisites: SOWO 10833 or permission of instructor. An examination of theories and methods of professional intervention with emphasis on those professionals with clients in the criminal justice system. Focus is on the development of skills that can be applied to individuals, families, and groups in both community-based and institutional settings. This course is primarily for Criminal Justice and Social Work majors and minors. (May be offered as CRJU or SOWO credit.)

## CRJ U 30543 - Criminalistics (3)

An examination of the various techniques and instruments used to analyze organic and non-organic evidence obtained from crime scenes, with an examination of techniques such as DNA analysis.

## CRJU 30613 - Police in a Free Society (3)

An examination of the organization and administration of law enforcement agencies, the function of police, police discretion, ethics, police-community relations, and the future of policing in American society.

## CRJU 30623 - Policing Cyberspace (3)

Prerequisite: CRJU 20413. An introduction to policing on the Internet environment. Sociological and criminological perspectives are used to examine the challenges that law enforcement faces today in this new crime environment. Contemporary cybercrime issues are discussed and new forms of public-private policing models are explored.

## CRJU 30633 - Federal Law Enforcement (3)

An examination of the history and development of federal law enforcement in the United States, the current make-up and jurisdictions of various federal law enforcement agencies, the role of federal government in homeland security efforts, and career opportunities within the federal law enforcement community.

## CRJU 30643 - Community Corrections (3)

An examination of the role of the community in the reintegration of offenders, with a focus on correctional programs designed to be administered in a community setting, including probation, parole, halfway houses, restitution, and community service.

## CRJU 30703 - Crime Mapping (3)

An exploration of the many ways Geographical Information Systems (GIS) technology is used for crime mapping and crime pattern analysis. The course provides a general overview of crime mapping techniques, including their theoretical background, application, trends and future directions. The course has an integrated lab component that is designed to introduce the student to the spatial data entry, geocoding, handling, and analyses capabilities of the GIS industry standard software application ArcGIS.

## CRJU 30803 - Victimology (3)

An examination of the major aspects of victimology. Topics include the historical role of victims, the nature of victimization in modern America, the victimization experience, legal aspects of victimization, victimization and the political process, solutions to victimization, and the future of victims' rights and victimology. (Offered as CRJU or SOCI credit.)

## CRJU 30813 - Sex Crimes (3)

A critical examination of sexual offending from psychological, sociological, and criminological perspectives. Emphasis is placed on theories of the etiology of sexual offending, historical perspectives on offending, measuring
the incidence and prevalence of sex crimes, sex offender legislation and criminal justice responses, correctional treatments for sex offenders, effects on and treatment of victims, and monitoring and prevention of sex crimes.

## CRJU 30823 - Criminal Violence (3)

An examination of the various types of criminal violence and the criminal justice system's responses to it. Discussion topics include domestic violence, mass murder, serial killing, riots, and gang violence.

CRJU 30853 - Multiculturalism in the Criminal J ustice System (3)
An examination of current issues and social problems relating to criminal justice in a culturally diverse society. Emphasis is placed on recognition of diversity and tolerance on behalf of criminal justice professionals.

CRJU 30883 - Crime and Justice in Scandinavia (3)
This course is an examination of crime and justice in Scandinavian countries, including: Norway, Sweden, and Denmark. The course will adopt a criminological and cultural perspective in studying crime, criminal justice policy, and the criminal justice system in Scandinavia. Lectures, assigned readings, field trips, guest speakers, and other cultural events are included to expand the global awareness and responsibility of students. Further, students will examine and articulate the rights and responsibilities of individuals and groups in various political/social contexts in their development of critical thinking skills.

## CRJU 30893 - Comparative Criminology in Scandinavia (3)

This course is an examination of the major similarities and differences between the American experience of crime and justice and that of the Scandinavian countries: including Norway, Sweden, and Denmark. The course will adopt a criminological and cultural perspective in trying to identify differences between the countries and how these differences lead to distinctions in criminal justice policy and process. Specific topics include but are not limited to: policing, drug policy, prostitution, incarceration and corrections, crime rates, and the judicial process. As an anticipated outcome students will demonstrate a capacity for a more global perspective of criminology and criminal justice.:

## CRJU 30903 - Law and Society (3)

An examination of the relationship between legal institutions and social processes. Topics include the nature of law, historical evolution of legal systems, creation and organization of law in modern societies, social functions of law, and limits of law as an instrument of social control. (Offered as CRJ U or SOCI credit.)

## CRJU 30913 - Social Psychology of Crime (3)

Prerequisite: CRJU 20413, SOCI 20213 or PSYC 10213 or equivalent. An examination of the social psychological theories and research relevant for understanding criminal behavior. Topics include societal and victim responses to crime.

## CRJU 30923-Organized Crime (3)

An examination of organized crime including its relationship to social structure, its historical development through groups such as the Italian/Sicilian Mafia, the extent and impact of modern and nontraditional organized crime syndicates, and prospects for its control.

## CRJU 30933 - Crime and the Media (3)

An examination of the effects that the media have on the perception of crime, including discussion of the social construction of many myths that surround crime and criminal justice.

CRJ U 30943 - Japan: Heritage, Culture, and Globalization (3) An overview of Japanese history and major cultural traditions. Japanese society will be looked at from its origins through the Tokugawa period and onto modern Japan. Religious traditions and cultural perspectives will be highlighted. Additionally, the place of modern Japan in the global community will be examined.
CRJU 30953 - Japan: Crime, Criminal Justice and Social Problems (3) An overview of the functioning of the Japanese policing, court, and correctional systems. In addition, both Japanese street crime and organized crime will be examined with special emphasis on the organization and history of the J apanese Yakuza. Further, the course will examine the realities of a myriad of social problems in Japanese society both as individual issues and as causes/effects of criminality. These topics include but are not limited to issues of poverty, urbanization, drug use and family structure stresses.

CRJU 30963 - Japan: Environment, Technology, and Sustainability (3) An overview of Japan's perspectives on and efforts toward sustainability in relation to the environment and economic/technological growth. Issues of mass transportation, energy production, green architecture, and farming/fishing will be addressed. In addition the place of sustainability as a
philosophical dovetail to J apanese religious and cultural traditions will be highlighted.

## CRJU 30973 - Victimless Crime (3)

An examination of victimless crime highlighting its social control and social construction. Specific topics include gambling, prostitution, drug and alcohol use, and pornography.

CRJU 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## CRJU 31293 - White-Collar Crime

This course examines white-collar crime using a theoretical and practical approach. Difficulties defining, identifying, and enforcing white-collar crimes will be emphasized by drawing from empirical research. The law and society theoretical framework will be used to examine societal perceptions and responses to white-collar criminals, paying particular attention towards systemic treatment of race and class in the American criminal justice and legal systems as well as society.
CRJU 32990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.
CRJ U 40003 - Senior Honors Paper in Criminal J ustice (3)
For Honors students obtaining a B.S. in Criminal Justice. A research study and paper, under faculty direction, in some area of criminal justice.

## CRJU 40403 - Cyber Crime (3)

An examination of cyber and high-tech crime addressed from a criminological perspective. Emphasis is placed on the nature, scope, and development of this relatively new crime problem. Special attention is given to the victims and perpetrators of the various types of cyber crime. The challenges cyber crime poses to researchers and law enforcement are addressed.

## CRJU 40463 - Juvenile Delinquency (3)

An examination of the causes, treatment, and prevention of delinquency, with particular focus on the relationships between juveniles, clinics, and the court, and the philosophical, historical, and traditional foundations of juvenile law. (Offered as CRJU or SOCl credit.)
CRJU 40503 - White Collar Crime (3)
An examination of the various aspects and dimensions of white collar crime. Emphasis is placed on the nature, extent, and costs of white collar crime, with special attention to the social structural and organizational forces which give rise to such crimes.

## CRJU 40613 - Terrorism and Homeland Security (3)

Examination of current issues and social problemsrelating to terrorism and homeland security. Emphasis is placed on recognizing and responding to terrorist threats with respect to individual rights and security.

CRJU 40903 - Ethics in Criminal Justice (3)
Prerequisite: CRJU 20413. An examination of the major value dilemmas confronting practitioners and professionals in the criminal justice system. Particular focus is on police conduct, courtroom conduct, and correctional professionals' conduct.

## CRJU 40963 - Internship in Criminal J ustice (3)

Prerequisite: Permission of Criminal Justice Internship Director. Students serve for a minimum of 125 hours per semester as participant-observers in a local criminal justice agency. Students submit weekly verified report on hours worked to the Internship Director, who meets with all interns in a seminar discussion of internship problems and activities on a regular basis. Each student will submit a final written report and evaluation.
CRJU 40970 - Independent Study in Criminal J ustice (1.00-6.00) A specific program of study that must be approved by the Director of the Criminal Justice Program prior to enrollment in this course. Independent studies may be taken for credit ranging from 1 to 6 semester hours depending on the project undertaken.

## DANC-Classical-Contemporary-Dance

## DANC 10211 - Bodywork I (1)

Prerequisites: Dance major or permission of instructor. This course is the first in a series of bodywork courses. It provides foundational information and experiences regarding alignment and conditioning for dancers with a focus on patterning effective habits, and dancing efficiently and safely. Students will participate in a variety of bodywork methods with focus on basic principles.
DANC 10221 - Bodywork II (1)
Prerequisites: Dance major or permission of instructor. This intermediate level course is the second in a series of bodywork courses. Course content builds on information and experiences regarding alignment and conditioning for dancers from DANC 10211, Bodywork I.

## DANC 10300 - Dance Production Practicum I (0.5)

Prerequisites: Dance major or permission of instructor. Practical experience in all facets of dance production related to departmental presentations. (Maximum of 5 credit hour per semester. Course may be repeated for a maximum of 3 credit hours.) (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## DANC 10302 - Music for Dancers (2)

Prerequisite: Dance major or permission of instructor. This course will provide dancers with a basic understanding of music theory and structure. Students will have practical experience working with musicians (composers and accompanists) as applied to dance.

## DANC 10311 - Career Preparation I (1)

Prerequisite: Dance majors. This course will introduce freshman dance majors to specific information relevant to their development as students, dancers and artists. Topics covered include careers in dance, ballet terminology, resume formatting, dance technology, audition practices, stage make-up, nutrition, and resource building.

## DANC 10312 - Improvisation (2)

Prerequisite: Concurrent enrollment in Ballet and/or Modern Dance Technique or permission of the instructor. This course focuses on improvisation as a dance form; a means of developing movement in the moment that fuses the role of creator and performer. Various approaches to improvisation will be presented and explored, including improv as a tool for dance composition. Students will acquire basic skills for critical response and analysis.

## DANC 10331 - International Dance Forms (1)

This course provides studio practice of an international dance form. Various dance forms will be offered and will be designated with a descriptive course title. Course may be repeated for credit.

## DANC 10341 - The Working Body (1)

Prerequisite: Dance major or permission of instructor. Approaches to healthful and efficient movement through topics including structure, alignment and conditioning particularly appropriate to the aspiring professional dancer.

DANC 10411 - Beginning Ballet for General Students (1)
Beginning ballet for general students. Introduction to theory and practice of classical ballet for general students. (Course may be repeated.) (This course is only offered as P/NC.)

DANC 10413 - Intermediate Ballet Technique for General Students (3)
Prerequisites: Placement audition and/or permission of instructor required. Study and practice of classical ballet technique for general students at the intermediate level. (Course may be repeated.)
DANC 10421 - Beginning Modern Dance for General Students (1)
Introduction to theory and practice of modern dance for general students. (Course may be repeated.) (This course is only offered as P/NC.)
DANC 10423 - Intermediate Modern Dance for General Students (3) Prerequisite: Placement audition and/or permission of instructor required. Study and practice of modern dance technique for general students at the intermediate level. (Course may be repeated.)

## DANC $\mathbf{1 0 4 3 0}$ - Social Dance (1)

This course is the study of various Social Dance styles. The styles offered each semester will vary. Classes include basic movement patterns, technique, elements of style, lead and follow (as applicable), and dance etiquette. Course content will be drawn from ballroom or other partner dance styles including circle dances, line dances, and club dances. Course may be repeated. ( $1-2$ credit hours.)

DANC 10432 - Character Dance (2)
Introduction to character dances selected from a variety of classical ballets designed to develop character dance technique and musicality.

## DANC 10453 - Dance in World Cultures (3)

Historical and critical examination of dance as a fundamental human expression present across world cultures.

DANC 20100 - Classical Ballet Technique Level I (.50-2.50)
Prerequisite: Dance Major status or permission of instructor. Training in theory and practice of classical ballet at the high beginner/low intermediate level. (.5-2.5 hours maximum per semester. Course may be repeated for credit)

## DANC 20130 - Directed Studies in Ballet (.50-3.00)

Prerequisites: Dance majors only or permission of instructor. Independent project supervised by faculty. (0.5-3 credit hours per course.) May be repeated for credit.

## DANC 20200 - Modern Dance Technique Level I (1.00-3.00)

Prerequisite: Dance major. Training, theory and practice of modern dance (classical and/or contemporary forms.) at the high beginner/intermediate level. (.5-3 hours maximum per semester, 9 hours maximum.)

## DANC 20211 - Bodywork III (1)

Prerequisites: Dance major or permission of instructor. This intermediate/advanced level course is the third in a series of bodywork courses. Course content builds on information and experiences regarding alignment and conditioning for dancers from DANC 10221, Bodywork II.

## DANC 20221 - Bodywork IV (1)

Prerequisites: Dance major or permission of instructor. This course is the fourth in a series of bodywork courses that provides information and experiences regarding alignment, conditioning, re-patterning, efficient and safe movement. Students will participate in a variety of bodywork methods building on basic principles learned from DANC 20211, Bodywork III.

DANC 20230 - Directed Studies in Modern Dance (.50-3.00)
Prerequisites: Dance major or permission of instructor. Independent project supervised by faculty. (.5-3 semester hours per course.) May be repeated for credit.

DANC 20262 - Contact Improvisation (2)
Prerequisites: DANC 10312 or permission of instructor. This course explores contact improvisation as a duet form grounded in the principles of weight sharing, gravity and momentum. Dancers will work together to hone improvisational skills that include heightened awareness and partnering work that requires commitment, responsiveness, and immediacy.

## DANC 20300 - DanceTCU I(0.5)

Prerequisite: Dance major permission of instructor. This course is a performance course. Students earn the opportunity - via audition - to perform in either a faculty or guest artist work. Through the performance experience, students utilize dance technique and artistry developed in ballet and modern dance courses. This course may be repeated for credit for 1-8 hours, .5 credit hour per semester ( 1.5 hours minimum required for dance majors.)

## DANC 20303 - Functional Anatomy (3)

Prerequisites: Dance major or permission of instructor. This course presents the various scientific tools of movement analysis that support and facilitate the work of the dancer and choreographer. Particular emphasis will be put on the qualitative differences in dance performance and the relationship between scientific and aesthetic aspects of movement. Methodologies in this course will be lecture with integrated lab.
DANC 20322 - Choreography I: Elements of Dance Composition (2)
Prerequisite: DANC 10312, and concurrent enrollment in a Ballet and/or Modern Dance technique class, or permission of instructor. Introduction to the craft of choreography. Students are introduced to the elements of dance movement and basic compositional theories, create choreographic studies and engage in critical analysis.

## DANC 20333 - Dance Production (3)

Prerequisites: Dance major or permission of instructor. Dance Production is an introduction to design and production for dance. This course provides broad exposure to design and production with emphasis on their relationship to dance performance. It is a survey of production areas including basic visual design, scenery and costumes, lighting, sound, and video. It also provides an introduction to the mechanics of the tools, lighting instruments, control consoles, sound systems, video projectors, and other technology used in live performance.

DANC 20442 - Jazz Dance I (2)
Study of Jazz Dance techniques. Classes include warm-up, strengthening exercises and progressions. Course content will be drawn from lyrical, contemporary musical theatre and hip-hop styles.
DANC 20452 - Jazz Dance II (2)
Study of Jazz Dance techniques. Classes include warm-up, strengthening exercises and progressions. Course content will be drawn from among lyrical, contemporary musical theatre and hip-hop styles.

DANC 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

DANC 30100 - Classical Ballet Technique and Artistry Level II (.50-2.50)
Prerequisites: Dance Major status or permission of instructor. Training in the theory and practice of Classical Ballet at the low intermediate/intermediate level. (.5-2.5 hours maximum per semester, course may be repeated for credit.)

## DANC 30110 - Pointe (0.5)

Prerequisites: Ballet major and concurrent enrollment in Ballet Technique (DANC 30100, 40100 or 50100 ); or instructor permission. This course develops the strength, technique and skill specific to pointe work at the advanced level of technique. This course may be repeated for credit.
DANC 30130 - Teaching Methods-Ballet (1.00-3.00)
Prerequisite: Must be a dance major with junior, senior or graduate standing. Theory, methods of teaching dance with specific focus on ballet (1-3 semester hours.)

## DANC 30161 - Ballet Variations (1)

Prerequisite: DANC 30110 or permission of instructor. Practice and performance of ballet variations from the Romantic, Classical and NeoClassical repertoire. This course may be repeated for credit.

## DANC 30181 - Ballet Partnering (1)

Prerequisites: Women: Two semesters of DANC 30110 or permission of instructor. Men: dance major or permission of instructor. Emphasis on partnering in classical and contemporary ballet. Course may be repeated for credit.
DANC 30200 - Modern Dance Technique and Artistry Level II (1.00-3.00) Prerequisite: Dance major. Training, theory and practice of modern dance (classical and/or contemporary forms.) at the intermediate level. (.5-3 hours maximum per semester, 15 hours maximum for dance majors.)

## DANC 30221 - Pilates Practice (1)

Prerequisites: DANC 20221, or permission of instructor. This dance elective course is a continuation of the Body Work series and will provide dancers with the opportunity $t$ build on their practice of Pilates Mat Work and/or Pilates Reformer/Equipment Work. With a better understanding of the core principles of the Pilates system - as exercised through mentored practice dancers gain further insight into cross-training that can support dance technique, means of taking care of their bodies through activity pre- or postclass and rehearsal, and/or better prepare themselves for entry into a Pilates certification or physical therapy program. Course may be repeated.

DANC 30230 - Teaching Methods - Modern Dance (1.00-3.00)
Theory, methods and materials of teaching dance with specific focus on modern dance. ( $1-3$ semester hours)
DANC 30300 - Dance Production Practicum II (0.5)
Prerequisites: Dance major and DANC 10300, or permission of instructor. Continued practical experience in dance production leadership related to departmental presentations. (Course may be repeated for a maximum of 3 credit hours.) (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## DANC 30303 -Junior Honors Seminar (3)

Prerequisites: Dance major and Honors standing. A supervised research experience in dance studies. The topic will be determined in consultation with the supervising professor. Topics may be focused on, but are not limited to, aspects of performance, choreography, history, education or aesthetics. Performance may be an aspect of the course. Arrangements for the course, which is offered only as a tutorial, must be made with an instructor prior to enrollment.

DANC 30311 - Career Preparation II (1)

Prerequisite: Dance major. This seminar course is an exploration of dancerelated topics providing frameworks for professional success in the field.

DANC $\mathbf{3 0 3 3 0}$ - Creative Movement for Children (1.00-3.00)
Prerequisites: DANC 30100 or 30200 or permission of the instructor. This course explores the theory and practice of teaching Creative Movement for young children. Students will learn to design and implement classes that harness the elements of dance - body, time, space and energy - to the end of stimulating creative investigation via movement. 1-3 credit hours.
DANC 30332 - Choreography II: Intermediate Dance Composition (2) Prerequisites: DANC 20322, concurrent enrollment in Ballet and/or Modern Dance technique class, or permission of the instructor. As dance majors further their choreographic skills, focus centers on developing content, defining structure and learning to manipulate choreographic devises. Creativity and critical analysis are essential components of coursework.

## DANC 30333 - Lighting and Design for Dance (3)

Prerequisites: Dance major and DANC 20333, or permission of instructor. This course will provide students with the information and practical experience to create and implement lighting design for dance.

DANC 30363 - Study Abroad: Physical Theatre in the United Kingdom (3) Prerequisites: DANC 20100 and 20200 or permission of instructor. Physical Theatre is a contemporary, hybrid art form developed within European culture. Program participants will move between hands-on practicedeveloping and testing ideas in the studio - and historical, aesthetic and critical investigation of the form. Study in the UK will be augmented by attendance at an international festival to view and respond to physical theatre in live performance.

DANC $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

DANC 40100 - Ballet Technique and Artistry Level III (.50-2.50)
Prerequisite: DANC 30100, Dance Major status or permission of instructor. Training in the theory and practice of classical ballet at the high intermediate/advanced level. (.5-2.5 hours maximum per semester, course may be repeated for credit.)

## DANC 40120 - Directed Studies in Ballet (.50-3.00)

Prerequisites: Dance major or permission of instructor. Independent project supervised by faculty. ( $0.5-3$ credit hours per course.)
DANC 40200 - Modern Dance Technique and Artistry Level III (1.00-3.00) Prerequisite: Dance major. Training, theory and practice of modern dance (classical and/or contemporary forms) at the advanced level. (.5-3 hours maximum per semester.)
DANC 40220 - Directed Studies in Modern Dance (1.00-3.00)
Prerequisites: Dance major or permission of instructor. Independent project supervised by faculty. (.5-3 credit hours per course.)

DANC 40272 - Advanced Performance Practicum (2)
Prerequisites: Dance major or permission of instructor. Dancers are challenged to enhance performance abilities and further develop artistry.

## DANC 40300 - DanceTCU II (0.5)

Prerequisites: Dance major or permission of the instructor. This course is a continuation of DanceTCU I for Junior and Senior dance majors. Students earn the opportunity - via audition - to perform in either a faculty or guest artist work. Through the performance experience, advanced dancers utilize dance technique and mature artistry developed in ballet and modern dance courses. This course may be repeated for credit for $1-8$ hours, .5 credit hour per semester. ( 1.5 hours minimum required for dance majors.)

## DANC 40303 - Senior Honors Seminar (3)

Prerequisites: Dance major and Honors standing. A supervised research experience with a thesis that is usually based on work completed in DANC 30303. Arrangements for the course, which is offered only as a tutorial, must be made with an instructor prior to enrollment.
DANC 40343 - Choreography III: Advanced Dance Composition (3) Prerequisite: DANC 30332. Advanced exploration of the form and content of contemporary choreography culminating in production of original dance works including the integration of theatrical production elements. Critical response skills will be fine-tuned.

DANC 40353 - Choreography IV: Senior Capstone (3)
Prerequisites: Dance major and DANC 40343 or permission of instructor. A capstone course giving the BFA candidate an opportunity to thoroughly explore, develop, edit and produce a project for performance that demonstrates choreographic crafting informed by artistic judgments and personal values. This course requires the integration of theatrical production elements.

## DANC 40373 - Dance History I (3)

Prerequisites: Dance major or permission of instructor. This course examines the development of dance from a global perspective. Beginning in antiquity and culminating with the early Renaissance, it investigates social conditions, political situations, religious customs, cultural traditions, and economic contexts for the development of dance forms across the world.

## DANC 40383 - Dance History II (3)

Prerequisites: DANC 40373, dance major or permission of instructor. This course examines the context and lineage of Western Concert Dance from the Renaissance to the present day: it analyzes historical trends and their development over time; it attends to notable figures and seminal dance works; and it traces the migrations of Western Concert dance throughout Europe, Russia, and North America.
DANC 50100 - Ballet Technique and Artistry Level IV (.50-2.50)
Prerequisites: DANC 40100, SSCD major, or permission of instructor. Training in theory and practice of classical ballet at the advanced/professional level (.5-2.5 hours maximum per semester, course may be repeated.)

DANC 50303 - Dance Theory (3)
Prerequisites: DANC 40373 and 40383. This course surveys readings and topics in the theory and philosophy of dance. Specific topics are at the discretion of the instructor, and may include aesthetics of dance, dance historiography, dance and music, dance and feminism, dance and sexuality, and dance for the camera.

## DANC 50313 - The Camera in Dance (3)

Prerequisites: Students must be a Dance major and have completed DANC 20333 or get permission from the instructor. The Camera in Dance" offers a comprehensive introduction to various screen dance genres and a contextual overview of mediated dance, while exploring the principles and techniques of dance for the camera."

## ECON - Economics

## ECON 10223 - Introductory Microeconomics (3)

Overview of economics, introduction to microeconomic theory and policy; demand, supply, price determination in product and factor markets, principle of comparative advantage, concept of economic efficiency, perfect and imperfect competition.

## ECON 10233 - Introductory Macroeconomics (3)

Introduction to macroeconomic theory and policy; measurement of economic aggregates, inflation, unemployment, business cycles, fiscal and monetary policies, economic growth, exchange rates, balance of payments, and financial capital flows.

## ECON 10241 - Laboratory in Microeconomics (1)

Prerequisite: Concurrent registration in, or completion of, ECON 10223. Use of computer simulations, games, and formal exercises to build on and to reinforce, concepts and procedures covered in ECON 10223.

## ECON 10251 - Laboratory in Macroeconomics (1)

Prerequisite: Concurrent registration in, or completion of, ECON 10233. Use of computer simulations, games, and formal exercises to build on and to reinforce, concepts and procedures covered in ECON 10233.

## ECON 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ECON 30003 - J unior Honors Seminar (3)

Prerequisite: Advanced standing in Economics and recommendation of the Chairman. Discussion of important books in the literature of economics and of significant economic problems.

ECON 30213 - Development Theory (3)

Prerequisites: A 'C' or better in ECON 10223 or 30223, and 10233 or 30233. An analysis of the changes that must take place in a society in order for economic development to proceed. Economic Theories of development and growth.

## ECON 30223 - Intermediate Microeconomics (3)

Prerequisites: A 'C' or better in any 3 or more semester hours ECON course, MATH 10283 or MATH 10524. Details of allocation and distribution theory of market economies. Explanations of product and factor market activities. Elements of partial and general equilibrium theories.

## ECON 30233 - Intermediate Macroeconomics (3)

Prerequisites: A 'C' or better in any 3 or more semester hours ECON course. Employment, monetary theory, aggregate demand and supply theory, economic performance and tools of measurement.

## ECON 30243 - Contending Perspectives in Economics (3)

Prerequisite: At least three semester hours credit in economics with a grade of 'C' or better. A survey of major theoretical approaches in economics today, with emphasis on the unique insights and applications of each approach, the theoretical underpinnings of enduring disagreements among professional economists, and the process of ongoing debate and crossfertilization among these contending perspectives.

## ECON 30253 - History of Economic Thought (3)

Prerequisites: A 'C' or better in three semester hours of Economics. The study of economic ideas. May include the ideas of any major contributor from Adam Smith to contemporary economists.

ECON 30423 - European Economic History - The Industrial Revolution (3) Prerequisites: A 'C' or better in any 3 or more semester hours ECON course, or instructor permission. This course examines the transformation of England, and later the world, to an industrialized society. Students investigate the technological, economic, and social changes that took place during this period. Possible sources of this change - why it happened, when and where it did - are examined.

## ECON 30433 - Development Studies (3)

Prerequisites: A 'C' or better in ECON 10223 or 30223, and 10233 or 30233. Survey of development experience in a country or group of countries or analysis of general development experiences such as external finance, foreign trade and payments, development policy sets, or other experiences typical of developing countries.

## ECON 30443 - Asian Economics (3)

Prerequisites: A 'C' or better in any six hours of Economics. Examines the modern development and economic history of East Asia from the 19th century to the present. Topics include explanations for the rapid economic growth in the region; the impact of industrial policies, trade, and foreign direct investment; the origins of the Asian financial crisis; the role of demographic and institutional factors.

## ECON 30453 - Economics of the European Union (3)

Prerequisites: A 'C' or better in any 3 or more semester hours ECON course. This course is concerned with the process of economics integration within the European Union. The main fields covered are: 1) Historical background, principles and functioning of the EU institutions; 2) the internal market: integration of product and factor markets; 3 ) EU policies (agriculture, regional, competition, etc.); 4) EU monetary integration.

## ECON 30463 - Latin American Economics (3)

Prerequisites: A 'C' or better in any 3 or more semester hours ECON course. ECON 10233 is recommended, but not required. This course covers the influence of past economic policies on the current state of the economics of Latin America. The major policies to be considered are industrial policy, international trade policy, exchange rate policy, financing current account deficits, and macroeconomic policy.

## ECON 30473 - Regional and Urban Economics (3)

Prerequisites: A 'C' or better in ECON 10223 or 30223. An introduction to, and overview of, regional and urban economic theory. Examination of location factors and costs including transportation rate structures, migration, firm location, structure of regions and urban areas, and urban problems.

## ECON 30483 - Financial History (3)

Prerequisites: A 'C' or better in 6 hours of Economics. Examines important topics in the development of American and Western European monetary and financial systems. Historical perspectives on innovation, stabilization, and regulation within the major themes of monetary regimes, banking systems, and capital markets.
ECON 30493 - International Economic Studies (3)

Prerequisites: At least three 3 semester hours credit in economics with a grade of ' C ' or better. Detailed analysis of current problems in international economic relationships. The list of topics selected on the basis of their significance in policy design, policy analysis, or contemporary economic well-being.

## ECON 30503 - Health Economics (3)

Prerequisites: A C" or better in any 3 or more semester-hour ECON course. Health Economics examines the determinants of health and health related behaviors disease prevention and health promotion focusing on the behaviors of consumers providers of medical care and the impact of policy on the price and quantity of health care services." health disparities and the impacts of health policy in bettering health outcomes. The course also examines the market for health insurance and health care services."

## ECON 30513 - Perspectives in International Economics (3)

Prerequisites: At least three hours of economics with a grade of C or better. Analysis of international trade theory, economics development, and exchange rates and capital flows from the perspective of competing schools of thought. Special emphasis is placed on how the unique foundational elements of each lead to significantly different interpretations of the vary same real-world phenomena.

## ECON 30533 - Happiness: Culture, Economics, and Being (3)

Prerequisites: 'C' or better in ECON 30243. Explores anthropological and economic perspectives on happiness and human flourishing: the diverse ways in which well-being is conceptualized and experienced in different cultural contexts, the complex relationship between well-being and economic growth, and cross-disciplinary inquiry into the conditions and activities (such as community, ecology, dignity, creativity, generosity, trust, health, and inequality) that engender or impede human flourishing.

## ECON 30763 - Economic Geography (3)

Prerequisite: A C" or better in ECON 10223 or ECON 10233. Economic Geography is the study of how elements within the economy are spatially arranged as well as the ways that space place and spatial scales shape economic activities in different parts of the world. Through a series of readings discussions and research assignments this course examines the distribution economic activities on the earth's surface; market resource and transportation factors in location theory and the role of state market and civil society's agents in management of the economy. Students are further introduced to Geographic Information Systems (GIS) through contentfocused lab assignments though no previous experience with GIS is required for this course."

## ECON 30990 - International Residential Study (1.00-20.00)

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## ECON 32990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ECON 40003 - Senior Honors Research Paper (3)

Prerequisites: A 'C' or better in ECON 30003 with recommendation of the Department. Each student will prepare a substantial paper under the direction of a faculty member.

## ECON 40013 - Senior Seminar in Economics (3)

Prerequisites: ECON 30223, 30233, 30243 and 12 additional ECON hours, all with grades of 'C' or better. Capstone seminar exploring selected issues in economic theory or policy.

## ECON 40113 - Industrial Organization (3)

Prerequisites: A 'C' or better in ECON 30223. Theoretical and empirical examination of the interrelationships between market structure, conduct and performance in the industrial sector of the economy.

ECON 40133 - Labor Economics (3)
Prerequisites: A 'C' or better in ECON 30223. Economic analysis of labor market issues, including minimum wage legislation, compensating wage differentials, human capital investment, discrimination, and collective bargaining.

ECON 40143 - Public Finance (3)
Prerequisites: A 'C' or better in ECON 30223 or 30233. Theory of public choice; budgeting procedures; theory and methods of financing government expenditures; fiscal policy.

## ECON 40153 - Economics of Financial Markets (3)

Prerequisites: A ' C ' or better in ECON 30233. Analysis of the structure and operations of financial markets and analysis of the role of money and capital markets in the economy.

## ECON 40213 - International Trade and Payments (3)

Prerequisites: A 'C' or better in ECON 30223. Surveys of international trade relationships, balance of payments accounting, theories explaining the pattern of trade and its relationship to economic welfare, policies affecting the pattern of a country's trade with the rest of the world.

## ECON 40223 - International Monetary Economics (3)

Prerequisites: A 'C' or better in ECON 30233 . Surveys of various theories of exchange rate determination, along with evaluation of fixed, flexible and mixed exchange rate regimes. In addition, long-term and short-term capital flows are described and explained.

ECON 40313 - Econometrics (3)
Prerequisites: A 'C' or better in ECON 10223 OR 30223, and 10233 OR 30233, and MATH 10043 or MATH 30853 or INSC 20153. Techniques of simple and multiple regression. Methods for correcting problems of autocorrelation, heteroscedasticity, and multicollinearity.

ECON 40413 - U. S. Economic History - The Founding Eras (3)
Prerequisites: A 'C' or better in 6 hours of Economics. Historical development of the United States economy from European contact through the antebellum period. Emphasis is on colonial and pre-industrial development

ECON 40423 - U. S. Economic History - the Rise of the Modern Era (3) Prerequisites: A 'C' or better in 6 hours of Economics. Historical development of the United States economy from the early national period to the modern era. Emphasis is on the transition from a pre-industrial economy to an industrial economy with modern financial and governmental institutions.

ECON 40433 - Law and Economics (3)
Prerequisites: ECON 30243. Law and Economics asks students to consider economics as a justification for legal decision making. Different perspectives regarding the nature of law are juxtaposed against different perspectives regarding the nature of economics. Students develop their own synthesis by examining landmark legal cases from various perspectives.

## ECON 40970 - Experimental Course (1.00-20.00)

Prerequisites: Vary according to nature of material. For use when instructor has new material or new teaching strategies which are not appropriate to existing courses.

## ECON 40980 - Directed Studies in Economics (1.00-20.00)

Prerequisites: 18 hours in economics, an overall GPA of 3.25, a GPA in Economics of 3.5 , and senior standing. The course will consist of supervised reading, research, and preparation of a substantial paper. The course content cannot duplicate an already existing TCU economics course. Students must receive preliminary approval from the department chair before developing a course plan with a faculty member.

## ECON 50453 - Macroeconomic Studies (3)

Prerequisites: A 'C' or better in ECON 30233 or graduate standing in business. Analysis of current macroeconomic issues in theory and policy. Topics may include economic growth, fluctuations in business activity, investment behavior, consumption functions, macroeconomic planning, and the policy formulation process.

## ECON 50463 - Perspectives in Macroeconomics (3)

Prerequisites: A 'C' or better in ECON 30233 or graduate standing in business. Analysis of macroeconomic issues in theory and policy from the perspective of competing schools of thought. Special emphasis will be placed on how each approach explains post-1970 business cycles, inflation, and unemployment in the U.S. economy.

## EDCS - Education - Curriculum Studies

EDCS 50001 - Colloquium Curriculum Studies (1)
Prerequisites: Admission into graduate studies or permission of instructor. Each semester, the colloquium addresses a different contemporary problem significant to curriculum studies. Through readings, discussions, and presentations of scholarly activities; student will explore the semester's theme, further their knowledge of curriculum studies, and develop academic
talents within a community of scholars. Non-Curriculum Studies students may join the colloquium with permission of instructor.

## EDEC - Education - Early Childhood

## EDEC 20013 - Science for Elementary Teachers (3)

This course is designed to build the content knowledge and skills needed by Pre-Kindergarten through sixth grade teachers. The science content emphasized in this course aligns with the National Science Teachers Association standards as well as the content mandated by the State of Texas. The course will model inquiry teaching, engage students in constructivist science inquiry, and provide students with the materials needed to successfully teach science. It will build student understanding of science concepts through active learning experiences. This course is required for acceptance into the EC-6 program in the college of Education. Texas teacher certification has changed from $\mathrm{EC}-4$ to $\mathrm{EC}-6$, requiring that teachers have additional content knowledge. In response to national reform documents, the content will be delivered using inquiry-based methodology.

## EDEC 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to acceptcredit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## EDEC 30001 - Professional Practice Seminar (1)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Issues in professional and legal responsibilities and certification standards. This course is available only for Pass/No credit grades. (Offered as EDEC, EDMS, EDSE or EDUC credit.)
EDEC 30013 - Creative Thinking and Problem Solving: Science (3) Prerequisites: Admission to the Teacher Education Program or written permission of the dean, College of Education. Concurrent enrollment in Junior 1 courses. This course builds on EDEC 20013, Science for Elementary Teachers. It will use the Texas Essential Knowledge and Skills (TEKS) as a framework to help students examine content methodology, skills, and materials used to teach science to children in elementary classrooms. Students will engage in hands-on investigations, class discussions, readings and field placements with emphasis on developmentally appropriate practices in science instruction. Procedures for planning, implementing, and reflecting on science instruction are learned in a school setting. Topics from life, earth/space and physical science will be covered.

EDEC 30023 - Creative Thinking and Problem Solving: Mathematics I (3) Prerequisites: Admission to the Teacher Education Program or written permission of the dean, College of Education. Concurrent enrollment in Junior 1 courses. Using the guidelines set forth by the National Council of Teachers of Mathematics and the State of Texas for mathematics instruction, the students will develop pedagogical content knowledge in the basic concepts and skills of math. Topics will include the development of the real number system, whole number computations, rational number computations, number theory, and problem solving.

EDEC 30033 - Creative Thinking and Problem Solving: Play and Creativity (3)
Prerequisites: Admission to the Teacher Education Program or written permission of the dean, College of Education. Concurrent enrollment in Junior 1 courses. This course is designed to prepare students for the challenges of teaching in child-centered environments that support creative development and scientific and mathematical learning through play. The course framework provides a theoretical and research base for supporting creative thinking and play-based learning. Students learn strategies for enhancing creative development, inquiry and expression in the areas of art, music, dance and drama, and apply them in elementary school settings. Additionally, students learn how to plan and manage a classroom environment that fosters self-directed learning and opportunities for play.

EDEC 30073 - Critical Literacy and Children's Literature (3)
Prerequisites: Student should be seeking EC-6 teacher certification. This course offers an introduction to the analytical study of children's literature with a focus on children's books that grapple with difficult social issues. We will explore books that go beyond happily ever after, learning how authors deal with topics such as $9 / 11$, homelessness, gangs, divorce, race, war, and the Holocaust. We will study novels, picture books, and film. While studying these texts, we will also discuss ways to integrate children's literature throughout the EC-6 curriculum--including a focus on content area reading strategies.

EDEC 30103 - Introduction to Early Childhood Education (3)
Prerequisite for all EC-6 coursework. Directed toward affecting prospective early childhood teachers' insights with regard to classroom behavior in teaching; dealing with the factors of child learning; and examining children's development. Classroom practicum is required.

EDEC 30203 - Education in Elementary Curriculum: Mathematics II (3) Prerequisites: Admission to Teacher Education or written permission of the Dean, College of Education. Concurrent enrollment in Junior II courses. Using the guidelines set forth by the National Council of Teachers of Mathematics and the State of Texas for mathematics instruction, the students will develop pedagogical content knowledge in the basic concepts and skills of mathematics. Topics will include measurement, geometry, and probability and statistics.

EDEC 30213 - Creative Thinking and Problem Solving: Writing (3) Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Concurrent enrollment in Junior I courses. This course examines principles of literacy learning in young children through grade six. The course introduces theories, practices and materials for teaching writing in the elementary through middle level grades (EC-6)

## EDEC 30223 - Education in Elementary Curriculum: Reading (3)

 Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Concurrent enrollment in Junior II courses. Block focuses on the study of the nature of literacy and second language learning processes and the relationship among these processes, young children, teachers, curriculum, and instruction. Emphasis is given to the guidance of students as they progress through the continuum of literacy abilities in phonics, decoding, vocabulary and comprehension in early childhood through grade 6 . Introduces recent research, philosophies of instruction, curriculum development, literature, and assessments that can be used to improve students' reading and language abilities.
## EDEC 30233 - Education in Elementary Curriculum: English as a Second

 Language (ESL) (3)Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Concurrent enrollment in Junior II courses. Principles and practices of first and second language acquisition in early childhood settings. Emphasis on the interrelatedness of language processing (reading, writing, speaking and listening) to facilitate the learner's ability to construct meaning. Strategies to enhance socialcommunicative and cognitive-academic language competencies are addressed. Assessment procedures appropriate to English language learners (ELL) are introduced.

## EDEC $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

EDEC 31233 - Education in Elementary Curriculum: Social Studies (3) Prerequisite: Admission to Teacher Education or written permission of the Dean, College of Education. Concurrent enrollment in Junior II courses. Examines fundamental concepts and methods of inquiry associated with social studies for democratic citizenship. The course explores ways (1) to integrate the official curriculum of history, culture, economics, geography and government, citizenship into the early childhood curriculum: and (2) to employ the hidden curriculum to enhance instead of undermine students' experiences of democratic citizenship. Emphasis is placed on instructional methods, lesson plans, curricular materials, and social studies inquiry. The course merges student and community interest within a democratic society with academic requirements.

## EDEC 41103 - Learner-Centered Teaching: Assessment (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Concurrent enrollment in Senior I courses. This course examines assessment and evaluation methods, strategies, and procedures within the classroom context. Both formal and informal methods of gathering educational information and monitoring children's progress will be integral parts of this course. Students learn how to develop appropriate assessments and interpret assessment information for educational program planning. Students also learn how to make modifications and accommodations for testing students who are English language learners and students with disabilities.

EDEC 41113 - Learner-Centered Teaching: Foundations (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Concurrent enrollment in Senior I courses. This course explores the foundations of educational thought, practice and policy through the works of influential philosophers. Through lectures, readings, study groups, discussion, and team and individual assignments students learn about perennialist, essentialist, pragmatic, critical pedagogy, and postmodern influences in education Students also study ethics and legal issues as they apply to professional development of teachers, as well as integrating philosophical inquiry and ethical considerations into the curriculum for young children. This course meets core requirement for the citizenship and Social Values, and Writing Emphasis.

## EDEC 41123 - Learner-Centered Teaching: Families (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Provides a foundation for understanding basic concepts regarding family interaction and parent/child relationships. This includes examining student assumptions appropriate family forms, rules and communication. Also students will learn communication skills for building relationships with parents as well as strategies for forming and guiding parental involvement. Students will be exposed to varieties of family forms through didactic, interpersonal, and community/practical experiences.

EDEC 41143 - Learner-Centered Teaching: Management (3)
Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. This block melds content instruction and a semester-long practicum. In addition, to be working in classrooms or in other ways with students, under the supervision of teachers and CoE faculty, CoE faculty will cover content regarding: classroom management, assessment, parent and family relationships and issues, and professional roles and responsibilities. Block components are: EDEC 41103 Learner-Centered Teaching: Assessment, EDEC 41113 Learner-Centered Teaching: Foundations, EDEC 41123 Learner-Centered Teaching: Families, EDEC 41143 Learner-Centered Teaching: Management, and EDEC 41153 Learner-Centered Teaching: Internship.

## EDEC 41153 - Learner-Centered Teaching: Internship (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. This internship provides fieldbased experience for Senior I fall block coursework.

EDEC 42213 - Professional Induction: Curriculum for Diverse Learners: ESL (3)
Prerequisite: Admission to the Teacher Education Programs or written permission of the Dean, College of Education. Concurrent enrollment in EDEC 42236, Professional Induction: Internship. Students develop curricula that meet the cultural, linguistic and developmental needs of all learners. Professional induction opportunities focus on placement file development, preparation of the interview process, and ESL or Bilingual certification standards.

## EDEC 42236 - Professional Induction: Internship (6)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Concurrent enrollment in EDEC 42213 (ESL or Bilingual Option) or EDSP 42213 (Special Education Option). During this semester, students will fulfill the State's requirements for student teaching. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## EDEC 50143 - Early Childhood Curriculum (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. The study of basic principles underlying curriculum construction and instructional practices in early childhood and primary education.

## EDEL - Education - Elementary

EDEL 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

EDEL 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a
student's official transcript have been included in the student's grade point average.

## EDGU - Education - Guidance Counselor

## EDGU 50223 - Helping Relationships (3)

Examination and practice of specific skills and processes essential to the development of helping relationships. Emphasis is placed on the development of interpersonal skills and professional ethics necessary to counseling.
EDGU 50323 - Small Group Dynamics (3)
Study of the group as an interactional system, including: group process, group roles, guidelines for group selection and guidance, techniques for facilitating interaction, strategies for building credibility in groups, and the impact of life styles on group needs.

## EDMS - Education - Middle School

## EDMS 30001 - Professional Practice Seminar (1)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Issues in professional and legal responsibilities and certification standards. This course is available only for Pass/No credit grades. (Offered as EDEC, EDMS, EDSE or EDUC credit.)

EDMS 30013 - Professional Roles and Responsibilities (3) Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. The focus of this course will be on philosophical and historical foundations of (U.S.) education with an emphasis on the moral and ethical responsibilities of the school educator. The evolution of assessment and the call (and need) for literacy, from the educator role and responsibility perspective, will also be examined. (Offered as EDMS, EDSE, or EDUC credit.)

## EDMS 30103 - Developmental Psychology of Adolescence (3)

Prerequisites: Students must be Education pre-majors, majors or minors who are seeking All-Level, Middle School, or Secondary School teacher certification. This course provides an introduction to selected theories of physical, cognitive, emotional, social, and identity development of adolescents. Special emphasis will be given to the practical application of developmental theory to educational contexts.

EDMS 30113 - Digital Literacy, Learning, and Citizenship in Education (3) Prerequisite: Completion or concurrent enrollment in EDUC 20003 or permission of the instructor. An overview of using technology effectively and responsibly in educational contexts. Focuses on use of current and emerging technologies for teaching, learning, research, assessment, communication, and collaboration. Addresses the rights and responsibilities of digital citizenship, including safe, legal and ethical use of digital information, as well as digital access, literacy, etiquette, and wellness. (Offered as EDMS, EDSE, or EDUC credit.)

## EDMS 30123 - Educational Psychology (3)

Prerequisite: Admission to the Teacher Education Program and EDUC 30143, EDUC 20003, EDSE 30103, EDSE 30013, with a co-requisite of EDSE 41151. Psychological bases of the education process; theories of learning and motivation; individual differences, teaching strategies. Includes observations of children and adolescents in classroom settings. (Offered as EDMS, EDSE, or EDUC credit.)

## EDMS 30603 - Study of Exceptional Students (3)

Prerequisite: Admission to the Teacher Education Program, EDUC 20003, EDMS 30103, EDMS 30013 and co-requisite EDMS 41151; A survey of programs for school-aged students with mental, physical and emotional deviations. (Offered as EDMS, EDSE, EDSP, or EDUC credit.)

EDMS 40213 - Promoting Literacy in the Content Areas (3)
Prerequisite: Admission to the Teacher Education Program, EDUC 20003,
EDMS 30103, and EDMS 30013; co-requisite: EDMS 41151. A course designed to acquaint the preservice teachers with strategies which facilitate middle and secondary students' use of reading and writing to learn from information texts. A component of this course is a field-based practicum. (Offered as EDMS, EDSE, or EDUC credit.)

## EDMS 40433 - Senior Seminar in Middle/Secondary Education: Mathematics (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Trends and problems in middle school and secondary math education. Seminar discussion, individual and group report preparation to bring into focus the student's
entire college experience in the light of higher chosen vocation. (Offered as EDMS or EDSE credit.)

EDMS 40443 - Methods for Teaching Middle School Mathematics I (3) Prerequisites: Admission to the Teacher Education Program, EDUC 20003, EDMS 30103, and EDMS 30013; corequisite: EDMS41151. Using the guidelines set forth by the national Council of Teachers of Mathematics and the State of Texas for mathematics instruction, the students will develop pedagogical content knowledge for teaching middle school mathematics. The content (number and operations, algebra) will be explored from an inquiry perspective to build a conceptual understanding of the mathematics. Students will also be exposed to best practices which promote the process standards (problem solving, reasoning and proof, communication, connections, and representations) through class investigations and discussions, readings, and field placements. The process of developing units and lessons as well as assessment techniques for evaluating students' progress and teacher practice will be integrated into the coursework.

EDMS 40463 - Methods for Teaching Middle School Social Studies (3) Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education. This course will use the Texas Essential Knowledge and Skills (TEKS) and the National Council of Teachers of Social Studies as a framework to help students examine content, methodology, skills, and materials used to teach social studies to adolescents in middle grades. Students will engage in hands-on investigation, class discussions, readings and field placements with emphasis on developmentally appropriate practices in social studies instruction. Procedures for planning, implementing, and reflecting on social studies instruction will be used in schools settings.

EDMS 40473 - Methods for Teaching Middle School Mathematics II (3) Prerequisites: Admission to Teacher Education Program, EDUC 20003, EDMS 30103, and EDMS 30013; corequisite: EDMS 41151. Using the guidelines set forth by the national Council of Teachers of Mathematics and the State of Texas for mathematics instruction, the students will develop pedagogical content knowledge for teaching middle school mathematics. The content (geometry, measurement, and data analysis and probability will be explored from an inquiry perspective to build a conceptual understanding of the mathematics. Students will also be exposed to best practices which promote the process standards (problem solving, reasoning and proof, communication, connections, and representations) through class investigations and discussions, readings, and field placements. The process of developing units and lessons as well as assessment techniques for evaluating students' progress and teacher practice will be integrated into the coursework.

## EDMS 40533 - Senior Seminar in Middle/Secondary Education: Science

 (3)Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Trends and problems in middle school and secondary science education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation. (Offered as EDMS or EDSE credit.)

## EDMS 40633 - Senior Seminar in Middle/Secondary Education: Social

 Studies (3)Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Trends and problems in middle school and secondary social studies education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation. (Offered as EDMS or EDSE credit.)

## EDMS 40986 - Student Teaching in the Middle School (6)

Prerequisite: Admission to the Teacher Education Program. All day observation and supervised teaching for a semester long period of time in the public schools. Accompanying weekly seminars for the purpose of developing competencies and professional growth will be required. (This course is only offered as P/NC.)

## EDMS 41151 - Field Experience in Education (1)

Prerequisites: Admission to the Teacher Education Program, co-requisite: concurrent enrollment in an education course. Field Experience in Education is a field-based experience for education majors. Placements are in local schools. Students enroll in Field Experience in Education three times during their teacher education program. (Course is only offered as P/NC) (Offered as EDMS or EDSE credit.)

EDMS 50023 - Effective Teaching and Classroom Implementation (3)

Prerequisite: Admission to the Teacher Education Program, EDUC 20003, EDSE 30103, and EDSE 30013; co-requisite: EDSE 41151. As a part of the effective teacher model, this course will focus on instructional design and implementation, motivation of students to promote and enhance learning in the classroom; management issues pertinent to student behavior and learning outcomes; and preparation of a variety of formal and informal assessment strategies. (Offered as EDMS, EDSE or EDUC credit.)

## EDMS 50153 - Literature for Adolescents (3)

Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education. This course provides an overview of young adult literature (YAL), while also exploring issues related to the use of YAL in the middle/secondary English classroom. The course provides students with opportunities to study the critical and pedagogical theories that inform the study of adolescent literature. There is a field based teaching component in a middle or secondary English classroom.

## EDMS 50173 - Development of Written Communication (3)

Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education. This course is a study of the developmental process of written communication as it relates to literacy development in upper elementary, middle school and high school students. This course will present methods of increasing students' written communication skills.

EDMS 50223 - Practicum in Reading and ESL (3)
Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Concurrent enrollment in EDUC 50503, Foundations of Language Acquisition. The reading practicum provides an opportunity to prepare lessons and teach in a sheltered ESL classroom under the supervision of a cooperating teach and TCU faculty.
EDMS 50553 - Methods forTeaching Middle School Science (3) Prerequisites: Admission to the Teacher Education Program, EDUC 20003, EDMS 30103, and EDMS 30013; corequisite: EDMS 41151. Using guidelines set forth by the National Research Council, the American Association for the Advancement of Science and the State of Texas, the students will develop pedagogical content knowledge for teaching middle science. Students will explore various aspects of the science teacher profession such as designing lessons/labs, aligning lessons to TEKS and frameworks, assessing student work, constructing assessment tools, classroom management techniques and best practices in teaching science. Peer-teaching and peer-evaluation will be used to help students identify their strengths and weaknesses to help them prepare for the teaching profession.

EDMS 50663 - Motivating and Managing Students in the Classroom (3) Prerequisite: Admission to the Teacher Education Program, EDMS 30123, EDMS 30113, EDMS 30603, EDMS 40213, and Content Area Methods course(s), and co-requisite: EDMS 41151. Research-based methods for creating positive classroom and school climates, organizing and managing classrooms, improving instruction, dealing with classroom discipline problems, and developing prosocial behaviors in children and youth. (Offered as EDMS, EDSE, or EDSP credit.)

## EDMS 51103 - Assessment (3)

Prerequisites: Admission to the Teacher Education Program, EDMS 30123, EDMS 30113, EDMS 30603, EDMS 40213, and Content Area Methods course(s), and co-requisite EDMS 41151. This course provides students with a foundation for understanding the basic concepts and procedures of educational assessment and evaluation as they pertain to teaching in the middle/secondary classroom and informing instruction. Both formal and informal methods of gathering educational information and monitoring learners' progress will be integral parts of this course. Students will learn how to develop appropriate assessments; interpret assessment information for educational program planning; provide timely, high-quality feedback; respond flexibly to promote learning for all learners, including second language learners and students with disabilities; and communicate assessment information to parents and other professionals. (Offered as EDMS or EDSE credit.)

## EDMT - Education - Mathematics

EDMT 50123 - Teaching Geometry and Measurement (3)
Prerequisites: Admission to the MEd in Mathematics Education Program or written permission of the Dean. Using the guidelines set forth by the National Council of Teachers of Mathematics and the State of Texas for mathematics instruction, students will develop pedagogical content knowledge for teaching geometry and measurement. The content will be explored from an inquiry perspective to expand upon students' conceptual understanding of the mathematics. Through class investigations and
discussions, readings, and assignments, students will be exposed to best practices which promote the process standards (problem solving, reasoning and proof, communication, connections, and representations.) By gaining expertise with respect to the development of children's thinking in geometry and measurement and instructional and assessment practices that contribute to this development, students will be prepared to serve as teacher-leaders.

## EDMT 50133 - TeachingData Analysis and Probability (3)

Prerequisite: Admission to the MEd in Mathematics Education Program or written permission of the Dean. Using the guidelines set forth by the National Council of Teachers of Mathematics and the State of Texas for mathematics instruction, students will develop pedagogical content knowledge for teaching data analysis and probability. The content will be explored from an inquiry perspective to expand upon students' conceptual understanding of the mathematics. Through class investigations and discussions, readings, and assignments, students will be exposed to best practices which promote the process standards (problem solving, reasoning and proof, communication, connections, and representations.) By gaining expertise with respect to the development of children's thinking in data analysis and probability and instructional and assessment practices that contribute to this development, students will be prepared to serve as teacher-leaders.

## EDRE - Education - Reading

EDRE 20990 - International Residential Study (2.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## EDRE 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## EDSE - Education - Secondary

EDSE 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## EDSE 30001 - Professional Practice Seminar (1)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Issues in professional and legal responsibilities and certification standards. This course is available only for Pass/No credit grades. (Offered as EDEC, EDMS, EDSE or EDUC credit.)

## EDSE 30013 - Professional Roles and Responsibilities (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. The focus of this course will be on philosophical and historical foundations of (U.S.) education with an emphasis on the moral and ethical responsibilities of the school educator. The evolution of assessment and the call (and need) for literacy, from the educator role and responsibility perspective, will also be examined. (Offered as EDMS, EDSE, or EDUC credit.)

## EDSE 30103 - Developmental Psychology of Adolescence (3)

Prerequisites: Students must be Education pre-majors, majors or minors who are seeking All-Level, Middle School, or Secondary School teacher certification. This course provides an introduction to selected theories of physical, cognitive, emotional, social, and identity development of adolescents. Special emphasis will be given to the practical application of developmental theory to educational contexts.

EDSE 30113 - Digital Literacy, Learning, and Citizenship in Education (3) Prerequisite: Completion or concurrent enrollment in EDUC 20003 or permission of the instructor. An overview of using technology effectively and responsibly in educational contexts. Focuses on use of current and
emerging technologies for teaching, learning, research, assessment, communication, and collaboration. Addresses the rights and responsibilities of digital citizenship, including safe, legal and ethical use of digital information, as well as digital access, literacy, etiquette, and wellness. (Offered as EDMS, EDSE, or EDUC credit.)

## EDSE 30123 - Educational Psychology (3)

Prerequisite: Admission to the Teacher Education Program and EDUC 30143, EDUC 20003, EDSE 30103, EDSE 30013, with a co-requisite of EDSE 41151. Psychological bases of the education process; theories of learning and motivation; individual differences, teaching strategies. Includes observations of children and adolescents in classroom settings. (Offered as EDMS, EDSE, or EDUC credit.)

## EDSE 30603 - Study of Exceptional Students (3)

Prerequisite: Admission to the Teacher Education Program, EDUC 20003, EDMS 30103, EDMS 30013 and co-requisite EDMS 41151; A survey of programs for school-aged students with mental, physical and emotional deviations. (Offered as EDMS, EDSE, EDSP, or EDUC credit.)
EDSE 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## EDSE 40123 - Senior Seminar in Secondary Education (3)

Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education and permission of instructor. Trends and problems in secondary education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation.
EDSE 40213 - Promoting Literacy in the Content Areas (3) Prerequisite: Admission to the Teacher Education Program, EDUC 20003, EDMS 30103, and EDMS 30013; co-requisite: EDMS 41151. A course designed to acquaint the preservice teachers with strategies which facilitate middle and secondary students' use of reading and writing to learn from information texts. A component of this course is a field-based practicum. (Offered as EDMS, EDSE, or EDUC credit.)

EDSE 40433 - Senior Seminar in Middle/Secondary Education: Mathematics (3)
Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Trends and problems in middle school and secondary math education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation. (Offered as EDMS or EDSE credit.)
EDSE 40463 - Methods for Teaching Secondary Social Studies (3) Prerequisites: Admission to the Teacher Education Program, EDUC 20003, EDSE 30103, and EDSE 30013; corequisite: EDSE 41151. This course will use the Texas Essential Knowledge and Skills (TEKS) and the national Council of Teachers of Social Studies as a framework to help students examine content methodology, skills, and materials used to teach social studies to adolescents in secondary grades. Students will engage in hands-on investigation, class discussion, readings and field placements with emphasis on developmentally appropriate practices in social studies instruction. Procedures for planning, implementing, and reflecting on social studies instruction will be used in school settings.

## EDSE 40533 - Senior Seminar in Middle/Secondary Education: Science

 (3)Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Trends and problems in middle school and secondary science education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation. (Offered as EDMS or EDSE credit.)

EDSE 40633 - Senior Seminar in Middle/Secondary Education: Social Studies (3)
Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Trends and problems in middle school and secondary social studies education. Seminar discussion, individual and group report preparation to bring into focus the student's entire college experience in the light of higher chosen vocation. (Offered as EDMS or EDSE credit.)

EDSE 40986 - Student Teaching in the Secondary/School (6)
Prerequisite: Admission to the Teacher Education Program. All day observation and supervised teaching for a semester long period of time in the public schools. Accompanying weekly seminars for the purpose of developing competencies and professional growth will be required. (This course is only offered as P/NC.)

## EDSE 41151 - Field Experience in Education (1)

Prerequisites: Admission to the Teacher Education Program, co-requisite: concurrent enrollment in an education course. Field Experience in Education is a field-based experience for education majors. Placements are in local schools. Students enroll in Field Experience in Education three times during their teacher education program. (Course is only offered as P/NC) (Offered as EDMS or EDSE credit.)

EDSE 50023 - Effective Teaching and Classroom Implementation (3)
Prerequisite: Admission to the Teacher Education Program, EDUC 20003, EDSE 30103, and EDSE 30013; co-requisite: EDSE 41151. As a part of the effective teacher model, this course will focus on instructional design and implementation, motivation of students to promote and enhance learning in the classroom; management issues pertinent to student behavior and learning outcomes; and preparation of a variety of formal and informal assessment strategies. (Offered as EDMS, EDSE or EDUC credit.)

## EDSE 50153 - Literature for Adolescents (3)

Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education. This course provides an overview of young adult literature (YAL), while also exploring issues related to the use of YAL in the middle/secondary English classroom. The course provides students with opportunities to study the critical and pedagogical theories that inform the study of adolescent literature. There is a field based teaching component in a middle or secondary English classroom.

## EDSE 50173 - Development of Written Communication (3)

Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education. This course is a study of the developmental process of written communication as it relates to literacy development in upper elementary, middle school and high school students. This course will present methods of increasing students' written communication skills.

## EDSE 50213 - Teaching in Bilingual Classrooms (3)

Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Methods and strategies in teaching the bilingual child; including English as a second language and Spanish as a first language. Observation and participation in bilingual classes required.

## EDSE 50223 - Practicum in Reading and ESL (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Concurrent enrollment in EDUC 50503, Foundations of Language Acquisition. The reading practicum provides an opportunity to prepare lessons and teach in a sheltered ESL classroom under the supervision of a cooperating teach and TCU faculty.

EDSE 50443 - Methodsfor Teaching Secondary School Mathematics I (3) Prerequisites: Admission into College of Education; EDUC 20003, EDSE 30103, and EDSE 30013; corequisite: EDSE 41151. Using the guidelines set forth by the national Council of Teachers of mathematics and the State of Texas for mathematics instruction, the students will develop pedagogical content knowledge for teaching secondary mathematics. The content (number and operations, algebra) will be explored from an inquiry perspective to build a conceptual understanding of the mathematics. Students will also be exposed to best practices which promote the process standards (problem solving, reasoning and proof, communication, connections, and representations) through class investigations and discussions, readings, and field placements. The process of developing units and lessons as well as assessment techniques for evaluating students' progress and teacher practice will be integrated into the coursework.
EDSE 50453 - Methods for Teaching Secondary Mathematics II (3) Prerequisites: Admission to the Teacher Education Program, EDUC 20003, EDSE 30103, and EDSE 30013; corequisite: EDSE 41151. Using the guidelines set forth by the National Council of Teachers of Mathematics and the State of Texas for mathematics instruction, the students will develop pedagogical content knowledge for teaching secondary mathematics. The content (geometry, measurement, and data analysis and probability) will be explored from an inquiry perspective to build a conceptual understanding of the mathematics. Students will also be exposed to best practices which promote the process standards (problem solving, reasoning, and proof, communication, connections, and representations) through class
investigations and discussions, readings, and field placements. The process of developing units and lessons as well as assessment techniques for evaluating students' progress and teacher practice will be integrated into the coursework.

## EDSE 50553 - Methods for Teaching Secondary Science (3)

Prerequisites: Admission to the Teacher Education Program, EDUC 20003, EDSE 30103, EDSE 30013; corequisite: EDSE 41151. Using guidelines set forth by the National Research Council, the American Association for the Advancement of Science and the State of Texas, the students will develop pedagogical content knowledge for teaching secondary science. Students will explore various aspects of the science teacher profession such as designing lessons/labs, aligning lessons to TEKS and frameworks, assessing student work, constructing assessment tools, classroom management techniques and best practices in teaching science. Peer-teaching and peerevaluation will be used to help students identify their strengths and weaknesses t help them prepare for the teaching professions.

EDSE 50663 - Motivating and Managing Students in the Classroom (3) Prerequisite: Admission to the Teacher Education Program, EDMS 30123, EDMS 30113, EDMS 30603, EDMS 40213, and Content Area Methods course(s), and co-requisite: EDMS 41151. Research-based methods for creating positive classroom and school climates, organizing and managing classrooms, improving instruction, dealing with classroom discipline problems, and developing prosocial behaviors in children and youth. (Offered as EDMS, EDSE, or EDSP credit.)

## EDSE 51103 - Assessment (3)

Prerequisites: Admission to the Teacher Education Program, EDMS 30123, EDMS 30113, EDMS 30603, EDMS 40213, and Content Area Methods course(s), and co-requisite EDMS 41151. This course provides students with a foundation for understanding the basic concepts and procedures of educational assessment and evaluation as they pertain to teaching in the middle/secondary classroom and informing instruction. Both formal and informal methods of gathering educational information and monitoring learners' progress will be integral parts of this course. Students will learn how to develop appropriate assessments; interpret assessment information for educational program planning; provide timely, high-quality feedback; respond flexibly to promote learning for all learners, including second language learners and students with disabilities; and communicate assessment information to parents and other professionals. (Offered as EDMS or EDSE credit.)

## EDSP - Education - Special

## EDSP 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## EDSP 30243 - Academic Success in Special Education (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the dean, College of Education. Students enrolled in EC6/Special Education Program must be concurrently enrolled in EDEC 30213, Creative Thinking and Problem Solving: Writing and EDEC 30223, Education in Elementary Curriculum: Reading. This course focuses on procedures and processes for assessing and teaching basic academic skills including oral language, reading, written language and math skills to students with disabilities. Individual education program planning and monitoring also will be addressed.

## EDSP 30603 - Study of Exceptional Students (3)

Prerequisite: Admission to the Teacher Education Program, EDUC 20003, EDMS 30103, EDMS 30013 and co-requisite EDMS 41151; A survey of programs for school-aged students with mental, physical and emotional deviations. (Offered as EDMS, EDSE, EDSP, or EDUC credit.)

EDSP 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. An examination of behavior problems of handicapped students with emphasis on developing alternative strategies for dealing with behavior problems.

## EDSP 41123 - Learner-Centered Teaching: Families (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Provides a foundation for understanding basic concepts regarding family interaction and parent/child relationships. This includes examining student assumptions appropriate family forms, rules and communication. Also students will learn communication skills for building relationships with parents as well as strategies for forming and guiding parental involvement. Students will be exposed to varieties of family forms through didactic, interpersonal, and community/practical experiences.

## EDSP 41143 - Learner-Centered Teaching: Management (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. This block melds content instruction and a semester-long practicum. In addition, to be working in classrooms or in other ways with students, under the supervision of teachers and CoE faculty, CoE faculty will cover content regarding: classroom management, assessment, parent and family relationships and issues, and professional roles and responsibilities. Block components are: EDEC 41103 Learner-Centered Teaching: Assessment, EDEC 41113 Learner-Centered Teaching: Foundations, EDEC 41123 Learner-Centered Teaching: Families, EDEC 41143 Learner-Centered Teaching: Management, and EDEC 41153 Learner-Centered Teaching: Internship.

## EDSP 42213 - Professional Induction: Curriculum for Diverse Learners: Special Education (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Concurrent enrollment in EDEC 42236 Professional Induction: Internship. Students develop curricula that meet the cultural, linguistic and developmental needs of all learners. Professional induction opportunities focus on placement file development, preparation of the interview process, and Special Education (EDSP) certification standards.

## EDSP 50013 - Literacy Methods in Special Education (3)

Prerequisite: Admission to a graduate program in the College of Education or permission from instructor. This course addresses research-based assessment and instructional methods in the area of literacy for students atrisk for failure and students receiving special education services.

## EDSP 50273 - Technology for Diverse Learners (3)

Prerequisites: Undergraduate education majors: EDUC 30113 and EDSP 30603, or admission to a graduate education program. An overview of using Universal Design for Learning to meet the differing educational needs of all students, including those who have disabilities. Addresses legal requirements for assistive technology, technology selection, resource accessibility, differentiated instruction, and factors related to successful implementation of technology in inclusive classrooms.

EDSP 50663 - Motivating and Managing Students in the Classroom (3) Prerequisite: Admission to the Teacher Education Program, EDMS 30123, EDMS 30113, EDMS 30603, EDMS 40213, and Content Area Methods course(s), and co-requisite: EDMS 41151. Research-based methods for creating positive classroom and school climates, organizing and managing classrooms, improving instruction, dealing with classroom discipline problems, and developing prosocial behaviors in children and youth. (Offered as EDMS, EDSE, or EDSP credit.)

## EDSP 58003 - Methods for Students with Mathematics Learning

 Differences (3)Prerequisites: Admission into College of Education or permission of the Dean. This course is designed to provide students with research-based, effective methods and strategies for assessing, teaching, and monitoring the mathematical performance of students with high-incidence disabilities and/or learning difficulties. This course follows the principles and standards for school mathematics set forth by the national Council of Teachers of Mathematics. It introduces research-based principles of mathematics instruction including explicit and systematic instruction, student practice opportunities, visual representations of mathematical ideas, and instructional scaffolding. It aims to prepare special education teachers to adequately facilitate skill acquisition, maintenance, retention, and generalization of students with mathematics learning difficulties.

## EDUC - Education - General

## EDUC 10433 - Freshman Seminar in Education (3)

An exploration of a variety of research perspectives through the eyes of university scholars. Faculty from various departments across campus will talk about their work. Students will visit the research sites and get firsthand experience of how each kind of research is conducted.

EDUC 10443 - Freshman Seminar: TCU: Our History, Our Heritage (3) Freshman Seminar in Education
EDUC 10533 - Freshman Seminar in Education (3)
Topics may vary each time it is offered.
EDUC 20003 - Critical Investigation: Teaching and Learning (3) This course will provide a careful and systematic exploration of teaching in public schools and a better understanding of the variety of student learning demands that teachers face. Moreover, class members will be expected to assess the quality and appropriateness of schooling processes for children at all levels from pre-school through high-school. These judgments will be made based on extended field experiences in public schools, as well as study of materials regarding best practices in schools.

## EDUC 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## EDUC 30001 - Professional Practice Seminar (1)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Issues in professional and legal responsibilities and certification standards. This course is available only for Pass/No credit grades. (Offered as EDEC, EDMS, EDSE or EDUC credit.)

## EDUC 30003 - Honors Tutorial (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. An examination of a major issue in education. This course is only offered as a tutorial and the topic is determined in consultation with an instructor. Arrangements for this course must be made prior to enrollment.

## EDUC 30013 - Professional Roles and Responsibilities (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. The focus of this course will be on philosophical and historical foundations of (U.S.) education with an emphasis on the moral and ethical responsibilities of the school educator. The evolution of assessment and the call (and need) for literacy, from the educator role and responsibility perspective, will also be examined. (Offered as EDMS, EDSE, or EDUC credit.)

EDUC 30113 - Digital Literacy, Learning, and Citizenship in Education (3) Prerequisite: Completion or concurrent enrollment in EDUC 20003 or permission of the instructor. An overview of using technology effectively and responsibly in educational contexts. Focuses on use of current and emerging technologies for teaching, learning, research, assessment, communication, and collaboration. Addresses the rights and responsibilities of digital citizenship, including safe, legal and ethical use of digital information, as well as digital access, literacy, etiquette, and wellness. (Offered as EDMS, EDSE, or EDUC credit.)

## EDUC 30123 - Educational Psychology (3)

Prerequisite: Admission to the Teacher Education Program and EDUC 30143, EDUC 20003, EDSE 30103, EDSE 30013, with a co-requisite of EDSE 41151. Psychological bases of the education process; theories of learning and motivation; individual differences, teaching strategies. Includes observations of children and adolescents in classroom settings. (Offered as EDMS, EDSE, or EDUC credit.)

## EDUC 30143 - Child and Adolescent Development (3)

Introduction to theories of child and adolescent development emphasizing ages 5-18. Physical, cognitive, emotional and social aspects of development will be considered. Includes observations of children and adolescents in informal settings.

EDUC 30333 - The University: From Scotland to Fort Worth (3)
The Scottish Enlightenment was an extraordinary outburst of intellectual activity that took place in Scotland in the eighteenth century." Daiches (1996) notes that "liveliness of mind was an essential condition" for the
progress envisioned by the enlightened Scots concerned to "put their new knowledge to work for the benefit of Man." At the heart of this great period in Scottish history were the great universities which not only nurtured this unprecedented outbreak of scholarship, though, so still Gaelic), in many ways they embody the same enlightenment spirit. This course will investigate the university in the Scottish Enlightenment and in TCU on the American frontier."

## EDUC 30603 - Study of Exceptional Students (3)

Prerequisite: Admission to the Teacher Education Program, EDUC 20003, EDMS 30103, EDMS 30013 and co-requisite EDMS 41151; A survey of programs for school-aged students with mental, physical and emotional deviations. (Offered as EDMS, EDSE, EDSP, or EDUC credit.)

## EDUC 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## EDUC 40003 - Honors Research Paper (3)

Prerequisite: Admission to the Teacher Education Program or written permission of the Dean, College of Education. An independent project on a major issue in education resulting in the Senior Honors Thesis.

EDUC 40100 - ETEN International Teacher Practicum in U.S. Public Schools (3.00-6.00)
This course is designed for international exchange students from the European Teacher Education Network (ETEN) of Colleges and Universities to provide students with opportunities to observe and interact with K-12 students in the U.S., while comparing and contrasting the similarities, strengths, and weaknesses of two different educational systems embedded in two different cultures.

## EDUC 40213 - Promoting Literacy in the Content Areas (3)

Prerequisite: Admission to the Teacher Education Program, EDUC 20003, EDMS 30103, and EDMS 30013; co-requisite: EDMS 41151. A course designed to acquaint the preservice teachers with strategies which facilitate middle and secondary students' use of reading and writing to learn from information texts. A component of this course is a field-based practicum. (Offered as EDMS, EDSE, or EDUC credit.)

## EDUC 40966 - All Level Student Teaching (6)

Prerequisites: Admission to Teacher Education and eligibility for Admission into the Student Teaching Program. All-day observation and supervised teaching for a period of 12 weeks in the public schools. Accompanying weekly discussion sessions and a two-week seminar on campus prior to beginning student teaching for the purpose of developing competencies and professional growth ( 6 semester hours.) (This course is only offered as P/NC.)

## EDUC 40970 - Directed Study in Education (1.00-6.00)

Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Study of specialized topics in Education.

## EDUC 50003 - Diversity in American Education (3)

Prerequisite: Admission to College of Education or written permission of the Dean, College of Education. This course will equip educators with the necessary skills for multiethnic school environments. It focuses on developing an awareness of how education is connected to wider structures of social, cultural, economic life and encourages not only critical examination, but also discussion of alternatives to the present reality.

EDUC 50023 - Effective Teaching and Classroom Implementation (3) Prerequisite: Admission to the Teacher Education Program, EDUC 20003, EDSE 30103, and EDSE 30013; co-requisite: EDSE 41151. As a part of the effective teacher model, this course will focus on instructional design and implementation, motivation of students to promote and enhance learning in the classroom; management issues pertinent to student behavior and learning outcomes; and preparation of a variety of formal and informal assessment strategies. (Offered as EDMS, EDSE or EDUC credit.)
EDUC 50043 - Seminar in Children's Literature (3)
Prerequisite: Admission to Teacher Education Program or written permission of the Dean, College of Education. Advanced study of literature for children with special attention to principles of selection and use in the elementary school curriculum.

EDUC 50063 - Seminar in Teaching Gifted and Talented Children (3)

Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Advanced study of methods to identify, assess and teach exceptionally capable students. Major emphasis is on developing skills and teaching methods. Other aspects cover guidance counseling process, social/emotional needs, working with parents, and model school-district programs.

## EDUC 50143 - Theories of Human Development (3)

Prerequisites: Admission to College of Education or written permission of the Dean, College of Education. Selected theories of human behavioral, social, and emotional development.

## EDUC 50203 - Programs in Bilingual Education (3)

Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education. The rationale for bilingualbicultural education including a survey of current programs. Includes lab experiences in public school classes.

## EDUC 50213 - Seminar in Bilingual Education (3)

Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Methods and strategies in teaching the bilingual child; including English as a second language and Spanish as a first language. Observation and participation in bilingual classes required.
EDUC 50253 - Applied Teaching, Learning and Technology (3) Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education. An examination of using educational technology for teaching, learning and professional productivity. Focuses on use of current and emerging technologies for teaching, assessment, research, communication, and collaboration in educational settings. Addresses topics such as finding and evaluating technology resources, designing print and multimedia products, collecting and analyzing data using technology, planning for technology-integrated instruction, and understanding issues and ethical practices related to technology use. Students will design a technology-integrated unit plan and develop a technology-enhanced instructional application for an educational setting. Includes a field component TBA.
EDUC 50263 - Digital Communication and Collaboration in Education (3) Prerequisites: EDMS/SE/UC 30113, Digital Literacy, Learning, and Citizenship in Education and admission to the Graduate Education Program or instructor permission. Educational applications of digital tools to support 21st century skills such as communication, collaboration, critical thinking, and creativity. Students will develop skills in locating organizing, analyzing, evaluating, designing and communicating digital information. Students will also learn fundamentals of data management and web development. In addition, they will consider ethical and societal issues related to digital communication and collaboration in education.

EDUC 50503 - Foundations of Language Acquisition (3)
Prerequisites: Admission to Teacher Education Program or written permission of the Dean, College of Education, and concurrent enrollment in EDMS/EDSE 50223 Practicum in Reading and ESL, or permission of the instructor. Course includes overview of language concepts, language learning research and theories, socio-cultural context for language development and program types. Overview of historic and current trends, policies and social issues affecting the education of linguistic minorities. Assessment procedures appropriate to second-language learners are introduced.

EDUC 50513-Curriculum and Instruction in the Second Language Learning Classroom (3)
Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Curricular and instructional principles and practices to meet the academic development needs of first and second language learners in the classroom. Emphasis on strategies for providing content-area instruction and establishing learner-centered environments within various ESL settings. Texas requirements for second language learners are addressed. (Offered as EDEL or EDSE credit.)
EDUC 50643 - Reading in the Secondary School (3)
Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, College of Education. Materials and methods for developing reading skills of the secondary school student in the various curriculum areas.

EDUC 50870 - Directed Study in Education (1.00-6.00)
Prerequisites: Admission to the Teacher Education Program or written permission of the Dean, School of Education. Study of specialized topics in Education.

EDUC 50970 - Special Problems in Education (1.00-20.00)
Study of specialized topics in Education.

## EDUC 50990 - International Experiences in Education (1.00-6.00)

Prerequisites: Meet admission requirements set forth by TCU Study Abroad. Permission of adviser and professor of record. The objective of the course is to gain first-hand knowledge of varying approaches to education. This course provides the opportunity to learn about unique educational practices in an international setting. Students will have opportunities to learn about, observe, and/or participate in educational facilities which focus on early childhood, middle childhood, and/or adolescence. This course may be taken for up to six hours credit.

## ENFL - English as a Foreign Language

ENFL 10003 - Reading/Study Skills (3)
A course designed to introduce and reinforce the reading and study skills necessary for success in the U.S. university.
ENFL 10103 - Intermediate Composition Skills (3)
A course designed for students who first language is other than English; students should have an intermediate level of ability to write in English. The course fosters improvement of composition skills by writing ethnography (or the writing of American academic culture particularly). Concurrent enrollment in ENGL 10803, Introductory Composition: Writing from Sources or ENGL 10833 Comp: Freshman Seminar is expected. The TWE is required as a final exam.

## ENFL 10113 - Advanced Composition Skills (3)

A course designed for students whose first language is other than English; student should have an advanced level of ability to write in English. The course fosters improvement of composition skills by writing ethnography (or the writing of American academic culture particularly). Concurrent enrollment is expected in one of the following course: ENGL 10803 Introductory Composition: Writing from Sources; ENGL 10833 Comp: Freshman Seminar; or ENGL 20803 Intermediate composition: Writing within communities. The TWE is required as a final exam.

## ENGL - English

ENGL 10103 - Introduction to Fiction (3)
Reading and analysis of prose fiction by a variety of authors. The course may focus on a specific historical period or may cover a more extensive time span. Students will become familiar with interpretive strategies and will examine the course texts in relation to literary antecedents, the conventions of various genres, and the cultural circumstances of composition.
ENGL 10113 - Introduction to Poetry (3)
Reading and analysis of a wide variety of American and British poetry. The goal of the course will be to help students understand that poetry is not difficult and dull, but understandable, worthwhile, and enjoyable.

## ENGL 10123 - Introduction to Drama (3)

Reading and analysis of the various dramatic genres.
ENGL 10133 - Introduction to Literature (3)
Reading and analysis of a variety of genres by a variety of authors. The course may focus on a specific historical period or may cover a more extensive time span. Students will become familiar with interpretive strategies and will examine the course texts in relation to literary antecedents, literary analysis as a research method, and the cultural circumstances of composition. Subtopics will often vary by section. This course cannot be repeated for additional credit.

ENGL 10203 - Introduction to Creative Writing (3)
Workshops in which students present their writing (fiction, poetry, drama, creative nonfiction) for class analysis will be complemented by lectures on the genres and readings that exemplify outstanding technique.

ENGL 10303 - Approaches to Film (3)
A study of aesthetic and ideological differences between literary source texts and the films, scripts, television series, video games, and other media adapted from and inspired by them.

ENGL 10503 - Introduction to Nonfiction Genres (3)
This course provides an introductory-level study of a variety of genres that do not fit the mold of fiction, poetry or drama. Readings will vary by semester, and may include such genres as oratory, essay, memoir, autobiography, oral history, diary, speeches, letters, belles lettres, chronicles, periodicals, treatises, manifestos, travelogues, weblogs, podcasts, dialogues,
debates, didactic and religious writings and/or documentary film and television.

## ENGL 10703 - Introduction to Critical Writing (3)

Introduction to critical writing, reading, and research in the university. ENGL 10703, when followed by a designated section of ENGL 10803, gives students the opportunity to engage in a year-long study of academic writing. Includes attention to invention, drafting, revision, and editing of various genres of academic writing. Designed for students who do not have extensive experience writing research-based academic essays. Not available to student who have credit for ENGL 10803 or ENGL 10833.

ENGL 10803 - Introductory Composition: Writing as Inquiry (3) Course satisfies Written Communication 1 (WCO) requirement in the TCU Core Curriculum. Writing workshop where students compose multiple pieces in a range of genres using appropriate rhetorical conventions, learn strategies for reading texts and visual critically, and incorporate suitable sources. Students will engage in processes for invention, drafting, critiquing, revising, and editing of prose. Note: themed sections on a range of topics may be offered and will be designated with a descriptive course title.

## ENGL 20103 - Reading as a Writer (3)

Introduces concepts of close reading and the creative writing workshop. Engages questions of the role of reading in culture, its impact on understanding complex issues, and the connection of reading to composing.

## ENGL 20203 - Girls' Studies (3)

Girls' Studies examines the experiences and representation of girls in the U.S. and global cultures through various feminist theoretical lenses and considers girlhood as a gender category worthy of academic analysis. Using academic and popular texts - including those produces in literature, online, and via television, film, and music - this course studies the category of girlhood in relation to dominant cultural practices and larger social, institutional, and political transformations.

## ENGL 20213-Global Women's Literature (3)

This course examines literature by women outside the United States and Europe, using a variety of recent theories about gender, nationalism, and historiography. Students will consider the fundamental place of gender in shaping a cultural narrative, and we will concentrate on the ways in which gender and sexuality are configured in the literature of women in various national, cultural, social, and political contexts. Themes considered may include sexuality, memory, race, decolonization, migration, nationalism, history, and diaspora.

## ENGL 20223 - Gender, Culture and Representation (3)

This course will explore how gender is portrayed in cultural texts across a range of genres and introduce students to theories of representation. Students will examine how gender difference is represented in literature, art or film; the cultural implications of those representations; and how texts may perpetuate, challenge, and/or subvert gendered stereotypes. Texts might include novels, short stories, plays, film, television shows, web texts and social media, visual art, graphic novels, and essays.

ENGL 20233 - Sex and Gender in Literature (3)
An introductory course on interpreting gender, sex and sexuality in literature from a variety of methodologies. Readings will vary by semester, but will always represent a spectrum of human sexual experience from diverse cultures, and draw on a variety of genres, such as poetry, drama, fiction, biography, film and essay.

## ENGL 20403 - Major British Writers (3)

Studies of texts by major British writers from the beginnings of English literature to the present. Texts vary by semester.

## ENGL 20423 - Introduction to Medieval Literature (3)

An introduction to many different genres of medieval literature including poetry, prose, epic, saga, romance, myth, frame tale, and drama from various Medieval cultures around the world. Students will become familiar with interpretive strategies and will examine the course texts in relation to the cultural and historical circumstances of composition.

## ENGL 20433 - Introduction to Shakespeare (3)

Introduction to and analysis of 6-7 plays, with reference to the sociocultural context in which the plays were composed and the ways they (and their author) have been interpreted and appropriated since the late sixteenth century. This course is designed for undergraduates with little or no preparation in literary studies.

ENGL 20503 - Major American Writers (3)
Studies of texts by major American writers from the beginnings of American literature to the present. Texts vary by semester.

ENGL 20523 - Sports in Modern American Literature (3)
Prerequisites: ENGL 10803, ENGL 20803. ENGL 20803 may be taken concurrently with ENGL 20523. An examination of the question of why so many of modern America's greatest authors employ sports-centered materials in their work. The readings will focus on baseball, football, basketball, and boxing.

## ENGL 20533 - The American Dream (3)

The American success dream as depicted and evaluated by major writers from Colonial times to the present.

## ENGL 20543 - The American Short Story (3)

A survey of the American short story from its origins to the present.
ENGL 20553 - Introduction to American Studies (3)
An introduction to the interdisciplinary field of American studies, which brings together work from across the humanities and social sciences to study the histories, ideas, and collectively told stories that constitute the nation and shape its culture. Engages key concepts in the field, including the construction of difference and identity, racism and antiracism, war and empire, cultural memory, and globalization.

ENGL 20573 - Introduction to Native American Literatures (3)
An introduction to the diverse literatures of Native America. The course may focus on a specific historical period or may cover a more extensive time span.

## ENGL 20583 - The Western (3)

The American West and the Western hero in fiction, from James Fenimore Cooper to selected contemporary authors.

## ENGL 20593 - Introduction to Literatures of the Global African Diaspora

 (3)This course will introduce literary and cultural production (prose, poetry, nonfiction, drama and film) of the global African Diaspora with attention to themes of identity, language, exile, and legacies of colonialism and imperialism. Students will examine this literature from aesthetic, historical, and social contexts.

## ENGL 20603 - Western World Literature I (3)

Two period surveys, the first from ancient Greece to the Renaissance, and the second from the Enlightenment to the present. The primary emphasis will be historical, but individual instructors may vary the choice and treatment of texts to explore important developments of theme (e.g., the hero, journey, and monsters) or genre (e.g., tragedy, epic, romance, and lyric). Students may take both courses or either course.

## ENGL 20613 - Western World Literature II (3)

Two period surveys, the first from ancient Greece to the Renaissance, and the second from the Enlightenment to the present. The primary emphasis will be historical, but individual instructors may vary the choice and treatment of texts to explore important developments of theme (e.g., the hero, journey, monsters) or genre (e.g., tragedy, epic, romance, lyric). Students may take both courses or either course.

## ENGL 20623 - Introduction to Women's Writing (3)

This course examines women writers who create forms of expression as well as contribute to literature and/or rhetoric. The course may focus on a specific historical period or may cover a more extensive time span.

ENGL 20633 - Mythology (3)
Study of major Greek and Roman myths, gods, and heroes, as these reflect cultural values and problems, and including some study of major literary forms.

## ENGL 20643 - Fable and Fantasy (3)

An examination of a wide range of texts, some that are classified as fable or fantasy literature as well as some that incorporate elements from these genres. The course may focus on a specific historical period or may cover a more extensive time span. Texts may include The Arabian Nights, Lucian's A True History, Aesop's and Marie de France's Fables, medieval Arthurian romances, eighteenth- to twentieth-century versions of fairy tales, Ursula LeGuin's A Wizard of Earthsea, Salman Rushdie's The Satanic Verses, and Naguib Mahfouz's Arabian Nights and Days.
ENGL 20653 - The Romantic Imagination (3)
A study of the means by which the spirit of romanticism is embodied in literature since the late 18th century.

ENGL 20663 - Why Read Literature? (3)
Why do people read literature, and in what ways might it matter? This course explores the personal, civic, and cultural significance of reading literature through assigned readings and a service learning component.

Students will thus explore literary works and theories about literature's significance in multiple contexts: in individual reading and reflection, in group discussions in the classroom, and in dialogue with community residents in the civic context of Fort Worth.

ENGL 20713 - Literature and Medicine (3)
This course examines literary works in a variety of genres that treat topics related to health care and medicine. Students will consider ways in which narrative shapes cultural understandings of health, sickness, and the body as well as ways in which literary writers have used health and sickness as metaphors to explore the human condition. Themes may include caregiving, doctor/patient relationships, chronic illness, reproduction, mental illness, infection and contagion, and disability.

ENGL 20733 - Science Fiction (3)
Historical development of science fiction as a literary genre with particular attention given to significant authors and themes.

## ENGL 20743 - Detective Fiction (3)

Detective and suspense fiction in its social and historical context, illustrated by selected major works and authors.

## ENGL 20803 - Intermediate Composition: Writing Argument (3)

Course satisfies Written Communication 2 (WCO) requirement in the TCU Core Curriculum. Prerequisite: ENGL 10803 or equivalent and sophomore standing ( 24 hours). Writing workshop that builds on ENGL 10803 by focusing on the analysis and production of arguments in a variety of media (i.e., print, visual, oral, digital). Students will work individually and collaboratively to read, research, and compose effective arguments on issues of local and national importance. Note: themed sections on a range of topics may be offered and will be designated with a descriptive course title.

## ENGL 20913 - Literature and Civilizations I (3)

This two-semester sequence explores the role of literary, rhetorical and dramatic expression in the development of cultural ideas, institutions and values. The first semester will focus on the cultural foundations of Britain and the United States; the second semester will focus on responses to these developments registered within various literary and rhetorical texts from around the world.

ENGL 20923 - Literature and Civilizations II (3)
Along with ENGL 20913, this course explores the role of literary, rhetorical and dramatic expression in the development of cultural ideas, institutions and values. This course focuses on responses to inherited cultural developments registered within various literary and rhetorical texts from around the world.

## ENGL 20933 - Non-Western World Literature (3)

Examines a broad survey of non-Western literature, including work from Asia, Africa, the Middle East, and Latin America. This course approaches the literature from a variety of cultural perspectives such as dissent and conformity, urbanity and rural life, religion and secular identity, and sex and gender. Students will gain an understanding of non-Western authors and the cultures they represent, as well as investigate the ways literature contributes to global conversations about identity and creativity.

ENGL 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ENGL 30003 -Junior Honors Seminar (3)

Independent projects in literature.
ENGL 30013 - Distinction Program: Thesis I (3)
Course meets to support students' independent distinction projects in literature and writing.

## ENGL 30103 - Introduction to Literary Theory (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. An introductory investigation into the peculiar aesthetic problems involved in reading and interpreting literary language. Particular attention is given to the tensions between literature, readers, and cultural contexts. Both traditional and contemporary approaches are examined. Readings range from folk tales to literary classics to recent writing in the philosophy of language.

ENGL 30113 - British Literature to 1800 (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. An introductory investigation into the peculiar aesthetic problems involved in reading and interpreting literary language. Particular attention is given to the tensions between literature, readers, and cultural contexts. Both traditional and contemporary approaches are examined. Readings range from folk tales to literary classics to recent writing in the philosophy of language.

## ENGL 30123 - British Literature since 1800 (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGLWRIT course. Two period surveys, the first of medieval and early modern literature, and the second of nineteenth- and twentieth-century literature. Both courses will consider literary antecedents, the conventions of various genres, the cultural circumstances of composition, and interpretive strategies. Students may take both courses or either course. The English Department recommends that ENGL 30113 and 30123 be taken consecutively.

## ENGL 30133 - American Literature to 1865 (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. The first of two period surveys in American Literature, this one spanning from the Colonial times through the Civil War. This course considers literary antecedents, the conventions of various genres, the cultural circumstances of composition, and interpretive strategies. Students may take both courses or either course.

## ENGL 30143 - American Literature since 1865 (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. The second of two period surveys in American Literature, this one spanning from after the Civil War to the present. This course considers literary antecedents, the conventions of various genres, the cultural circumstances of composition, and interpretive strategies. The English Department recommends that ENGL 30133 and 30143 be taken consecutively.

## ENGL 30153 - Nature Writing in Nature (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one additional 10000- or 20000-level ENGL/WRIT course. The seminar focuses on nature writers and texts from the eighteenth century to the present and will cover a variety of genres, including exploration accounts, travel narratives, memoirs, poetry, and creative non-fiction. Field trips are required.
ENGL 30163 - Urban Experiences and American Literature (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. An examination of depictions of cities in American literature, with attention to the ways urban experiences shape Americans' lives, social interactions, and identities. The historical period under inquiry may vary by semester.

## ENGL 30173 - Marxist Cultural Theory (3)

Prerequisites: ENGL 10803, ENGL 20803, and one 10000-20000 level ENGL/WRIT class. This course provides an introduction to the early tradition of Marxist Cultural Theory. Students will analyze and evaluate theoretical arguments and apply them to literary and visual texts.

## ENGL 30183 - Prison Literature (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least onee additional 10000or 20000-level ENGL/WRIT course. Study of literary works pertaining t the experience, concept, theory, politics, culture, history, and/or imaginary of prison and/or penal systems. Themes of analysis may include politics, power, race, ethnicity, class, gender, and/or violence. Topics and reading vary by semester.
ENGL 30233 - Creative Nonfiction Workshop I (3)
Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. A creative nonfiction writing class for students with some experience in creative writing. In this course, students will get experience writing memoir, personal essays, autobiography, oral history, and in other nonfiction genres. The course may also include reading of major nonfiction writers from the Renaissance to the present.

## ENGL 30343 - Fiction Writing Workshop I (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. A fiction writing class for students with some experience in creative writing.
ENGL 30353 - Poetry Writing Workshop I (3)
Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. A poetry writing class for students with some experience in creative writing.

ENGL 30363 - Digital Creative Writing (3)
Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. Explores the composition of creative work using digital technologies - collage, graphic
narratives, multimedia poetry/fiction, and creative short animations. Course emphasizes concepts in creative writing, multimedia, and authorship in digital environments. Students design and compose a variety of multimedia products incorporating typography, image, and other modes.

## ENGL 30373 - Drama Writing Workshop I (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. A dramatic writing workshop, focusing on the growth of students' own work in playwriting and/or screenwriting.

## ENGL 30413 - Studies in Medieval Literature and Culture (3)

Prerequisite: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Concentrated study of Medieval literature and culture, $500-1500$. Topics, genres, authors, and approaches will vary by semester. May be taken more than once for credit under different subheadings.

## ENGL 30423 - Early British Drama (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Survey of early British dramatic literature, from morality- and mystery-plays of the 15th century through revenge tragedies and city comedies of the 16th and 17th. The course examines drama as a cultural force and traces the growth of tragic and comic genres.
ENGL 30433 - Renaissance Poetry (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Survey of 16th- and 17th-century English verse, with particular attention to aesthetic, political, and religious functions of poetry; the status of poets in early modern England; and the effects of societal changes on the production of poetry in the period.

## ENGL 30443 - Twentieth Century Irish Literature (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A survey of drama, poetry, prose and film from all 32 counties of Ireland beginning with the Irish literary revival exemplified by, for example, W.B. Yeats, Augusta Gregory, J ames J oyce, J.M. Synge and concluding with Ireland's second renaissance e.g., works by Seamus Heaney, Paula Meehan, Roddy Doyle, Brian Friel, and Neil Jordan.

## ENGL 30453 - The Victorian Novel (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. This course examines the genre of the Victorian novel, asking why it emerges in this period to challenge the preeminence of poetry, why realism becomes its dominant style, and how particular novelists respond to the substantial changes occurring in British society, including industrialization, political reform, and changing relations between the sexes and classes.

ENGL 30463 - British Literature: The Bloomsbury Group (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A close scrutiny of early 20th century British literature and criticism written by and about the intellectual circle called the Bloomsbury Group. Writers and artists may include Virginia and Leonard Woolf, E.M. Forster, Lytton Strachey, Roger Fry, Duncan Grant, Vanessa and Clive Bell, and Desmond MacCarthy. Emphasis will be given to the writers' engagement with, contributions to, and/or repudiation of Modernism, Empire, sexual norms, and class consciousness.
ENGL 30473 - Wilde Years: Oscar Wilde and the 1890s (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. This course examines the writings of Oscar Wilde and his contemporaries to explore how literature constructs and reflects gender, sexuality, and social debates. Particular attention will be given to diverse sexualities represented by New Woman writers, new theories of sexual inversion" developed in the 1890s, and Oscar Wilde's trials and imprisonment on the grounds of indecency with another man."
ENGL 30493 - Women Poets and Poetic Tradition (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGLWRIT course. A survey of British, American and Anglophone women poets from the 16 th century to the present. Emphasis will be given to women writers' engagement with, contribution to, and rewriting of poetic tradition; to the social and historical conditions affecting women's poetic production; and to the relation between poetry, poetics, and theories of gender.

## ENGL 30503 - The Roaring Twenties (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A study of major American authors emerging in the Twenties, the cultural context for their art, and the influences of their achievements.

ENGL 30513 - American Poetry (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Survey emphasizing major poets from Colonial times to the present, including some poetic theory and criticism.

## ENGL 30523 - Popular Literature (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A study of American literature's place in popular culture and of the intersections among popular forms and the literary." The course may focus on different periods (e.g. historical or contemporary) different genres (e.g. mass market forms such as mysteries romance and biographies) different authors and/or different reading practices (e.g. book clubs etc.)."

## ENGL 30533 - Modern American-Jewish Literature (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGLWRIT course. A survey of the contributions of major AmericanJewish authors to modern American literature. Prospective students need no special knowledge, since this is a course in American literature and not in Judaism.

## ENGL 30553-19th Century American Novel (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Development of the American novel from its origins through the beginning of the 20th Century. Readings may include works by James Fenimore Cooper, Nathaniel Hawthorne, Herman Melville, Louisa May Alcott, Henry James, Harriet Beecher Stowe, Mark Twain, Sarah Orne Jewett, and Frank Norris, and will emphasis the novels' close ties to contemporaneous social, scientific, and political issues.

ENGL 30563 - American Drama (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Representative plays by the major playwrights of the American theatre. Movements in theater and changes in theatrical conventions will provide a historical context. Limited readings in criticism.

## ENGL 30573 - African-American Literature (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one additional 10000- or 20000-level ENGL/WRIT course. An analysis of the fiction, poetry, drama and/or essays written by African-Americans, with texts potentially drawn from the slave era through post-civil rights, exploring chronologically the historical, social, cultural and racial contexts which shape the literature.

ENGL 30583 - Early American Literature (3)
Prerequisites: ENGL 10803 , ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. The development of American literature from the period of earliest settlement through the era of the Early Republic, emphasizing the religious and socio-political evolution of American thought; attention will also be given to the development of imaginative literature, such as the novel. Among the figures included will be William Bradford, Anne Bradstreet, Edward Taylor, Thomas Jefferson, Benjamin Franklin, Susannah Rowson, and Charles Brockden Brown.

ENGL 30593 - American Fiction, 1960 to the Present (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A study in the development of American Fiction from 1960 to the present. Explores the relationship between literature and the concerns of contemporary society. Examines current trends and topics in American Fiction and introduces students to recent literary analysis and critical debates.

## ENGL 30613 - Women's Lives: Memoir and Fiction (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Readings in contemporary women's writing that reflect women's lives and experiences with self, family, and society, with some attention to the theory and practice of writing the memoir. Discussion of works as both literature and social commentary.

## ENGL 30623 - Medieval Literature in Translation (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A survey of major thinkers and writers of the West from the fall of Rome to 1500 , in part devoted to drawing a coherent picture of medieval thought: Heavenly versus earthly order; the nature of desire; the power of human agency; the value and uses of the past, including the classical past; gender roles. The often surprising ways in which individual writers deviate from and even criticize this cultural heritage.
ENGL 30633 - Medieval and Early Modern Women Writers (3) Prerequisites: ENGL 10803, ENGL 20803 and at least one 10000- or 20000level ENGL/WRIT course. A study of one or more female authors writing in the medieval or early modern periods in Britain, with attention to the development of beliefs about women's roles and characters and the ways
these beliefs were accepted, challenged, or discredited. Genres, authors, and approaches may vary by section.

## ENGL 30653 - Jane Austen: Novels and Films (3)

Prerequisites: ENGL 10803, ENGL 20803, and a least one 10000 or 20000-level ENGL/WRIT course. A study of Jane Austen's biography, letters, and novels and the film adaptations based upon them, from 1940 to the present day.
ENGL 30673 - King Arthur in Literature and Legend (3)
Prerequisites: ENGL 10803 , ENGL 20803 , and at least one 10000- or 20000level ENGL/WRIT course. Surveys the growth of the Arthurian tradition from legend and medieval literature into the 19th and 20th centuries, with special attention to Malory, Tennyson, Twain, and Bradley.

ENGL 30683 - Post-Colonial Anglophone Literature (3)
Prerequisites: ENGL 10803 , ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. This course examines contemporary writers of English whose literary works were influenced or shaped by colonialism or its aftermath. Emphasis will be placed on writers from India, Australia, Ireland, Africa or the Caribbean.

ENGL 30693 - U.S. Multi-Ethnic Literature (3)
Prerequisites: ENGL 10803, ENGL 20803 and at least one 10000- or 20000level ENGL/WRIT course. An analysis of the fiction, poetry, drama and essays by major ethnic writers from the United States. From a comparative angle, this course will explore the historical, social, cultural and racial contexts that shape the literature. Several critical approaches will be taken to show interrelationships among writers.

ENGL 30703 - Contemporary Latino Literature (3)
Prerequisites: ENGL 10803, ENGL 20803 and at least one 10000- or 20000level ENGL/WRIT course. Study of literary works in English on various genres by U.S. authors of Puerto Rican, Mexican, Nicaraguan, Cuban, Dominican, and/or Chicano/a backgrounds. Historical emphasis will be limited to the twentieth and twenty-first centuries. Topics of analysis include race, gender, class, nationality, migration, immigration, and urban studies.

## ENGL 30713 - Mexican American Culture (3)

The course examines expressive culture that reflects and shapes the way people think, behave, and give their lives meaning. The expressive culture includes history, literature, and lore considered as resources for people to address their needs and circumstances, especially in relation to social positions, gender, self-identification, politics, and ethics. Other topics include U.S. Mexico relations, social conflict, resistance movements, religion, and cultural poetics.
ENGL 30723 - Short Story (3)
Prerequisites: ENGL 10803, ENGL 20803 and at least one other 10000- or 20000-level ENGL/WRIT course. A survey of the development of the genre through the 19th and 20th centuries.

## ENGL 30733 - Satire (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Examines the nature and uses of satire, concentrating on the variety of satiric forms. Readings will include prose fiction, essays, and poetry written by European and American satirists.

ENGL 30743 - Illustrated Storytelling: Comic Books, Graphic Novels, Art and Film (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. The course examines sequential illustrated storytelling -- including comic books, graphic novels, political cartoons, and engravings -- from a variety of cultures over the past 300 years. The perspective will be literary and historical.

ENGL 30753 - Literature and Film (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A study of aesthetic and ideological differences, considering both how various literary works have been filmed and how films images may be analyzed using interpretive techniques developed by literary criticism.

ENGL 30763 - Lesbian, Gay, Bisexual and Transgender Authors and Themes in Literature (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRITcourse. This course examines themes of sexual identity in literature by authors from antiquity to the present.
ENGL 30773 - India: Texts and Traditions (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A consideration of selected classic works of religious and literary imagination in Indian culture. Versions and
interpretations of the Hindu epics Mahabharata and Ramayana will be examined in translation.
ENGL 30783 - Modern India: Literature and Culture (3)
Prerequisites: ENGL 10803, ENGL 20803 and at least one 10000- or 20000level ENGL/WRIT course. A student of the literature and culture of modern, post-independence (post 1947) India through the lens of literature. The course introduces students to India's history of colonization and religious diversity to understand Indian heritage and provide a context for modern Indian literature. Literature is the focal point but the course includes readings about India's history, religion and philosophy.
ENGL 30793 - Multi-Ethnic Literature of the World (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGLWRIT course. An analysis of the fiction, poetry, drama and essays of major ethnic writers and new literatures in English from Britain, the Commonwealth and other parts of the world. From a comparative angle, this course will explore the historical, social, cultural and racial contexts which shape the literature. Several critical approaches will be taken to show interrelationships among writers.

ENGL 30803 - Theories of Cinema (3)
Prerequisites: ENGL 10803 or 10833, and ENGL 20803 or 20833. A study of theories of cinema as text in the humanities, including areas such as analytic approaches to film, rhetorical approaches to film, and/or film criticism. Course includes an integrated lab for viewing required films.

## ENGL 30813 - Books and the History of Print Culture (3)

Prerequisites: ENGL 10803 or 10833, and ENGL 20803 or 20833. This course examines the history of the book from the perspectives of producers and consumers. It includes the social and cultural significance of print culture, analyzing print technology as a mass media capable of shaping human attitudes. As readers move from the printed page to the computer screen, all areas of traditional print culture are changing as well, including the most basic concepts of what it means to be a writer, reader, and publisher. This course may include a lab component.

## ENGL 30823 - Law and Literature (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one other 10000- or 20000-level ENGL/WRIT course. This course will explore the parallel interests and debates of literary and legal discourse. Subtopics and time period may vary by semester.
ENGL 30833 - Serials, Franchises, and Fan Culture (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. This course critically examines consumer-driven participatory culture through multiple media, including magazine and newspaper serial publication, film franchises, television series, parodies, pastiches and interactive fan cultures. Case studies vary by semester.
ENGL 30843 - Australian Literature (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. This course examines a wide variety of Australian literature written between European colonization in 1788 and the present.

## ENGL 30853 - Asian American Literature (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. An introduction to Asian American literary culture and the many histories, geographies, and experiences that shape it. Explores how Chinese, Japanese, Filipino, Korean, Hawaiian, South Asian, and Southeast Asian American literatures have reflected and given form to the panethnic identity Asian American.
ENGL 30863 - Literature of the Middle East and North Africa (3) Prerequisites: ENGL 10803 or 10833 and ENGL 20803 or 20833 plus one additional ENGL or WRIT class. This class examines literature from across the Middle East and North Africa, addressing a wide range of topics such as dissent and conformity, religious and secular identity, sex and gender, conflict and reconciliation, etc. Discussions will be grounded in critical race theory cultural, constructivist approaches to literature.
ENGL 30970 - Directed Studies in English (1.00-6.00)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Directed Study in English.

## ENGL 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

ENGL 31990- International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ENGL $\mathbf{3 2 2 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ENGL 34990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ENGL 35590 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ENGL 37990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ENGL 38013 - Research Seminar in British Literature (3)

Prerequisites: English majors or minors only; students must have junior or senior standing and must have completed one $30000-$ level ENGL or WRIT course. Introduces English majors and minors to a sustained, Iong-format research project over the course of the semester. Students will discuss and examine the practical and professional aspects of the English major while attempting to synthesize and integrate their various learning experiences in British literature and writing.
ENGL 38023 - Research Seminar in American Literature (3)
Prerequisites: English majors or minors only; students must have junior or senior standing and must have completed one 30000 -level ENGL or WRIT course. Introduces English majors and minors to a sustained, long-format research project over the course of the semester. Students will discuss and examine the practical and professional aspects of the English major while attempting to synthesize and integrate their various learning experiences in American literature and writing. This course is not repeatable for credit.

## ENGL 38033 - Reseach Seminar in Global Literature (3)

Prerequisites: English majors or minors only; students must have junior or senior standing and must have completed one 30000 -level ENGL or WRIT course. Introduces English majors and minors to a sustained, long-format research project over the course of the semester. Students will discuss and examine the practical and professional aspects of the English major while attempting to synthesize and integrate their various learning experiences in global and diasporic literatures and writing. This course is not repeatable for credit.

## ENGL 39990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ENGL 40003 - Senior Honors Seminar (3)

Independent projects in literature resulting in Senior Honors Thesis.
ENGL 40013 - Distinction Program: Thesis II (3)
Independent study to complete a distinction project in literature or writing.

ENGL 40123 - Literary Criticism (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. An historical study of major developments in the theory of literature since Plato. The first half of the course surveys representatives of the most important positions, the second half surveys how these positions remain influential in 20th century thought.

## ENGL 40133 - Creative Nonfiction Workshop II (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. A creative nonfiction writing class for students with some experience in creative writing, this a craft/workshop course intended for advanced writers who have a committed interest in creative non-fiction (such as personal essay, literary journalism, travel writing, science writing, memoir, and other non-fiction genres) and are comfortable writing longer works of prose. As a workshop, students will work cooperatively to share and improve each others' work during the semester.

## ENGL 40203 - Fiction Writing Workshop II (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. An advanced fictionwriting workshop, focusing on the growth of students' own work. Prior to enrollment, students are also strongly encouraged to take ENGL/WRIT 30343 (Fiction Writing Workshop I.)

## ENGL 40213 - Poetry Writing Workshop II (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. An advanced poetrywriting workshop, focusing on the growth of students' own work. Prior to enrollment, students are also strongly encouraged to take ENGL/WRIT 30353 (Poetry Writing Workshop I.)

## ENGL 40223 - Drama Writing Workshop II (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. An advanced dramatic writing workshop, focusing on the growth of students' own work in playwriting and/or screenwriting. Prior to enrollment, students are strongly encouraged to take another 30000 -level course in creative writing.

## ENGL 40323 - History of the Language (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. The study of the origins and development of Modern English.

## ENGL 40403 - Chaucer (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. An intensive study of Chaucer's major poetry, especially The Canterbury Tales and Troilus and Criseyde, in Middle English. Emphasis is on Chaucer as inheritor and innovator of medieval ideas about God, social order, gender, authorship, and the morality of reading and the function of poetry. Some prior experience with early literature is expected.

## ENGL 40413 - Renaissance in England (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. The prose writers, dramatists, and poets of sixteenth- and seventeenth-century England in relation to the cultural circumstances influencing and being influenced by their works. Topics may include the prospect and enactment of censorship; the centrality of the patronage system; courts and courtiers; changing views of monarchy and obedience; religious controversy; issues of gender, ethnicity, and class; literature and science; pseudo-nonfictional strategies; adaptations of the bible, history, and mythology; and early book production and circulation.

ENGL 40423 - Restoration and 18th Century Literature, 1660-1790 (3) Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. The poetry and prose of Pepys, Dryden, Prior, Pope, Swift, Defoe, Thomson, Goldsmith, Gray, Johnson, Burns, and others writing between 1660 and 1798.

ENGL 40433-19th Century Literature (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A general survey of British literature from 17901900.

## ENGL 40443 - British Literature Since 1900 (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. An intensive study of British literature from 1900 to the present.

## ENGL 40453 - British Novel to 1832 (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A survey of the novel through the early 19th century.

ENGL 40463 - British Novel since 1832 (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A survey of the novel from the mid-19th century to the present.

## ENGL 40473 - Milton and his Contemporaries (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. This course examines major literary texts written during and immediately after the English Revolution of 1640-1660 with a focus on the poetry and prose of John Milton and his major contemporaries. Topics include Protestant and Catholic poetics, poetry and theology, literary responses to political upheaval and the rise of the new empirical sciences, the status of epic poetry in modern society, and the literary consequences of changes in the structure of family life and gender.

ENGL 40483 - Shakespeare and Marlowe (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Comparative study of several plays each by Shakespeare and Marlowe, placing their work in historical and social contexts. Reading includes historical documents and literary theory.

ENGL 40493 - Shakespeare (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. An intensive study of Shakespeare's major works. Emphasis will be on developing interpretive strategies for understanding Shakespeare's aesthetic achievement within larger literary and historical contexts. Topics may include attention to how Shakespeare's works were written, performed, and published as ways of understanding their significance to both early modern and contemporary culture.

## ENGL 40513 - U.S. Women's Writing I (3)

A study of American women's writings from the colonial period through 1865, with attention to the ways the literature reflects, responds to, and shapes perceptions of women's roles, identities, and opportunities at various historical moments. Topics, authors, genres, and approaches may vary by semester.

ENGL 40523 - Emerson and Thoreau (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Works of two 19th century American literary masters, read in their social and historical context.

## ENGL 40533 - Toni Morrison (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. An intensive study of the works of Toni Morrison. Attention will also be given to the cultural contexts (historical and contemporary) that structure the worlds of Morrison's fiction and influence the reception of her work.

ENGL 40543 - Studies in Early American Literature (3)
Prerequisites: ENGL 10803, ENGL 20803, and one 20000-level ENGL/WRIT course. Concentrated study of American literature before 1830. Topics, genres, authors, and approaches will vary by semester. May be taken more than once for credit under different sub-headings.

ENGL 40553 - Studies in Nineteenth-Century American Literature (3) Prerequisites: ENGL 10803, ENGL 20803, and one 20000-level ENGL/WRIT course. Concentrated study of American literature, 1800-1899. Topics, genres, authors, and approaches will vary by semester. May be taken more than once for credit under different sub-headings

ENGL 40563 - U.S. Women's Writing II (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A study of U.S. women's writings from 1865 to the present, with attention to the ways the literature reflects, responds to, and shapes perceptions of women's roles, identities, and opportunities at various historical moments. Topics, authors, genres, and approaches may vary by semester. This course may be taken more than once for credit under different subheadings.

## ENGL 40573 - Mark Twain (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. The seminar will focus on the life and works of Mark Twain. Readings will include several of his major novels, a broad sampling of his short stories, and a selection of his essays and letters. Attention will be given to both the historical and contemporary contexts that have shaped the reception of Twain's writing.

## ENGL 40583 - Contemporary American Poetry (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Intensive study of contemporary American poets, poetic movements and relevant issues in aesthetics.

## ENGL 40593 - Faulkner (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Examination of several of Faulkner's major Yoknapatawpha County novels and of Faulkner scholarship. The course will be a mixture of lecture and discussion.

## ENGL 40613 - King Arthur in Modern Literature and Culture (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Surveys transatlantic responses to Arthurian legend in leterature, art, and culture from 1800 to the present, with attention to Tennyson, Twain, T.H. White, and Marion Zimmer Bradley, among others.
ENGL 40633 - Love, Sex, and Power in Renaissance England (3) Prerequisites: ENGL 10803, ENGL 20803, and at least one additional 10000- or 20000-level ENGL/WRIT course. An advanced course on the subject of romantic love, gender relations, and sexuality in literature of the English Renaissance. This course examines the political, cultural, and aesthetic contexts of love and sex that shaped representations of desire in some of the Renaissance's most enduring works, including drama and poetry by Shakespeare and others.

ENGL 40643 - British Romanticism (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. This class will survey British literature from 17901830, examining the aesthetic movement of Romanticism in its social and historical context. Authors include Blake, Wordsworth, Coleridge, Barbauld, Byron, Percy and Mary Shelley, Keats, Hemans, and De Quincey.

## ENGL 40653 - Renaissance Literature and the 'New' Science (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. This course examines how and why artists and scientists in the century c. 1550-1650 interacted intellectually as they did. Topics include influences of scientific developments and discoveries upon European (chiefly British) letters; strategies used by writers to appropriate, revise, or contest scientific development in astronomy, medicine, philosophy and other disciplines; and relationships between scientific and literary discourses of change.

## ENGL 40663 - Modern Fiction (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENG/WRIT course. Exploration of literary developments in fiction since 1900. Topics vary by semester. May be taken only once for credit.

## ENGL 40673 - Modern Drama (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Close study of representative plays marking significant movements in modern theater, including realism, surrealism, absurdism, and the theatre of alienation.

## ENGL 40683 - Studies in 20th Century American Literature (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Concentrated study of American literature, 1900 to the present. Topics, genres, authors, ad approaches will vary by semester. May be taken more than once for credit under different sub-headings.
ENGL 40693 - British and Irish Poetry Since 1900 (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. An intensive study of contemporary British and/or Irish poets and poetic movements.
ENGL 40723 - Young Adult Literature in American Culture (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Examines individual texts, authors, and recurring themes to explore Young Adult (YA) literature's place within American culture. Students will analyze its position in literary history; its major writers from diverse ethnic, class, and gendered backgrounds; and the impact YA texts have on social issues, particularly those related to diversity and inclusiveness. Students will also evaluate the material contexts of YA publication and of reading practices in diverse contexts.
ENGL 40733 - Children's Literature (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A study of the history and criticism of children's literature, with an emphasis on Anglophone works from the last 200 years.

## ENGL 40743 - The Long Novel (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. An intensive study of the pleasures and difficulties of long novels, which represent a unique genre of literature. Each semester focuses on three or four novels generally regarded as works of tremendous influence, but which may be too involved for study in survey courses. The novels will be selected from different periods, cultures, and languages.

ENGL 40831 - Senior Seminar (1)
Prerequisites: English majors or Writing majors only; students must have senior standing and must have completed 21 hours in English courses beyond 10803/10833 and 20803/20833. This seminar is intended as a capstone course for all English majors. Students will discuss and examine the practical and professional aspects of the English major while attempting to synthesize and integrate their various learning experiences in literature and writing. Students will also attend special workshops and seminars intended to inform them about various areas of professional activity (and as well meet professionals active in these areas.) Students will prepare and submit a final writing portfolio, representing their work as an English major.

## ENGL 50133 - Semina in Literature and History (3)

Prerequisites: Junior standing with a minimum of 9 hours in literature, history, and/or political science, or graduate standing in English or History. Interdisciplinary study of society, culture, or politics through the literature and history of a given era (variable topic). Open to graduate students and to advanced undergraduate students. Students will receive instruction from both an English professor and a History professor n content (literary works, historical studies, primary documents in periodicals or archives) and discipline-specific research methods.

ENGL 50233 - Studies in Creative Writing (3)
Prerequisites: ENGL 10203 and 20803. Prior to enrollment, students are also strongly encouraged to take the 30000 -level course appropriate to the semester's genre. ENGL 50233 is an intensive creative writing workshop open to students (graduate and advanced undergraduates) who have a strong background in literature and imaginative writing. Depending on the semester and the selected genre, this course will pay special attention to invention, point-of-view, voice, form, and genre-appropriate theory.
ENGL 50243 - Teaching Writing (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A course for teachers of English combining theories of composition with practical pedagogy and classroom strategies for the teaching of writing. Not applicable toward degree requirements for the Ph.D. in English.
ENGL 50253 - Classical Rhetoric (3)
Prerequisite:Junior or senior standing, permission of instructor. This course examines the emergence of rhetoric in Antiquity and traces the impact of classical rhetoric up to the Middle Ages. A substantial amount of the course is devoted to learning about the relationship between oral and written discourse, the impact of literacy, and the adaptability of systems of communication to technology and society. The implications of such phenomena are examined in different periods in an effort to develop an historical perspective about the relationship between cognition and expression within cultural conditions.

ENGL 50973 - Directed Study in English (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Directed Study in English.

## ENGR - Engineering

## ENGR 10032 - Static Mechanics (2)

Prerequisites: ENGR 10033; corequisite: MATH 10524. Force systems and resultants, equilibrium, friction, structural analysis, geometric properties and distributed loadings, internal forces.
ENGR 10033 - Engineering Design and Graphics (3)
Prerequisites: Must be an Engineering major or Energy Technology and Management minor. This course provides an introduction to the engineering design process and manual and computer- aided design graphics through student team projects, manual and computer-aided engineering problem solving and presentation.
ENGR 10042 - Principles of Digital Logic (2)
Number systems. Arithmetic, Boolean algebra and logic operations. Timing diagrams. Introduction to the design and analysis of combinational and sequential logic circuits.

ENGR 10053 - A Hands-On Introduction to Engineering Design (3) Introduction to some of the principles of engineering design. Simple microcontroller programming. Basic machine component design. Student teams design and construct autonomous mobile robots to accomplish an assigned task.
ENGR 10402 - Circuit Analysis and Design I (2)
Prerequisites: MATH 10524 or concurrent. Terminal characteristics of passive devises and electrical energy sources. Basic DC circuit analysis laws and
techniques applied to resistive circuits. Introduction to operational amplifiers. Introduction of computer-aided analysis and design tools.

## ENGR 10433 - Freshman Seminar in Engineering (3)

Topics may vary each time it is offered.

## ENGR 10573 - Applied Programming Matlab (3)

Students in the course will examine both structured programming concepts and Matlab's built-in functions, providing a platform for utilizing Matlab's extensive capabilities for contending with engineering problems. Students will study variables, assignments, input/output, selection statements, loops, and problem solving.

## ENGR 20404 - Circuit Analysis and Design II (4)

Prerequisite: ENGR 10402, Math 20524. Corequisite: Math 30613. Terminal characteristics of passive devices and energy sources. Steady-state response of networks containing these elements. Transient response of first- and second-order networks. Use of computer-aided analysis and design tools. Emphasis on the proper use of basic electrical laboratory instrumentation.

## ENGR 20413 - Circuit Analysis and Design III (3)

Prerequisite: ENGR 20404. Complex frequency response. Frequency domain analysis using Laplace and Fourier transforms. Two-port networks analysis and applications. Computer-aided analysis and design tools.

## ENGR 20603 - Solid Mechanics I (3)

Prerequisites: ENGR 10032, MATH 10524. Fundamental topics in static structural analysis, concepts of stress and strain, and stress-straintemperature relations. Stresses and deformations due to axial, torsional, and bending loads. Transverse shear. Combined loadings.

## ENGR 20613 - Dynamics and Vibrations I (3)

Prerequisites: ENGR 10032, PHYS 20473/20474, and credit for, or concurrent enrollment in MATH 30613. Kinematics and kinetics of a particle. Workenergy and impulse-momentum methods for particles. Planar kinematics and kinetics of a rigid body. Work-energy and impulse-momentum methods for rigid bodies. Free and forced response of damped single-degree-offreedom systems.

## ENGR 20623 - Solid Mechanics II (3)

Prerequisites: ENGR 20603, PHYS 20473/20474: credit for or concurrent enrollment in MATH 30613. Curved beams. Thick-walled cylinders and spinning disks. Torsion of noncircular shafts. Energy methods. Theories of failure. Introduction to finite element analysis.

## ENGR 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ENGR 30003 - Honors Tutorial (3)

Prerequisite: Junior standing and membership in the Honors Program. An examination of an important topic in mechanical or electrical engineering determined in consultation with an instructor. This course is offered on a directed study basis and must be arranged prior to the semester enrolled.

## ENGR 30014 - Materials Science (4)

Prerequisite: CHEM 10113 or CHEM 10114. Introduction to the physical, chemical, mechanical, electrical, and optical properties of metals, semiconductors, ceramics, and polymers. Emphasis on the relationship between these properties and how performance is influenced by microstructure and processing. Atomic bonding. Crystal structure. Phase equilibria. Deformation and fracture. Composite materials. Electronic, magnetic, dielectric and optical properties. Laboratory methods for characterizing materials emphasized. (Crosslisted as ENGR/PHYS 30014.)

## ENGR 30113 - Energy in Society (3)

Prerequisites: junior standing or permission of instructor. This course is designed for any major at TCU who wants to develop a better understanding of how energy is produced, transported and marketed in the metroplex and across the country. Industry professionals will also visit to discuss current and developing technologies they are using to provide energy for the future. This course does not count toward the major requirements in engineering.
ENGR 30444 - Electronics I (4)
Prerequisite: ENGR 20404. Fundamentals of solid-state, discrete-component microelectronic devices, including the pn-junction diode, bipolar junction transistor, and field-effect transistors. Utilization of pn-junction diodes and
transistors as electronic switches for digital logic applications is stressed. Computer-aided analysis and design tools. Laboratory applications.

ENGR 30454 - Electronics II (4)
Prerequisite: ENGR 30444. Differential amplifiers. Frequency response of amplifiers with an emphasis on design for wideband operation. Negative feedback with practical circuit applications. Amplifier output stages. Analog integrated circuits including op-amps. Basic analog filter design. Sinusoidal oscillators. Laboratory applications.

## ENGR 30503 - Signals and Systems (3)

Prerequisite: ENGR 20413 or instructor approval. Signal and system representations. Convolution. Fourier series and transforms and applications. Laplace transforms and applications. Z-transforms and applications.

ENGR 30543 - Engineering Electromagnetics (3)
Prerequisites: ENGR 20404, MATH 30524, MATH 30613. Vector fields and operators. Electrostatic fields. Coulomb, Gauss, Joule, and Continuity Laws. Solution of boundary-value problems. Magnetostatic fields. Vector magnetic potential. Biot-Savart Law. Time-varying fields. Faraday's Law. Maxwell's equations. Plane waves. Transmission lines. The use of computer-aided calculation and visualization tools.
ENGR 30573 - Computer Organization (3)
COSC Prerequisites: COSC 30203 (may be concurrent) and MATH 20123, or, ENGR prerequisites: ENGR 30444. Corequisite: COSC 20101. Treatment of sequential and combinatorial circuits including flip-flops, multiplexers, decoders, adders, registers, counters. Design of functional components, of a computer including memory, ALU, control unit, busses. The tradeoffs of alternative architectural features such as word size, instruction sets, addressing modes. (Crosslisted as COSC 30253/ENGR 30573.)

## ENGR 30583 - Microprocessor Based Digital Systems (3)

Prerequisite: COSC 30253. Introduction to the design of microprocessor based digital systems including the study of processor control signals, address decoding and memory interfacing, interfacing to serial and parallel ports, A/D conversion, and interrupt processing. Features of state-of-the-art microprocessors will be discussed. Both hardware and software assignments will be required. (Crosslisted as COSC 30353/ENGR 30583.)
ENGR 30593 - Computer Architecture (3)
Prerequisite: COSC 30253. The logical organization and functional behavior of digital computers are studied. Fundamental principles in the design of the CPU, memory, I/O devices, and bus structures are presented. Performance enhancement topics such as caching, memory interleaving, interconnection schemes, pipelining, memory management, reduced instruction sets (RISC) and multiprocessing are discussed. (Crosslisted as COSC 30453/ENGR 30593.)

## ENGR 30613 - Dynamics and Vibrations II (3)

Prerequisites: ENGR 20613, MATH 30613. Moving reference frames. Kinematics and kinetics of typical machines. Lagrange's equations. Rotating machinery and balancing. Free and forced response of damped multi-degree-of-freedom systems. Modal analysis.
ENGR 30623 - Control Systems I (3)
Prerequisites: ENGR 20613, 20404, MATH 30613. Analysis and design of feedback control systems. Laplace transforms and transfer functions. Transient and steady-state response. Root locus method. Nyquist diagrams. Bode plots. Control system simulation software. Introduction to state-space analysis and design.

## ENGR 30634 - Manufacturing I (4)

Prerequisite: ENGR 20623. Manufacturing processes and engineering materials emphasizing metals, polymers, ceramics, and composites. Material selection. Product design for optimum manufacturability and quality control. Computer integrated manufacturing and process engineering.

## ENGR 30704 - Thermal Sciences I (4)

Prerequisites: MATH 10524, CHEM 10113, PHYS 20473 or 20474. An introduction to thermodynamics, fluid mechanics and heat transfer. System and control volume concepts in analysis. First and second laws in thermodynamics. Thermodynamics cycles. Fluid statics and steady flow of fluids. Introduction to topics in conduction, convection, and radiation heat transfer.

## ENGR 30714 - Thermal Sciences II (4)

Prerequisite: ENGR 30704. Continuation of ENGR 30704. Further topics in thermodynamics and fluid mechanics. Applications of the first and second laws to power and refrigeration cycle analysis, psychrometrics, and reacting mixtures. Conservation equations. Inviscid and viscous incompressible flow. Introduction to compressible flow.

ENGR 30861 - Mechanical Systems Lab (1)
Prerequisite: ENGR 20603. Experimental, computational and analytical studies of phenomena in solid mechanics, dynamics and vibrations. Data acquisition, transmission, and analysis.

ENGR 30871 - Thermal Systems Lab I (1)
Corequisite: ENGR 30704. Experimental, computational and analytical studies of phenomena in fluid flow, heat transfer, thermodynamics, refrigeration, and mechanical power systems. Data acquisition, transmission, and analysis.

ENGR 30903 - Issues in Engineering Design (3)
Prerequisite: Junior Standing. Examination of various issues inherent in engineering design. A review of the engineering method. Ethical issues of engineering design such as: product liability, risk assessment, intellectual property, competitive bidding, and the environmental and social impacts of design decisions. Project management, topics in engineering economy, and probabilistic concepts in design.

## ENGR 30990 - International Residential Study (1.00-20.00)

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## ENGR 40003 - Senior Honors Research Paper (3)

Prerequisite: ENGR 30003. A supervised research experience culminating in the writing of a research paper based on the subject matter studied in ENGR 3003 Honors Tutorial. The course is offered on a directed study basis and must be arranged prior to the semester enrolled.

## ENGR 40203 - Engineering Economic Analysis (3)

Prerequisites: MATH 10524 or MATH 10283. Development and use of time value of money interest relationships. Comparison alternatives including present worth, annual worth, rate of return and payout period methods. Decision making among independent, dependent, capital-constrained, and unequal-lived projects. Replacement, break-even, and minimum cost analyses. Depreciation and depletion methods and their effect on corporate income taxes, leading t after-tax cash flow analysis.

## ENGR 40213 - Sustainable Energy (3)

Prerequisites: PHYS 20484, MATH 30524 or 30613, and ENGR 30704. This course introduces concepts that are needed to understand a range of diverse energy initiatives, and discusses resources available to supply energy to both developed and developing nations. Energy sources of interest include geothermal, fossil fuels (coal, oil, gas), nuclear, wind, solar, hydropower, biofuels, conservation, hybrid energy systems, etc. The broad perspective helps the student develop an expanded knowledge base, and become a steward of the earth's natural resources.

ENGR 40223 - Petroleum Reservoir Management (3)
Prerequisites: PHYS 20484 and MATH 30524 or 30853 or 30613. Modern petroleum reservoir management relies on teams of people from a variety of scientific and engineering disciplines. This course will introduce concepts and terminology for topics that are often encountered by members of petroleum reservoir management teams. Topics from geology, geophysics, petrophysics, and petroleum engineering are discussed. A case study is used to integrate the material in the course.

## ENGR 40303 - Petroleum Industry Overview (3)

Prerequisites: ECON 10223, ENGR 40203, MATH 10524 or MATH 10283, or permission of instructor. This course will cover the upstream side of the petroleum industry. It will start with geology, the formation of oil and gas, and the geophysical characteristics which characterize the location of oil and gas. Next, the drilling process for both exploration and production will be considered. Finally, the actual production of oil and gas from the reservoir will be developed. Economic considerations will be developed throughout the process.

## ENGR 40313 - Energy from Fluids in Motion (3)

Prerequisite: ENGR 40213. Science and engineering concepts that are needed to harvest energy from moving fluids are discussed. Energy sources include wind energy, hydroelectric energy, tidal energy and wave energy.

## ENGR 40323 - Solar and Nuclear Energy (3)

Prerequisites: ENGR 40213. Science and engineering concepts that are needed to develop solar and nuclear energy resources are discussed. Energy resources include solar thermal energy, solar electric energy, nuclear fission and nuclear fusion.

ENGR 40434 - Introduction to Microelectromechanical System (MEMS)
(4)

Prerequisites: ENGR 20404 and ENGR 20603. Micro Electro Mechanical Systems (MEMS) are miniature devices that are widely used in industrial and consumer products such as accelerometers, used in cars to activate the airbags and in smart phones to flip images and play video games. This course will cover the fundamentals of MEMS including the design and modeling, fabrication, actuation and sensing, packaging, testing and characterization as well as reliability. The MEMS concepts will be reinforced through labs using an advanced MEMS simulation tools. The applications and challenges of existing MEMS devices will be discussed.

## ENGR 40454 - Semiconductor Device Electronics (4)

Prerequisite: ENGR 30454. Semiconductor materials and solid-state physics principles. Charge carrier transport phenomena. PN-junction analysis. Bipolar junction transistor physics. Metal-oxide-semiconductor MOS physics. MOS transistor principles. Computer-aided analysis and design tools will be used. Individual research laboratory project.

ENGR 40464 - Theory and Fabrication of Microelectronic Devices (4) Prerequisites: ENGR 30444. This course provides a theoretical background and a practical laboratory experience in modern microelectronic device fabrication technologies and processes. The students will learn the theory of the nested set of microelectronic processing techniques used to manufacture microelectronic devices. Each student will actively participate in a laboratory whose focus is to fabricate and test the performance of silicon-based microelectronic devices, including: metalized and diffused resistors, pn-junction diodes, metal-oxide-semiconductor (MOS) capacitors, and MOS field-effect transistors (MOSFETs).

## ENGR 40484 - Electromechanics (4)

Prerequisites: ENGR 20404, and PHYS 20483/20481 or PHYS 20284. Electromechanical energy conversion principles. Magnetic circuits. Balanced three-phase system analysis. Development and applications of the circuit models for transformers, induction machines, synchronous machines, and DC machines. Laboratory exercises emphasize measurement of machine model parameters and comparison of predicted and observed steady-state performance.

## ENGR 40494 - Power Systems Analysis (4)

Prerequisites: ENGR 20404, and corequisite: ENGR 40484. Phasors, three phase power, power transmission-line parameter, transformer modeling, power flow analysis, short circuit analysis, basic concepts of generation, transmission, distribution, smart grid and renewable energy in power systems will be covered. Laboratory exercises will emphasis measurement and modeling parameters in power system network. It will also include an introduction on electrical power system analysis and energy management software for electrical engineering design.
ENGR 40514 - Communication Systems (4)
Prerequisite: ENGR 30503. Introduction to analog and digital communication systems and concepts. Sampling theorem. Amplitude modulation. Frequency modulation. Pulse-code modulation. Time-division and frequency-division multiplexing. Analog and digital noise analysis.

## ENGR 40544-Optical Fiber Communications (4)

Prerequisite: ENGR 30543 or PHYS 40653. Waveguiding and signal transmission properties of optical fibers. Optical sources. Power launching and coupling. Photodetectors. Optical receivers. Optical fiber transmission systems. Laboratory exercises emphasize the measurement of waveguiding characteristics.

## ENGR 40574 - Digital Signal Processing (4)

Prerequisite: ENGR 30503. Sampling and quantization effects. Digital filter design. Structures for realizing discrete time systems. Discrete Fourier transform and fast Fourier transform. Laboratory exercises emphasize digital signal processing techniques to applications in audio signal processing and telecommunications.

## ENGR 40613 - Machine Component Design (3)

Prerequisites: ENGR 20613, 20623. The design and selection of mechanical components. Lubrication. Antifriction and journal bearings. The design of screws, fasteners, and joints. Mechanical springs. Gears and gearing systems. Clutches, brakes and couplings. Flexible mechanical elements. Flywheels and power units. Miscellaneous topics.

## ENGR 40623 - Control Systems II (3)

Prerequisite: ENGR 30623. Design of control systems. Stability. System sensitivity. Nyquist, root locus and Bode design. Nichols chart analysis and design. Controllability and observability. Introduction to nonlinear control systems. Phase plane methods.
ENGR 40633 - Manufacturing II (3)

Prerequisite: ENGR 30634. A continuation of ENGR 30634.

## ENGR 40723 - Heat Transfer (3)

Prerequisite: ENGR 30704. Thermal conductivity. Steady and unsteady conduction. Free and forced convection. Boundary layer concepts. Heat exchangers. Thermal radiation. Numerical procedures.

## ENGR 40733 - Fluid Mechanics (3)

Prerequisite: ENGR 30704. Fluid statics. Conservation equations. Incompressible inviscid and viscous flow. Boundary layers. Dimensional analysis and similitude. Compressible flow.

## ENGR 40743 - Thermal Systems Design (3)

Prerequisite: ENGR 30704. Design and analysis of thermal systems. Selection and evaluation of fluid flow equipment. Heat exchangers. Vapor power and refrigeration cycles. Fluid flow circuits. Preliminary cost estimations and economic evaluation. Availability analysis and optimization techniques.

## ENGR 40753 - Advanced Engineering Dynamics (3)

Prerequisites: ENGR 20613, MATH 30613. Kinematics and kinetics of three dimensional motion. Gyroscopic systems, Energy and momentum methods. Generalized coordinates and Lagrange's equations. Special topics.

## ENGR 40763 - Introduction to Structural Dynamics (3)

Prerequisites: ENGR 20613, MATH 30613. Structural excitation and response of vibratory systems including single and multiple degrees of freedom as well as continuous systems. Focuses on understanding and controlling to protect from failure the undesired response of structures (buildings, automobiles, aircraft, machine tools, and more) to the dynamic environments they encounter in actual operations.

## ENGR 40861 - Mechanical Systems Lab II (1)

Prerequisite: ENGR 30623. Experimental, computational and analytical studies of phenomena in solid mechanics, dynamics and vibrations. Data acquisition, transmission, and analysis.

## ENGR 40871 - Thermal Systems Lab II (1)

Prerequisites: ENGR 30714. Experimental, computational and analytical studies of phenomena in fluid flow, heat transfer, thermodynamics, refrigeration, and mechanical power systems. Data acquisition, transmission, and analysis.

## ENGR 40903 - Systems Design I (3)

Prerequisite: ENGR 30903. Two-semester interdisciplinary team projects. Application of analysis and design principles and techniques to the synthesis, modeling, optimization, fabrication, and testing of electrical, mechanical and electromechanical systems. Individual and team oral and written reports.

ENGR 40913 - Systems Design II (3)
Prerequisite: ENGR 40903. Continuation of ENGR 40903
ENGR 40920 - Senior Design Projects (1.00-4.00)
Prerequisite: Instructor approval. Individual design and development projects in fundamental or applied aspects of electrical or mechanical engineering 1-4 hours.

## ENGR 40950 - Engineering Internship (1.00-3.00)

Prerequisites: 2.5 GPA in major, completion of two years course work and advisor's approval. Practical experience in engineering. Must include a minimum of 260 work hours in an approved practical experience situation for three semester hours of credit. Credit may be prorated. A weekly work journal and term paper are required for this course. (This course is only offered P/NC.)

ENGR 40970 - Special Topics in Engineering (.50-6.00)
Prerequisite: Instructor ap proval. 1-6 hours.

## ENSC - Environmental Science

## ENSC 10143 - Contemporary Environmental Issues (3)

Two hours lecture and two hours of laboratory per week. This course introduces students to the major environmental/resource problems that confront humanity in the 21st century. The course seeks to both develop a fundamental scientific knowledge and understanding of the concepts and principles that underlie current environmental problems, as well as to engage in critical and reflective thinking about our resources, the environment and our place within it. Field trip required.

ENSC 10243 - Environmental Context: Natural History of North-Central Texas (3)
This course is part of the Integrated Academic Community, one of five freshman courses run in tandem. It introduces environmental history, which
integrates earth sciences, ecology, natural history, and environmental literature. Assignments are designed to increase awareness about how the regional environment has been shaped by interactions among cultural and natural processes. There also is emphasis on understanding the complex cosmology assembled from the various European imperialism, and urban ecology. The course centers upon five all-day field trips in the vicinity of Fort Worth. Trips include presentations and exercises representing different expert perspectives, designed both to showcase individual enthusiasms and to explore how disciplinary knowledge can be integrated into a richer understanding of the local environments. Whenever possible, readings from both scientific and literary sources are used to interpret the same landscapes and phenomena. Students practice describing environments in different modes, in order to cultivate the breadth of perspective required for environmental literacy. Each trip is framed during 2-hour evening sessions to discuss assigned readings, insights from the previous trip, and relevant concepts for the next trip.

ENSC 30003 - Junior Honors Seminar in Environmental Science (3) Prerequisite: Permission of Instructor.

ENSC 30133 - Concepts in Environmental Science (3)
Prerequisites: CHEM 10113 or concurrent enrollment, and an introductory Biology course. Three hours lecture per week. This course provides students with the basic scientific principles underlying major environmental/resource problems that confront the global community. The course will help develop the scientific knowledge and understanding of the major environmental problems associated with the air, water, land, and biota, as well as issues associated with population, biodiversity, energy, sustainability, and urbanization.

## ENSC 30313 - Environmental Issues in Costa Rica (3)

In this course, students spend three weeks in Costa Rica examining environmental issues and the case for environmental stewardship, defined as the need to make informed and responsible decisions with regard to the planet. Costa Rica provides a unique biological learning environment. It is one of the smallest countries in the Americas, yet has the most diverse selection of flora and fauna in the hemisphere. This diversity is now under threat from widespread habitat destruction, primarily through deforestation. At the same time, the country has one of the most enlightened and dedicated approaches to conservation in the world. Students get to experience first-hand the difficulties involved in working toward a balance between humans and nature, or development and the preservation of environmental quality. It is also a unique opportunity for students to engage in critical and reflective thinking about our resources, the environment, and our place within it.

## ENSC 30363 - Introduction to Geospatial Technology (3)

Introduction to the fundamentals of Geospatial Technologies, including Geographic Information Systems (GIS), Global Positioning Systems (GPS), cartography, remote sensing, and spatial analysis through a series of handson computer-based exercises. Participants will learn how to utilize geospatial technology to address social and environmental issues. This course is designed to be used as a stand-along course to complement other disciplines or as an entry level course into other GIS classes. (Crosslisted as ENSC/GEOL 30363.)

## ENSC 30403 - Field Methods (3)

Prerequisites: GEOL 10113 and major field of study within the College of Science and Engineering. Two hours of lecture and one three-hour laboratory period per week. The course offers instruction and drill in fundamental skills for field work in geology and environmental science. It will be taught in field contexts as much as possible, defining field" to include the TCU campus and environs. This course also includes three mandatory weekend field trips as well as field trips during regularly-scheduled laboratory class. (Crosslisted as GEOL/ENSC 30403.)"

## ENSC 30453 - Wildlife Research Project (3)

Prerequisites: Six semester hours in Biology and permission of instructor.
Two one-hour lectures and one three-hour laboratory/fieldwork per week. In this course students will design and implement local wildlife research projects and apply scientific methods to test hypotheses. Students will then gain essential skills through the analysis of their data, using web of science and preparing scientific reports.

## ENSC 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ENSC 33990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ENSC $\mathbf{3 9 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ENSC 40001 - Scientific Presentations (1)

Prerequisites: must be an Environmental Science major. The goal of this course is to acquaint the student with the organization, preparation and effective delivery of scientific seminars.

ENSC 40003 - Senior Honors Research in Environmental Science (3) A research study and paper, under faculty direction, in some area of environmental science.

## ENSC 40013 - Environmental Internship (3)

Prerequisites: Students must have a C or better in at least 9 hours of approved courses in the minor or degree, plus permission of instructor and program advisor. Students must spend at least 135 hours in approved practical work experience with an organization or company approved by the program director.

## ENSC 40173 - Mammalogy (3)

Prerequisites: six semester hours in Biology. Two hour lectures and two hours of laboratory per week. This course introduces advanced undergraduate students to mammals. Lectures will examine the major topics of mammalian biology, including the evolutionary history, classification, adaptations, ecology, and natural history of mammals. Field techniques for the study of mammalian biodiversity and abundance will also be covered in this course. Field trips will be required. (Crosslisted as BIOL/ENSC 40173.)

## ENSC 40193 - Environmental Stewardship Seminar (3)

Three hours lecture per week. This course examines the case environmental stewardship, defined as the need to make informed and responsible decisions with regard to the planet. Students meet in a seminar-type format and cover broad, integrating themes that then serve as a foundation for topics that address more specific environmental problems, such as global warming, deforestation, sustainable development, and energy depletion. The course exposes students to the foundations necessary to enable them to develop their own environmental ethic.

## ENSC 40353 - Wildlife Ecology and Management (3)

Prerequisites: Six semester hours in Biology. Two hour lectures and a three hour laboratory each week. This discussion-oriented course introduces advanced undergraduate students to the general principles of wildlife ecology and how those principles can be applied to wildlife management and conservation. The objectives of this course are 1) to provide an introduction to the major concepts of Wildlife Ecology and Management, and 2) to allow you to learn the application of the scientific method to ecological problems. Laboratory exercises are required. (Crosslisted as BIOL/ENSC 40353)

## ENSC 40503 - Environmental Methods and Statistics (3)

Environmental Methods and Statistics is a laboratory- and field-based course that presents essential general science and specific environmental methods, techniques, and theory. Students are exposed to the basic tools of environmental science - observation and notation, data gathering, using statistics, sampling, lab and field techniques, surveying, and safety. Specific environmental methodologies relating to soil, water, and ecological systems are explained. The course presents a wide cross-disciplinary range of techniques and information with a unique environmental perspective.

## ENSC 40601 - South African Biodiversity and Human Development Part

 2 (1)This course builds on what students learned and experienced in South Africa with regard to the rapidly developing human population and simultaneous efforts to preserve and conserve the natural heritage and biodiversity for future generations. For this course, students will develop and produce a research report that examines one aspect of wildlife conservation and human development.

## ENSC 40603 - South African Biodiversity and Human Development Part

 1 (3)Prerequisites: Junior standing. This course aims to give students an immersive experience into South Africa's rapidly developing human population while the country simultaneously strives to preserve and conserve its natural heritage and biodiversity for future generations. This course will address the geopolitical and socio-economic aspects of South Africa's human development.

ENSC 40970 - Special Problems (1.00-20.00)
Prerequisite: permission of instructor. Field and laboratory problems for advanced undergraduate students. Fifty clock hours of laboratory and field work for each semester hour credit. 1-6 semester hours.
ENSC 50003 - Applied Projects Partnership Program (3)
Prerequisites: Must have C or better in at least 9 hours of approved courses in the minor or degree, plus permission of instructor and program advisor. ENSC faculty will identify opportunities for students to partner with local businesses, industry and consulting firms to solve real-world problems and create professional deliverables. Students will be matched with the positions that are available, based on observed talents and the type of experience they seek. This is a student-lead project. ENSC faculty provide oversight and guidance but will NOT manage the project or direct the team.

## ENSC 50233 - Urban Wildlife (3)

Prerequisites: one semester of biology and junior or higher standing standing. Through readings, discussions, lectures and two required Saturday field trips, students will gain an appreciation for urban wildlife habitat in its many forms by providing a foundation of knowledge regarding wildlife ecology and natural habitats and the ability to relate this knowledge to the urban environment.

ENSC 50333 - Energy Development and Wildlife Conservation (3) Prerequisites: Three semester hours of biology. The quest for energy can cause problems for wildlife, but through effective use of Best Management Practices (BMPs), the impact of energy development and distribution on wild life can be limited. From site selection through production to reclamation, practical means exist to promote wild life-friendly energy development. This course will feature BMPs that allow energy development and wildlife conservation to coexist.

## ENSC 50403 - Rivers in the Landscape (3)

Prerequisites: Junior Senior, or graduate standing. In this course , students analyze modern principles of river processes and forms within a geographical perspective. The course examines the fundamental mechanics of fluvial channels with an emphasis placed on both qualitative and quantitative geographic and geologic evaluation of river processes and their products. The course emphasizes natural scientific perspectives and includes linkages to ecology, engineering, natural resources, and resources management/policy.
ENSC 50503 - Wetlands Delineation and Management (3)
Prerequisites: Major field of study within the College of Science Engineering, graduate enrollment, or permission of instructor. To develop a working understanding of the wetland delineation process using the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and regional supplements. Students will be taught how to measure the three parameters required for a jurisdictional wetlands. In addition, students will learn a basic understanding of wetland ecology. At the end of the course students will be able to use the manual to assist in delineating wetlands.

## ENSC 50513 - Wetlands Restoration (3)

Prerequisites: Major field of study within the College of Science and Engineering, graduate enrollment or permission of instructor. To develop a working understanding of stream and wetland riparian ecology, methods to evaluate and categorize streams and wetlands, and methods to restore, enhance and create streams and wetlands. Students will be taught the various methods of stream/wetland evaluations and categorization and will apply these methods on an actual stream and wetland. Students will evaluate and develop a working plan for stream and wetland restoration. In addition, students will visit various restoration projects in the region.

ENSC 50523 - Introduction to Geographic Information Systems (3) Prerequisites: GEOL/ENSC 30363. Basic introduction to Geographic Information Systems using ESRI-ArcGIS. Elements of spatial data, mapping, data representation, and geodatabases. Training in use of a GIS system to infer relationships among spatial features. (Crosslisted as ENSC/GEOL 50523.)

ENSC 50551 - Anthropogenic Disturbance of Wildlife (1)

Prerequisites: Six semester hours in Biology, and permission of instructor. This is a seminar class in which students will be introduced to both the direct and indirect ways humans impact wild life. Students will review and discuss current literature related to this topic (e.g., road ecology and wind energy). This class comprises one fifty minute seminar per week.

ENSC 50613 - Chemical Analysis of Environmental Systems (3)
Prerequisite: CHEM 10113 or equivalent. This course covers analytical instrumentation and techniques used in chemical analysis of environmental systems including aquifers, streams, soils and the atmosphere.

## ENSC 50693 - Natural Resources Compliance (3)

Prerequisites: Major field of study within the College of Science and Engineering. This course is designed to teach the basics of natural resources compliance for students seeking a career in either environmental consulting or environmental compliance for industry. At the completion of the course, students will understand the basics of the natural resources regulatory framework, how natural resources regulations interrelate, federal versus state or local regulatory agency authority, basic permitting processes, and the fundamentals of compliance. Students will have the opportunity to apply the knowledge they gain t real-life situations throughout the class.

## ENSC 50703 - Environmental Compliance (3)

Prerequisites: Major field of study within the College of Science \& Engineering with 60 hours of coursework completed; or graduate enrollment in SCEE; or permission of instructor. This course is designed to teach the basics of environmental compliance for students seeking a career in either environmental consulting or environmental compliance for industry. At the completion of the course, students will understand the basics of environmental regulatory framework, how environmental regulations interrelate, federal versus state or local regulatory agency authority, basic permitting processes, and the fundamentals of compliance auditing. Students will have the opportunity to apply the knowledge they gain to relife situations throughout the class.

ENSC 50713 - Phase I and Phase II Environmental Site Assessment (3)
Prerequisites: Major in College of Science Engineering, with 60 earned hours or graduate enrollment in SGEE. This course is designed to teach the basics of Phase I and Phase II Environmental Site Assessments for students seeking a career in environmental consulting. At the completion of the course, students will understand the basics of performing environmental site assessments, the environmental regulatory framework, and the fundaments of site investigation. Students will have the opportunity to apply the knowledge they gain to real-life situations throughout the class.

ENSC 50723 - Water and Wastewater Technology (3)
Prerequisites: Major in College of Science Engineering, with 60 earned hours or graduate enrollment in SGEE. This course is designed to teach the basics of water and wastewater treatment technology, including regulations, for students seeking a career in environmental consulting. At the completion of the course, students will understand the basics of water and wastewater treatment, the regulations affecting water and wastewater treatment and pretreatment programs. Students will have the opportunity to apply the knowledge they gain to real-life situations throughout the class.

ENSC 50733 - Hazardous Waste Operations and Emergency Response (3) Prerequisites: Must be a Science and Engineering major, graduate student, or have permission of instructor. This course is designed to teach the basics of worker protection for those who will work with hazardous substances during clean up operations and emergency response. The course is designed to meet the requirements of OSHA (Occupational Safety and Health Administration) regulations under 29 CFR 1910.120. At the completion of the course, students will understand the basics of hazardous materials/substances, routes of exposure, personal protective equipment, and permissible exposure limits. Students who complete the entire 40 hours of instruction will receive an occupational certification for the 40-hour initial course in accordance with 29 CFR 19101.120.

## ENSC 50743 - Environmental Impact Statements (3)

Prerequisites: Major in College of Science Engineering, with 60 earned hours or graduate enrollment in SGEE. This course is designed to teach the basics of Environmental Impact Statements and the NEPA process for students seeking a career in environmental consulting. At the completion of the course, students will understand the basics of evaluating federally-funded development projects for impacts to the environment. Students will be able to evaluate if the project qualifies for a categorical exclusion, and perform environmental assessment (EA) and environmental impact state (IES). Students will have the opportunity to apply the knowledge they gain to reallife situations throughout the class.

Prerequisites: ENSC 50703, and major field of study within the College of Science \& Engineering with 60 hours of coursew ork completed; or graduate enrollment in SCEE; or permission of instructor. This course is designed to provide an overview of environmental management systems (EMS) and how EMS can support environmental improvements at facilities that are subject to environmental regulations. At the completion of the course, students will have an understanding of how an EMS allows an organization to systematically manage its environmental and health safety matters. Students will also understand the state and federal requirements for an EMS and how an EMS compares with ISO14001 certification.
ENSC 50763 - Groundwater Hydrology (3)
Prerequisites: GEOL 30443 and major field of study within the College of Science Engineering with 60 earned hours, or graduate enrollment, or permission of instructor. This course is designed to teach the basics of groundwater hydrogeology including hydrologic cycle, aquifers, groundwater flow, groundwater recharge, water chemistry and groundwater contamination. At the end of this course, students will be able to understand the relationship between surface water and groundwater, groundwater protection, field methods, and groundwater development. (Crosslisted as ENSC/GEOL 50763.)

ENSC 50773 - Introduction to Environmental Law (3)
Prerequisites: Major field of study within the College of Science \& Engineering with 60 earned hours; or graduate enrollment. Students will be introduced to and will analyze selected federal statutes governing environmental remediation, discharge of pollution, and management of wastes, including the Comprehensive Environmental Response Compensation and Liability Act, the Resource Conservation and Recovery Act, the Clean Water Act, the Clean Air Act, the Endangered Species Act, and others, including the common law (nuisance, trespass, negligence.) Students will be introduced to the American legal system and the role of experts in lawsuits. Students will read and discuss in class statutes, case law, and related materials. (Crosslisted as ENSC/GEOL 50773.)

## ENSC 50783 - Environmental Chemistry (3)

Prerequisites: CHEM 10123 or 10124 or 10125 or 20123 or permission of instructor. Three hours lecture per week. Chemistry of water, soil, energy, and air as related to environmental problems. Subjects include: nutrients and eutrophication, fluorocarbons, sulfur and nitrogen oxides, Eh-pH relationship, natural carbonate reactions, and cation exchange phenomena. (Crosslisted as CHEM/ENSC/GEOL 50783.)
ENSC 50793 - Environmental Sustainability (3)
Prerequisite: Major field of study within the College of Science \& Engineering with 60 hours of coursework completed; or graduate enrollment in SGEE, or permission of instructor. Includes global populations, resource consumption (water, waste, energy pollution), environmental regulations, environmental management systems, and an introduction to ISO14001. This course also introduces the concepts of return on investment (ROI) and building a financial case for sustainability.

## ENSC 50863 - Spatial Analysis (3)

Prerequisites: MATH 10043 or equivalent, ENSC/GEOL 30363, and ENSC/GEOL 50523 , or permission of instructor. Further development of GIS skills to include 3D data modeling, image analysis using Remote Sensing data, advanced GPS mapping, geoprocessing to infer relationships between spatial features, spatial statistics, model building and good cartographic design. (Crosslisted as ENSC/GEOL 50863.)

ENSC 50883 - Applied GIS (3)
Prerequisites: ENSC/GEOL 50523 and ENSC/GEOL 50863, or permission of instructor. Independent work in specially designed projects not covered by regular course offerings for students to continue to advance their basic GIS skills. The student is required to do independent research on a GIS problem, submit a paper with associated maps and give an oral presentation of the findings. A GIS faculty supervisor will be appointed for each research problem. (Crosslisted as ENSC/GEOL 50883.)

## ENSC 50963 - GIS Internship (3)

Prerequisites: 2.75 GPA in major, completion of at least 6 hours of approved GIS courses and permission of instructor. Practical experience working in the GIS field. Must include a minimum of 260 work hours in approved practical experience situation with an organization or company approved by instructor. A weekly work journal is required for this course. This course is only offered on a P/NC basis. (Crosslisted as ENSC/GEOL 50963.)

## ENTM-Energy-Technology-Management

ENTM $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ENTM 40803 - Advanced Readings in Energy (3)

Prerequisites: 2.5 GPA in major, completion of at least 2 approved energy minor courses and approval of the energy minor advisor. This course consists of advanced topical readings in energy as assigned by the instructor. The student will be expected to write summary papers on the assigned readings as outlined in the syllabus.

## ENTM 40903 - Energy Internship (3)

Prerequisites: 2.5 GPA in major, completion of at least 3 approved energy minor courses and approval of energy minor advisor. Practical experience in the energy field. Must include a minimum of 260 work hours in an approved practical experience situation. A weekly work journal and term paper are required for this course. This course is only offered on a P/NC basis.

ENTM 40970 - Directed Studies in Energy Technology and Management (1-3)
Prerequisites: Must have C or better in at least 9 hours of approved courses in the minor and permission of instructor and program advisor.

## FINA - Finance

FINA 10433 - The Contemporary Investor: Freshman Seminar in Finance (3)

Freshman Seminar in Finance.

## FINA 20990 - International Residential Study (1.00-6.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## FINA $\mathbf{3 0 1 5 3}$ - Financial Management (3)

3 hours. Prerequisite: ACCT 20353 with a grade of at least C - " and be any Business major with junior standing, or a pre-business major with sophomore standing with a 3.5 GPA and permission from the Finance Department Chair. Decision making in the financial environment. Emphasis on the acquisition and optimum management of funds. The relationship between financial management and economics, accounting, law and various functional areas of business is stressed. Working capital management, capital budgeting, short- and long-term financing, investment analysis and related topics."

## FINA 30203 - Money and Banking (3)

3 hours. Prerequisite: ECON 10223 and 10233, and prior or concurrent enrollment in FINA 30153, and must be a declared Business major. Nature, function, and operations of our money and banking system. Modern monetary and banking theory, monetary policy, and their relationship to domestic and international economic and financial problems and issues. Also listed as Economics.

## FINA 30213 - Investments I (3)

3 hours. Prerequisite: FINA 30153 with a grade of at least $\mathrm{C}-$, and must be a declared Business major. Investment management from the perspective of the individual investor. Financial analysis of stocks, bonds, and other financial instruments. An examination of the securities markets and the trade-off between risk and return. Attention to contemporary investment problems.
FINA 30233 - Investments II (3)
3 hours. Prerequisites: FINA 30153 and FINA 30213 with a grade of at least C-" in each course, and must be a Business major. A survey of the development and economic functions of options and futures and their markets. Includes development of pricing models, trading strategies, and portfolio management considerations."

## FINA 30303 - Insurance (3)

3 hours. Prerequisite: Must be a Business major. Fundamentals of major types of insurance, including life, fire, accident and health, automobile, worker's compensation, transportation, and fidelity and surety bonds. Designed to acquaint the student with the general principles of insurance and their application to personal and business situations.

3 hours. Prerequisite: Must be a Business major. Introduction to real estate principles and practices, activities of real estate brokers and operators, transfer of real property and real estate securities, essentials of real estate law, practices incidental to ownership and control of real property.
FINA 30623 - Real Estate Valuation (3)
3 hours. Prerequisite: FINA 30313 with a grade of at least C-, and must be a Business major. Theory, methods and principles of valuation; cost, market and income approaches to value; the appraisal process applied both to residential and commercial property.

## FINA 30653 - Financial Planning (3)

Prerequisites: Junior standing; completion of ACCT 20653 with a minimum of 'C' and must be a business minor or receive departmental approval. Students may not receive credit for both FINA 30153 and FINA 30653. Decision making in the financial environment. Making the best use of resources including the acquisition and management of funds. Financial analysis of stocks, bonds, and other financial instruments.

## FINA 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## FINA $\mathbf{3 9 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.
FINA 40030 - Senior Honors Research Paper (1.00-3.00)
$1-3$ hours. Prerequisite: Honors Section of MANA 30153, and must be a Business major. Preparation for and completion of a research paper in the student's area of concentration in business under the direction of an assigned staff member. May be taken for up to three hours credit.

FINA 40153 - Advanced Financial Management (3)
3 hours. Prerequisite: FINA 30153 and FINA 30203 and credit for, or concurrent enrollment in FINA 30233, and must be a Business major. An advanced course in the application of the theory of corporate finance to real problems in business. Taught primarily by the case method, topics include financial analysis and planning, forecasting the financial needs of a firm, capital expenditure analysis, capital structure and distribution policies, merger and acquisition analysis, and corporate restructuring. Emphasis is placed on the effects of the firm's financial and operating decisions on the value of the firm's securities in financial markets.

## FINA 40183 - Educational Investment Fund (3)

3 hours. Prerequisite: FINA 30153 and FINA 30213, and must be a Business major. Admission by approval of the dean of the Neeley School. Participation in the operation of the Educational Investment Fund student-managed investment portfolio.

FINA 40193 - Educational Investment Fund (3)
3 hours. Prerequisite: FINA 30153 and FINA 30213, and must be a Business major. Admission by approval of the dean of the Neeley School. Participation in the operation of the Educational Investment Fund student-managed investment portfolio.

FINA 40313 - Management of Financial Institutions (3)
3 hours. Prerequisite: FINA 30153 and 30203 with a grade of at least C-" in each course, and must be a Business major, or consent of instructor. Problems of commercial banks and financial institutions, primarily from the perspective of the management of an individual institution, with emphasis on formulating appropriate policies concerning the asset, liability, and capital management of the firm."

## FINA 40533 - Topics in Applied Financial Analysis (3)

Prerequisites: FINA 30213, and must be a Business major. This course is a comprehensive course integrating fundamental topics related to financial analysis. Specific topics include ethics, economics, financial statement analysis, corporate finance, quantitative methods, portfolio management, equity analysis, fixed income analysis, and derivatives.

FINA 40603 - Real Estate Law (3)
3 hours. Prerequisite: MANA 20153 and FINA 30313 with a grade of at least C-" in each course, and must be a Business major, or consent of instructor.

Acquisition and transfer of property; rights of adjoining owners; mortgages and liens; abstracts of title; recording; drafting of deeds, leases, mortgages, options. Especially for real estate salesmen and brokers, owners, tenants."

## FINA 40613 - Real Estate Finance and Investment Analysis (3)

3 hours. Prerequisite: FINA 30153 with a grade of at least C-" and must be a Business major, or consent of instructor. Investment value based on the present value of expected cash flows. Includes computer applications, the current income tax laws for real estate, mortgage law, sources of real estate credit including primary and secondary markets, government programs, and mortgage loan underwriting."

## FINA 40623 - International Finance (3)

3 hours. Prerequisite: FINA 30153 and FINA 30203 with a grade of at least C-" in each course, and must be a Business major, or consent of instructor. The international monetary system; speculation, hedging and arbitrage in foreign exchange and financial markets; financial management of the multinational firm; Eurocurrency and capital markets; and international banking."

## FINA 40703 - International Finance Study Abroad (3)

3 hours. Prerequisites: permission of instructor, and must be a business major. The objective of the class is to expose students to different aspects of financial issues from an international perspective. The course provides the opportunity to study variations in business practices and experience distinct cultures in an international setting. Students will have the opportunity to experience topically relevant practices, for example by visiting local firms and interacting with business people in order to obtain a firsthand understanding of the impact of global influences.

FINA 40970 - Special Problems in Finance (1.00-20.00)
( $1-6$ semester hours) This course may be repeated for credit.

## FNRT - Fine Arts Interdisciplinary

FNRT 20203 - Dance and Music: Living Art, Living Culture (3)
Students in this course will travel to Budapest, Prague and Vienna and gain information from direct experiences in the artistic disciplines of dance and music, through a lens of history and culture. This study abroad experience will introduce students to performance, creation, observation, and the development of the critical language of dance and music as they explore a range of perspectives that define the cultural and historical forces that impact the development of national identity. With this ability to integrate, they will situate themselves inside of these societies: living art, living culture.

## FNRT 20903 - Children, Creativity and the Fine Arts (3)

This multidisciplinary course will provide elementary education, child development and other interested majors with the experiences and tools to design meaningful arts learning experiences for children. Students will spend five weeks in each art content area: visual art, music, and dance. Students will develop their creative capacities in each of these disciplines by examining and critiquing art, creating art and designing elementary art curricula.

## FNRT 30903 - Art and Music in Hungary (3)

FNRT $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

FNRT 40970 - Special Problems (1.00-20.00)
Special Problems in Fine Arts

## FREN - French

FREN 10033 - Practical Conversational French (3)
Emphasis on active skills, in a two-semester sequence. May not be used to satisfy the B.A. language requirement.

## FREN 10043 - Practical Conversational French (3)

Continues FREN 10033. Prerequisite: FREN 10033 or equivalent with a grade of C - or better.

## FREN 10053 - French for Reading Knowledge (3)

Intensive reading in the humanities, the social sciences and the natural sciences. Intended for students preparing for graduate reading examination. May not be used to satisfy the B.A. language requirement.

## FREN 10063 - French for Reading Knowledge (3)

Continuation of FREN 10053.
FREN 10153 - First Semester College French (3)
A beginning course in French intended for students with no previous knowledge of the language, or insufficient knowledge to qualify for placement into a more advanced course. The four skills of listening, speaking, reading and writing are taught at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in Frenchspeaking countries. No prerequisite.

## FREN 10163 - Second Semester College French (3)

Prerequisite: FREN 10153 with a grade of C - or better, or permission. Continuation of FREN 10153.

## FREN 20053 - Third Semester College French (3)

Prerequisite: FREN 10163 with a grade of C - or better or appropriate score on an approved placement test. Continues development of the skills of listening comprehension, speaking, reading, and writing on the intermediate level. Includes regular language laboratory assignments.

## FREN 20063 - Fourth Semester College French (3)

Prerequisite: FREN 20053 with a grade of C- or better, or permission. Enhances language skills on the intermediate level through a combination of readings and oral activities. Emphasizes acquisition of active and passive vocabulary.

## FREN 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

FREN 30003 - Junior Honors Seminar (3)
Junior Honors Seminar.
FREN $\mathbf{3 0 0 3 3}$ - Phonetics (3)
Prerequisite: FREN 20053-20063, with grades of C- or better, or permission. Description and study of French sounds and intonation. Transcriptions using the International Phonetic Alphabet and orthophonic drills. Laboratory practice.

FREN 30043 - Advanced Conversation (3)
Prerequisite: FREN 30033 with a grade of C - or better, or permission. Essentially a performing class with emphasis on motivating the students to speak. Opportunity not only to hear but also to use everyday spoken French and to acquire systematically the vocabulary and idioms necessary to express oneself correctly and comfortably in practical situations. This course will count toward the major in French, but does not replace either French 30063 or 30073. Not open to heritage or native French speakers.

FREN 30063 - Readings in Selected French Genres (3)
Prerequisite: FREN 20063, with a grade of C- or better, or permission. This course further develops students' reading skills in French, exposing them to literary texts in a variety of genres from different periods. Includes an introduction to the study and analysis of literary works. Not open to heritage or native French speakers.

## FREN 30073 - Introduction to Composition (3)

Prerequisite: FREN 30063 , with a grade of C- or better, or permission. This course builds on reading/comprehension skills taught in FREN 30063 and introduces students to basic elements of style and academic writing in French. Students will learn to write short personal narratives, reviews, expository and persuasive essays, and critical analyses of literary and nonfiction texts. In addition, students will begin to explore the characteristics of writing for the Web.2.0 environment. Not open to native French speakers.

FREN 30143 - French and Italian Traditions in Opera and Literature (3) Prerequisites: FREN 10163 or ITAL 10163, or equivalent proficiency. This cross-disciplinary course explores and compares French and Italian culture through the theme of famous operas based on French literature. Students will study works of writers such as Victor Hugo and Alexandre Dumas fils, and composers Giuseppe Verdi and Giacomo Puccini through educational excursions and performances in historic sites. The course provides for independent research projects and language instruction in Italian and French.

FREN 30153 - French Culture and Civilization I (3)

Prerequisite: FREN 30063 with a grade of C- or better, or permission. Study of French history, art, geography, government and customs to the revolution of 1789

## FREN 30163 - French Culture and Civilization II (3)

Prerequisite: FREN 30063 with a grade of C - or better, or permission. Continuation of 30153 from the revolution of 1789 to the present day.

FREN 30173 - France Today: Citizenship, Identity, and Nationalism (3) The course consists of a six-week program, two at TCU and four in Montpellier, France, and explores French and migrant culture. The course incorporates readings, service learning, and site visits to learn about migration history, economies of labor, politics, identity, citizenship, and civic responsibilities. Service learning gives students actual experience with nonnative people to learn about French and migrant culture from divers perspectives.

FREN 30176 - French Culture and Civilization: Study Abroad in France (6) Prerequisite: FREN 20063 with a grade of C- or better. A summer course conducted by TCU in France or other francophone country. The course offers students the opportunity to improve linguistic and cultural proficiency by interacting directly with culture and native speakers. Students will study topics related to the region in which the program is held.

## FREN 30183 - Introduction to French Cinema (3)

Prerequisite: FREN 20063 with a grade of C - or better, or equivalent. This course proposes the study of several films representative of modern French cinema. Terminology pertaining to filmmaking and an overview of cinematic techniques will be introduced at the beginning of the semester, enabling students to express their insights and impressions with accuracy, and to make meaningful cultural comparisons between French and American filmmaking styles. Films will be supplemented by readings selected to give additional insight into their cultural and artistic significance. These texts will consist primarily of 1) journalistic articles pertaining to historical events or social issues portrayed in the films, 2) historical documents pertaining to political situations addressed in the films, and 3) critical texts and interviews pertaining to the making of the film and their public reception.

FREN 30253 - Contemporary France through the Media (3)
Prerequisite: FREN 30063 with a grade of C-or better, or permission. This course examines through the lens of the French media the main currents of ideologies in today's French society with respect to politics, education, work, family, the question of a national identity, and the relationship between France and the Francophone world, particularly in North America. Open to Native Speakers and non-minors or majors with a demonstrated Intermediate to High proficiency in French.

## FREN $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## FREN 32990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been includedin the student's grade point average.

## FREN 34990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## FREN 37990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## FREN $\mathbf{3 9 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian

University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## FREN 40003 - Senior Honors Research Paper (3)

Prerequisite: Admission to Honors Program in Modern Languages and senior standing or permission. Senior honors students will write a major paper on a topic agreed upon between the student and two professors, one of whom will direct the research and development of the paper. This paper, when completed, is to be read and approved by the two designated professors of the department.

FREN 40013 - French Literature in Translation (3)
Prerequisite of FREN 30063-30073 does not apply. Topic to be announced each time the course is offered. Lectures, discussions and readings in English. Open to French majors and minors for elective credit only.

## FREN 40073 - Studies in French Literature I (3)

Prerequisite: FREN 30073 with a grade of C - or better, or permission. This course will examine francophone literary texts from the Middle Ages through the 17th century. The choice of texts may vary each semester and focus on a particular genre, theme, or region. Includes techniques of literary analysis and interpretation.
FREN 40083 - Studies in French Literature II (3)
Prerequisite: FREN 30073 with a grade of C- or better, or permission. This course will examine francophone literary texts from the 18th century to the present. The choice of texts may vary each semester and focus on a particular genre, theme, or region. Includes techniques of literary analysis and interpretation.

## FREN 40123 - Seminar in French Studies (3)

Prerequisite: FREN 30073 with a grade of C - or better, or permission. A specific author, genre, period or theme will be chosen for study.

FREN 40143 - Non-European French Prose and Poetry (3)
Prerequisite: FREN 30073 with a grade of C- or better, or permission. Study of French language writings from Africa, the Caribbean, Canada or other French-speaking areas. A specific author, genre, period or theme will be chosen for study.

## FREN 40173 - Advanced French Composition (3)

Prerequisite: FREN 30063 with a grade of C- or better. Intensive practice in various forms of written expression in French, including correspondence, short essay, explication de texte, and problems of translation.

FREN 40183 - Advanced Writing and Culture (3)
Prerequisites: FREN 30073 with a grade of C - or better, or permission. This capstone course extends the range of verbal communication and writing strategies, particularly focusing on developing persuasive communication skills. It emphasizes reviewing the fine grammar points and diversifying vocabulary through readings in key social issues (Social Justice, Community Engagement, sustainable Living, etc.) Furthermore, the students will complete a research project in an area of personal interest demonstrating their language proficiency and their understanding of the French and/or Francophone cultures.
FREN 40970 - Directed Study (1.00-6.00)
Prerequisite: FREN 30073 with a grade of C - or better, or permission. Topic and credit hours announced yearly. Opportunity for independent study. 1-6 hours

FREN 50033 - The Teaching of Modern Foreign Languages (3)
Prerequisite: Junior standing, and FREN 30073 with a grade of C - or better, or concurrent enrollment. Analysis and consideration of values, objectives, content and methods, with special reference to the teaching of foreign languages in the high school. Demonstrations of modern techniques, use of audiovisual aids and realia, and operation of a foreign language laboratory. Required of students seeking Texas Public School Certification. Cross-listed under German 50033 and Spanish 50033.

## FTDM-Film-Televisn-Digital-Media

## FTDM 10013 - TV Studies for Non-Majors (3)

Lecture and viewing sessions. An introduction to the field of television studies, including an examination of various approaches to the study of television history and the television industry within appropriate social and cultural contexts. Viewing of significant programming in television history. Designed for non-majors.

FTDM 10053 - Survey of Film (3)
Lecture and viewing sessions. Includes examination of the development of film structure and aesthetics within appropriate social and cultural contexts. Viewing of significant films in cinema history. Designed for non-majors. FTDM majors may not use this course to fulfill major requirements or Fine Arts UCR requirement.

## FTDM 10073 - Media Adaptations (3)

Examination of film/television adaptations from literature, with emphasis on the discussion of style, structure, and characterization, and on the cultural factors which affect adaptations (financial expectations of different media, censorship and self-regulation of content, etc.) Topics may include film/television programs adapted from plays, short fiction, or novels; the course may also address novelizations" of stories which first appeared as films or television programs, musical adaptations of non-musical films, and remakes."

## FTDM 10113 - History of Broadcasting (3)

Lecture and viewing sessions. An intensive overview of the history of radio, television and related electronic media from 1900 to the present. Topics include the rise of the network system, programming and the evolution of broadcast technology. This course is designed for majors; the minimum acceptable grade is a 2.0 C "."

## FTDM 10123 - History of Film (3)

Lecture and viewing sessions. An intensive history of film from 1890 to the present. Includes examination of the development of film structure within social and cultural contexts, the Hollywood studio system, and selected international cinema systems. This course is designed for majors; the minimum acceptable grade is a 2.0 C". FTDM 10053 may not substitute for this course."

FTDM 10143 - Introduction to Film and Television Aesthetics (3) An overview of how motion pictures and television programs can be read" and analyzed as complex aesthetic texts. The course is designed to complement and provide a framework for all other FTDM courses. Class combines lecture, discussion and viewing sessions. This course is designed for majors and minors; the minimum acceptable grade is a 2.0 " C "."
FTDM 10433 - Freshman Seminar in Film, Television, and Digital Media (3)

Topics may vary each time it is offered.
FTDM 20213 - Basic Video Production (3)
Prerequisites: A 2.0 C" grade or higher in FTDM 10123; FTDM majors only. Students will learn the basics of video production, including principles of camera work, shot composition, audio techniques, and basic lighting concepts, through a series of lectures and labs. This class provides students with a foundation for advanced production classes."

## FTDM 20510 - Radio Broadcasting on KTCU (1.00-3.00)

Prerequisites: FTDM majors only: a 2.0 C" grade or higher in FTDM 10123 and permission of the department. JOUR majors: permission of department. Open to FTDM and JOUR majors only. (maximum 3 semster hours; 1-3 semester hours per semester.) Students will study basic radio station operations, including announcing, writing for radio, basic audio production, programming fundamentals, and promotions. The class includes 9 hours of on-air lab work, per weeks, at KTCU FM 88.7 (this could include some nights and weekends). Hours of lab TBD."

## FTDM 20523 - Business of Media (3)

Prerequisites: A 2.0 C" grade or higher in FTDM 10113; FTDM majors and Sports Broadcasting majors only. This course provides an intensive overview of radio, TV, and film business practices, including the structure of media companies; how media conceptualize and measure their audience; strategies (i.e. promotion, advertising) media companies use to attract an audience, and regulatory structures that govern the radio, TV, and film industries."

## FTDM 20583 - Media Analysis

Prerequisites: A 2.0 C" or higher in FTDM 10143; FTDM majors and minors only; ENGL 10803. Students in this course will develop a critical perspective on broadcasting and film. Intensive practice in analyzing and writing about broadcast programs and motion pictures."

## FTDM 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experiencewith an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

FTDM 21113 - Sports Broadcasting (3)
Prerequisites: FTDM and Sports Broadcasting Majors only. Overview and analysis of sports broadcasting. This course teaches the fundamentals of both on-air talent and behind-the-scenes production of both television and radio sports production. This course is a foundation course for students majoring in sports broadcasting.
FTDM 21513 - Sports Radio (3)
Prerequisites: FTDM 21113, Sports Broadcasting majors only, and permission of instructor. This class is designed to give students practical experience working in a radio station sports department. Students will produce a variety of TCU sports, cut promos, live-sports updates and pre- and postgame shows on KTCU-FM.

## FTDM 21713 - Introduction to Remote Sports Production (3)

Prerequisites: FTDM or Sports Broadcasting majors only. This course teaches students the basic skills and techniques necessary to work in the sports production business. Students will serve as crew on TCU sports broadcasts. This course provides hands-on learning opportunities for students and serves as a primer for progression in the major.

## FTDM 30003 - Honors Tutorial (3)

Prerequisites: Junior standing and membership in the Honors Program. This course is offered only as a tutorial and the specific topic is determined by consultation with an instructor. Arrangements for this course must be made with an instructor the semester prior to enrollment.

## FTDM 30103 - Media Analysis (3)

Prerequisites: A 2.0 C" or higher in FTDM 10143; FTDM majors and minors only; ENGL 10803. Students in this course will develop a critical perspective on broadcasting and film. Intensive practice in analyzing and writing about broadcast programs and motion pictures."
FTDM 30153 - Dramatic Style and Structure (3)
Prerequisite: A 2.0 C" grade or higher in FTDM 10123; By reading and viewing plays and screenplays of various eras and genres, students will learn to identify the structural components of narrative drama and to analyze their usage in a variety of works, providing them with tools to more effectively write and direct original screenplays."
FTDM 30203 - Audio Theory and Practice (3)
Prerequisite: A 2.0 C" grade in FTDM 10123 and 20213. Advanced audio production and editing. Sound design for film and television. Multitrack music recording and mastering. Field recording and sound-effect production. Foley sound, editing for voice acting and dialog replacement."
FTDM 30213 - Advanced Video Production (3)
Prerequisites: A 2.0 C" or higher in FTDM 20213. This course focuses on advanced production work for narrative dramatic projects. Students will create and execute single-camera productions designed to give them handson experience and build on the skill set learned in other production classes. The course culminates with students producing productions that may be entered into video festivals. These projects will allow students to use equipment such as SteadyCams, Micro Dollies, Jibs, Green Screen, etc."
FTDM 30223 - Cinematography (3)
Prerequisite: A 2.0 C" or higher in FTDM 20213. An extensive exploration of the tools and techniques used by the cinematographer. Lectures will cover the evolving technologies of film and HD filmmaking with an emphasis on filmspace, visual language, lens language, camera dynamics, cinematic continuity, exposure, the tools of lighting, color theory and lighting as storytelling. Weekly labs will include lighting workshops in the studio with emphasis on single camera film production. Students will work on individual projects culminating with a film production."
FTDM 30243 - Directing (3)
Prerequisite: A 2.0 C" or higher in FTDM 10123 and 20213. This course focuses on the role of the director in film and television. Students learn to breakdown scripts, block actors and camera, develop characters, work with actors to get a performance, and oversee the various department heads involved with film and television production."

## FTDM 30353 - Theory and Practice of Film Acting (3)

Prerequisites: A 2.0 C" or higher in FTDM 10123. An exploration of the theories and techniques of on-camera performance. Students act in studentdirected video projects and critique their work in class. Projects and assignments focus on improving performance skills as well as developing strategies to work with talent in a production setting."

FTDM 30393 - Motion Graphics: Special Effects (3)
Prerequisites: A 2.0 C" or higher in FTDM 10123. This course provides
students with the aesthetic skills and technical knowledge needed to
develop and implement Web design and interactive media as well as titles and graphics, process shots, and special effects for film and video."

## FTDM $\mathbf{3 0 4 1 0}$ - Film and Television Genres (3)

Prerequisites: A 2.0 C" or higher grade in FTDM 20583. This course examines one or more film and/or TV genres, considering how we define genres, how genres have developed in relation to changes in the film and TV industries, and how audiences have responded to different genres. Selection of genres varies by semester, can be repeated with another topic. ( 6 semester hours maximum; 3 hours per semester)"

## FTDM 30433 - American Cinema (3)

Lecture and viewing sessions. An overview of the history of American cinema from 1895 to the present. Includes examination of the development of American film from a cultural and historical perspective. Topics include Hollywood system, Independent cinema, Ethnic cinema, and Minority cinema. Open to non-majors.

## FTDM $\mathbf{3 0 4 5 3}$ - Crime Films and Society (3)

This course explores how crime and punishment have been depicted throughout film history, focusing on the relation between culture and the movies. Topics include audiences' continuing interest in crime films, the censorship battles which have been triggered by movies about crime, and the treatment of specific historical figures such as AI Capone and John Dillinger.

## FTDM 30463 - Media Decades (3)

Prerequisites: A 2.0 C" or higher in FTDM 20583. This course examines media texts in their historical and cultural contexts, considering how film, TV shows, and other media both reflect and affect the time and place in which they are made. Each decade can only be taken once. ( 6 semester hours maximum; 3 hours per semester.) May be repeated for credit under different decades."

FTDM 30473 - History in the Movies (3)
Films about historical events may inspire us to learn more about history; however, they may also present us with inaccurate information, and they are always subjective. This course examines how specific historical events and the lives of historical figures have been depicted in Hollywood films. The course will examine the typical structures and themes of these based-on-a-true-story" movies and how changing cultural attitudes affect the depiction of specific events from the past."

## FTDM 30483 - Media Authorship (3)

Prerequisites: A 2.0 C" or higher in FTDM 20583. In this course, students will study the concept of authorship in media production, which is always in essence a collaborative endeavor. In this course, students will identify individual creative vision by viewing film and/or TV texts and how authorship has been seen historically in the media industries and by audiences."

FTDM 30510 - Radio Programming, Promotions, and Advanced Operations on KTCU (1.00-3.00)
Prerequisites: A 2.0 C" grade or higher in FTDM 20510 and permission of instructor. FTDM majors only. (maximum 6 semester hours; 3 hours maximum per semester.) Practicum in operations of a radio stations. Students will do more advanced audio production, organize and conduct promotions, and may also serve in management roles in programming, music, news, and/or sports. The class included 9 hours of lab work per week, at KTCU FM 88.7 (this could include some nights and weekends). Hours of lab TBD."

## FTDM 30513 - Audience Research (3)

Prerequisites: A 2.0 C" or higher grade in FTDM 20523; FTDM and Sports Broadcasting majors only. Introduction to qualitative and quantitative research methodologies used to measure audiences in the media industries."
FTDM 30523 - Media Marketing and Promotions (3)
Prerequisites: A 2.0 C" grade or higher in FTDM 20523; FTDM and Sports Broadcasting majors only. JOUR majors need JOUR 20313 or permission of instructor. Principles and techniques of developing successful marketing and promotions campaigns in the media industries. Course focuses on issues of market research, advertising strategies, identity and image development, and creative execution. (Offered as FTDM or JOUR credit.)"

## FTDM 30573 - Broadcast and Cable Programming (3)

Prerequisites: A 2.0 C" grade or higher in FTDM 20523; FTDM and Sports Broadcasting majors only. Historical overview of broadcast programming trends. Current program practices and strategies in radio, television, cable and other electronic media."

FTDM 30593 - Television, Culture and Society (3)
Prerequisite: A 2.0 C" or higher grade in FTDM 20583; FTDM majors and minors only. Explores issues in the relationships among television, culture,
and society. Emphasis on understanding the role television has played in the development of mass culture and the influence of television on contemporary society."

## FTDM 30643 - British Cinema and European Culture (3)

Prerequisite: A 2.0 C" or higher in FTDM 10143, or permission of instructor. Using a cultural/historical perspective, this course focuses upon postcolonial, social, economic, and political factors that create the visual image in British cinema. Investigates the representation of Britain's identity in European culture. Examined through a series of seminars, guest lectures, and on-site visits to studios and museums in London."
FTDM 30663 - Film in a Global Society (3)
Prerequisites: A 2.0 C" or higher in FTDM 10123, and 20523, or permission of instructor. Examines the increasingly global nature of the film and broadcasting industries, and explores the impact of US films abroad, using the British market as a specific subject of analysis. Includes a series of seminars, guest lectures, and on-site visits to studios and museums in London."

## FTDM 30813 - TV Number Ones (3)

Prerequisites: A 2.0 C" or higher grade in FTDM 20523. A comprehensive examination of television series that were ranked number one in the Nielsen ratings for one or more TV seasons between 1950 and the present, with a focus on the significance of these series and their impact on the television industry."

FTDM 30860 - Internship in Film, Television, and Digital Media (1.003.00)

Prerequisites: FTDM and Sports Broadcasting majors only. Permission of department is required. Students must have completed 21 hours of FTDM courses including FTDM 20523 or FTDM 21113 with a 2.0 C" or higher grade, and at least one of the following courses (with a 2.0 " C " or higher): FTDM 20203, 21713, 20213, 20243, or 40333. Supervised study, experience, and on-the-job training in a media-related organization. May only be taken on a pass-no credit basis. This course is required for Sports Broadcasting majors. FTDM majors or minors may use this class as an elective only ( $1-6$ semester hours, 3 hours maximum per semester.) (This course is only offered as P/NC.)"

## FTDM 30983 - Women in Television and Film (3)

This course examines the relationship between women and the electronic media. Specific issues include the social construction of gender and gender roles, the influence of media stereotypes, and the critical evaluation of artistic works created by female writers, producers, and directors.

FTDM $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## FTDM 31713 - Remote Sports Production (3)

Prerequisites: A 2.0 C" or higher in FTDM 10113,21113, and 21713; Sports Broadcasting majors only. This course gives the student practical hands-on experience in 'live' sporting events such as: football, baseball, basketball, soccer, tennis and other sports. Students will be responsible for all aspects of the production from director to camera operator. This course is a foundation course for sports broadcasting majors."

## FTDM 31723 - Producing the Live Sports Event (3)

Prerequisites: A $2.0 C^{\prime \prime}$ or higher in FTDM 21713 and 31713 or permission of instructor. Sports Broadcasting majors only. This course will prepare students as producers, associate producers, and production managers for sports production. Combining lecture and lab students will learn all of the necessary skills to be able to produce 'live' sporting event broadcasts. Students enrolled in this course will produce TCU sporting events that will air via webcasts or live on Fox Sports Southwest."

FTDM 31733 - Audio Production for Sports: Television and Radio (3) Prerequisites: A 2.0 C" or higher in FTDM 10113 and 21113; Sports Broadcasting majors only. Theory and application of audio for sports broadcasting. This class looks at the techniques for live sports television and radio. Includes microphone choice and placement, mixing techniques, IFB, and replay video monitor deployment. Labs include actual onsite broadcasts of sporting events (live to tape). This is not a play-by-play announcing course."

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## FTDM 34990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

FTDM 39990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## FTDM 40003 - Senior Honors Research Paper (3)

Prerequisites: FTDM 30003. Senior standing and membership in the Honors Program. A supervised research experience and a thesis that is usually based on the subject matter studied in 30003. This course is offered only as a tutorial; arrangements must be made with an instructor prior to enrollment.

## FTDM 40153 - Dramatic Writing (3)

Prerequisites: A 2.0 C" or higher in FTDM 10123 and 30153. Building on the knowledge acquired in Dramatic Style and Structure, students will develop, create, write and revise original screenplays. Conducted as a workshop, all scripts are read aloud and critiqued by the class with the ultimate goal of developing a script suitable for production."

## FTDM 40210 - Topics in Production (3)

Prerequisite: A 2.0 C" or higher in FTDM 20213; FTDM majors only and permission of instructor. This course will focus on a particular productionrelated area not covered elsewhere in the curriculum. It provides a chance for students to pursue in-depth study in such areas as music, sound design, cinematography, post-production, production management, writing, directing, and others. Up to 6 semester hours, maximum of 3 hours per semester."

## FTDM 40223 - Entertainment Law and Finance (3)

Prerequisite: A 2.0 C" or higher in FTDM 20523; FTDM majors only. An examination of legal and financial issues related to film and television production. Topics covered may include employment contracts, permits and releases, music licensing, guilds and unions, financing, and production and distribution revenues and expenses. Counts as 'industry' credit."

## FTDM 40333 - Post-Production (3)

Prerequisites: A 2.0 C" or higher in FTDM 10123 and 20213. Working with AVID and Final Cut Studio non-linear editing software, students will edit commercials, narrative films, and take projects through the on-line process of color correction, special effects, and exporting the project to its final distribution form."

## FTDM 40383 - Documentary Production (3)

Prerequisites: At least a 2.0 C" grade or higher in FTDM 20213. Through an examination of documentary styles and journalistic techniques, write, direct, and edit a documentary."

FTDM 40440 - Topics in Film (3)
Prerequisites: A 2.0 C" or higher in FTDM 20583; FTDM majors and minors only. Using a variety of theoretical and critical approaches, students will examine limited topics such as films produced within a particular time period, films by specific directors, or film which are unified by theme or style. ( 6 hours maximum; 3 hours per semester)."

FTDM 40503 - Media Industry Law and Regulation (3)
Prerequisite: A 2.0 C" or higher in FTDM 20523. Structural and content regulation of the media industries. Court cases bearing on media industries. Introduction to legal research and writing."

## FTDM 40513 - Topics in Media Industry Studies (3)

Prerequisite: A 2.0 C" or higher in FTDM 20523; FTDM majors only. An indepth examination of selected issues relating to media industry business practices. ( 6 semester hours maximum; 3 hours per semester)"

Prerequisite: A 2.0 C" or higher grade in FTDM 20523; FTDM majors only. The organization and administration of broadcast, cable and film operations. Management techniques and strategies, including forecasting, planning, statistical and financial analysis, and interpersonal communication."

FTDM 40570 - Topics in Television (1.00-3.00)
Prerequisites: A 2.0 C" or higher in FTDM 20583; FTDM majors and minors only. An in-depth analysis or selected television genres and industry practices from a variety of critical and theoretical perspectives. ( 6 semester hours maximum; 3 hours per semester)"

## FTDM 40623 - World Cinema (3)

Prerequisite: A C" or higher in FTDM 20583. In this course, students will study the production, circulation, and styles of international films. (6 semester hours maximum; 3 hours per semester)"

FTDM 40643 - Media and Popular Culture (3)
Prerequisites: A 2.0 C" or higher in FTDM 20583. This course will examine noteworthy topics pertaining to popular culture as
represented/communicated in two or more types of media."
FTDM 40653 - Popular Music and the Recording Industry (3)
This course explores how popular music functions as a significant media industry and source of culture in contemporary society and explores the technology that made music recording and distribution possible.

## FTDM 40663 - Contemporary Media (3)

Prerequisites: A 2.0 C" or higher in FTDM 20583. Students in this course will examine current trends in various media forms, looking at the ways texts, the industry, and audiences intersect in contemporary practice. May be repeated for credit under different topics. (6 semester hours maximum; 3 hours per semester.)"

## FTDM 40683 - Film Theory and Criticism (3)

Prerequisite: A 2.0 C" or higher grade in FTDM 20583; FTDM majors and minors only. Survey of classical and contemporary film theories."
FTDM 40773 - Media in Britain (3)
An overview of contemporary media in Great Britain, focusing on the press, television, and cinema. Taught only in London.

## FTDM 40813 - The Business and Regulation of Media Sex and Violence

 (3)Prerequisites: A 2.0 C" or higher grade in FTDM 20523; FTDM majors only. An examination and historical overview of media product producer strategies utilizing sexual and/or violent content to attract audiences, as well as governmental strategies and regulations to limit sexual and/or violent content in the media. Industry credit."
FTDM 40900-Special Problems in Film, Television and Digital Media (1.00-6.00)

Prerequisite: Junior standing; a 2.0 C" grade or higher in FTDM 10113, 10123, and 10143. A conference course designed to give an individual student opportunities for additional specialized work in his or her area of concentration. Prerequisites may vary for different sections of this course. 16 semester hours"

FTDM 40901 - Senior Seminar in Film, Television, and Digital Media (1)
Prerequisite: By permission only. Students must be in last semester of senior year. A review and synthesis of material covered in the FTDM and Sports Broadcasting majors. This course is required for FTDM and Sports
Broadcasting majors; the minimum acceptable grade is a 2.0 C." (1 semester hour)"

## FTDM 41113 - Sports Play-by-Play (3)

Prerequisites: FTDM 21113 and FTDM 31713. This course is designed to give students an opportunity to put into practice play-by-play, color analyst, and sideline reporting skills that were taught in prior classes. The class gives students a chance to put pre-production, background research and interview skills into practice by calling games for television and radio broadcasts.
FTDM 41333 - Post-Production for Sports (3)
Prerequisites: A 2.0 C" or higher in FTDM 21113 and 21713; Sports Broadcasting majors only. This course examines the principles and techniques of non-linear editing for use in sports. Students will log time on the department's Avid and Final Cut Pro systems. The course will explore the theory and practice of sports editing, and use examples ranging from long form documentaries to sports highlight shows."

FTDM 41383 - Sports Documentary Production (3)
Prerequisites: A 2.0 'C' or higher in FTDM 21113 and 21713; Sports
Broadcasting majors only. Students in the course will explore the theory and
practice documentary production for the sports broadcasting industry. Students will examine different forms of documentary storytelling, ranging from Ken Burn's Baseball to NFL films. Students will also research and create documentaries that may be aired.

## FTDM 41580 - Topics in Sports Media (3)

Prerequisites: A 2.0 C" or higher in FTDM 21113 or permission of instructor. Using a variety of theoretical and critical approaches, this course will examine coverage of sporting events in the broadcast media as well as depictions of athletes and athletic events in fictional film and television programming. ( 6 semester hours maximum; 3 hours per semester)"

## FTDM 41713 - Global Sports Media (3)

Prerequisites: A 2.0 C" or higher in FTDM 21113 and 20523; Sports Broadcasting majors only. This course will examine legal issues, rights fees, and problems associated with producing an event overseas. Students will examine what is needed to produce sports events internationally, such as the Olympics, World Cup Soccer, Skiing, Sailing, and Golf, and how television networks overcome the problems associated with international broadcasting."

## FTDM 45113 - Producing (3)

Prerequisites: A 2.0 C" or higher in FTDM 20523; FTDM majors only. An advanced exploration of film and video producing, with an examination of techniques used by producers and financial, budgeting, and legal issues facing today's producers. All phases of the producing process will be examined, from acquiring the property, to pre-production, principal photography and post-production, as well as distribution."

FTDM 50400 - Advanced Studies in Radio, Television, and Film (3.006.00)

Prerequisites: Senior or graduate standing. Seminar in radio, television, and film. 3-6 semester hours; maximum 3 semester hours per semester.

FTDM 50970 - Special Problems in Film, Television and Digital Media (1.00-20.00)

Prerequisite: Senior or graduate standing. A conference course designed to give an individual student opportunities for additional specialized work in his or her area of concentration. (1-6 semester hours)

## GEOG - Geography

## GEOG 10003 - World Regional Geography (3)

A survey of the world's primary regions and the human and physical geography that shape them. Interactions between natural environment, cultural geography, geopolitics, history, land use, and economic geography are highlighted.

## GEOG 20013 - Human Geography (3)

The systematic subdivisions of human geography are surveyed, including urban, cultural, political, economic, historical, agricultural, and population geography. Within each subdiscipline, applications of geographic concepts and processes are emphasized.
GEOG 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

GEOG 30003 - Junior Honors in Geography (3)
Prerequisite: Permission of instructor. For geography majors who are Honors students as well as other students with overall GPAs at or above 3.5, who are willing to join the Honors College. Permission by a geography faculty member required. Directed study course for students who intend to complete a Seniors Honors Thesis research paper or equivalent creative project in a selected area of geography.

GEOG 30313 - Introducation to Geographic Information Systems (3) This course is an introduction to Geographic Information Systems (GIS), with a focus on both the conceptual foundations and applications of GIS software. Topics covered include spatial data models; cartographic design; coordinate systems and map projections; address geocoding and GPS data; spatial analysis; Internet GIS applications; and GIS modeling. Laboratory assignments give students experience using GIS in thematic areas such as demographic analysis, market research, and urban environmental change.
GEOG 30323 - Data Analysis and Visualization (3)

Data literacy is essential to success in many professional fields. In this course, students will gain experience acquiring, manipulating, and analyzing data, and will learn how to effectively communicate their findings with static and interactive visualizations. Students will learn how to work with data using the Python programming language, one of the most popular tools for performing data analysis.

## GEOG 30503-Topics in Regional Geography (3)

An analysis of the human and physical geography of a specific region. Examples of regions include Texas, Sub-Saharan Africa, and Eastern Europe. Regional characteristics investigated may include economic, political, historical, and cultural components as well as topography, climate, and natural resources. May be repeated for credit provided the specified region changes.

## GEOG 30513 - Geography of the United States (3)

An exploration of the human and physical geography of the United States. Areas of the country, such as the Pacific Northwest and New England, will be surveyed, analyzing the physical, historic, cultural, and economic characteristics that embody their unique regional identities.

## GEOG 30523 - Geography of Latin America (3)

An exploration of the human and physical geography of Latin America. This course analyzes Latin America from a geographical perspective and addresses topics such as landforms, climate, environmental hazards, indigenous peoples, culture, ethnicity, religion, agriculture, political geography, population, cities, and economic production.

## GEOG 30533 - Geography of Western Europe (3)

An exploration of the human and physical geography of Western Europe. Countries and regions of the realm will be surveyed, analyzing their economic, political, language and religious characteristics as well as topography, climate, and natural resources. Themes may include the impact of population trends, environmental problems, trade and economic development, interactions between ethnic groups, and geopolitical change.

## GEOG 30703 - Topics in Systematic Geography (3)

Concepts, principles, patterns, and processes associated with a specific subdiscipline in geography. Examples of topics include Economic Geography, Geopolitics, Medical Geography, and Physical Geography. May be repeated for credit provided the specified subdiscipline changes.

## GEOG 30713 - Urban Geography (3)

Urban Geography is the geographical study of cities. Examples of topics include: urban ecosystems; the role of physical geography in the origins and growth of cities; theoretical models of urban size, location, and land use structure; the internal geography of urban economic and social activity; and international and historical variation in the form, functions, and degree of urbanization.

## GEOG 30723 - Cultural Geography (3)

Cultural Geography is the study of human culture from the perspectives of its five geographic themes: culture region, diffusion and migration, cultural ecology, cultural landscape, and cultural integration. Each theme is applied to a variety of topics, which may include religion, language, cultural conflict, folk culture, popular culture, and demography.

## GEOG 30733 - Geography of Religion (3)

The Geography of Religion is the study of religion from the spatial perspective, utilizing the five themes of cultural geography: region, diffusion, culture-environment interaction, landscapes, and integration. Our most important topics cover the relationship between physical geography and religion and from this context we will analyze religions, past and present.

## GEOG 30743 - Applied Geography (3)

Problem-solving by application of geographic concepts, methodologies, and techniques. Examples are drawn from physical and human geography.

## GEOG 30753 - Population Geography (3)

In this course, students engage with contemporary debates around world population growth and change. Course topics include demographic data and methods; the history and future of world population growth; fertility and population control in the developing world; aging in the developed world; global trends in mortality and disease; internal migration and immigration; and population, climate change, and environmental sustainability.

## GEOG 30763 - Economic Geography (3)

Economic Geography is the study of how elements within the economy are spatially arranged, as well as the ways that space, place and spatial scales shape economic activities in different parts of the world. Through a series of readings, discussions, and research assignments, this course examines the distribution of economic activities on the earth's surface; market resource
and transportation factors in location theory, and the role of state, market and civil society's agents in management of the economy. Students are further introduced to Geographic Information Systems (GIS) through content-focused lab assignments, though no previous experience with GIS is required for this course.

## GEOG 30970 - Topical Studies in Geography (1.00-20.00)

Topical studies in Geography.

## GEOG 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## GEOG 40003 - Senior Honors in Geography (3)

Prerequisites: GEOL 30003 or permission of instructor. A senior Honors Thesis research paper or equivalent creative project, under faculty direction, in a selected area of geography.

## GEOG 40010 - Field Studies in Geography (1.00-6.00)

An intensive field study in the regional and systematic geography of a selected area. Examples include France, Central America, and the American West. May be repeated for credit provided the selected area changes.

GEOG 40313 - Advanced Geographic Information Systems (3)
Prerequisites: GEOG 30313, or instructor consent. In this course, students gain experience with advanced applications of Geographic Information Systems (GIS) software. Topics covered include GIS modeling; web GIS applications and distributed GIS services; open-source GIS; developing geoprocessing scripts using the Python programming language; and the current state of the GIS profession. Students will also complete a semesterlong course project in which they apply GIS techniques to a topic of their interest.

## GEOG 40323 - Urban and Business Applications of Geographic

 Information Systems (3)Prerequisites: GEOG 30313; another introductory GIS course; or instructor consent. This advanced GIS course gives students experience applying GIS to solvereal-world urban and business problems. Topics covered include demographic analysis; remote sensing of urban areas; network analysis; 3D urban modeling; spatial statistics; time and GIS; geodemographic
classification; market area analysis; and web GIS services. Students will also complete a semester-long group project that applies GIS to assist an organization or business in the Fort Worth area.
GEOG 50970 - Special Studies in Geography (1.00-20.00)
Supervised reading, research, and preparation of a substantial paper focused on a specific regional analysis or topical subdiscipline of geography. Regional characteristics investigated may include economic, political, historical, and cultural components as well as topography, climate, and natural resources. Examples of topics include advanced studies in Urban Geography, Cultural Geography, Geopolitics, and Historical Geography.

## GEOL - Geology

GEOL 10113 - Understanding the Earth (3)
Two hours lecture and two hours of laboratory per week. A study of the physical environment of the planet Earth, its makeup, the processes that mold its surface features and an introduction to the resources that it provides.
GEOL 10433 - The Abyss of Time: Freshman Seminar in Geology (3) Freshman Seminar in Geology.
GEOL 20213 - Our Geological Legacy (3)
Prerequisite: GEOL 10113. Three hours lecture per week. For the nonscience major. Places society's relationship to geological phenomena within a scientific framework. Evaluates the apparent immutability of the earth. Field trip required.

## GEOL 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

GEOL 30003 - Honors Seminar (3)
Reading assignments and discussions on topics of great importance in geology.

## GEOL 30103 - Science, Scientists and Society (3)

Three hours lecture per week. A cross-disciplinary course in the natural sciences. The workings of science and scientists studied by examining recurring themes and selected episodes in the history of science. The scientific enterprise considered within the changing intellectual, cultural and social milieu in which it was practiced from Epicurus and Aristotle though Einstein and Heisenberg.

## GEOL 30113 - Weather and Climate (3)

Three hours lecture per week. Introduction to the basic concepts and principles of atmospheric science in a descriptive format;emphasizes the physics responsible for changes in weather and climate complemented with popular treatment

## GEOL 30123 - Dinosaurs and Their World (3)

Three hours lecture per week. Prerequisite: GEOL 10113 or consent of instructor. A broad-based inquiry into dinosaurs, the biological and geological aspects of their world and those who study them. We will approach dinosaurs from many different fields of science in an attempt to reconstruct their world. The course is intended for science and non-science students.

## GEOL 30133 - Historical Geology I (3)

Prerequisite: GEOL 10113 or equivalent. This first semester of a two semester lab/lecture introduces students to the general principles of earth history. Lab exercises and field trips introduce students to the practical aspects of earth history. Microscope work and field trips are mandatory.

## GEOL 30143 - Historical Geology II (3)

Prerequisite GEOL 30133 or equivalent. This second semester of a two semester lab/lecture course continues with an in depth look at the details of the geological history of North America and the history of life on earth Lectures focus on historical detail, while lab exercises and field trips focus on major groups of fossils in the lab and field. Microscope work and field trips are mandatory

## GEOL 30153 - Geology of National Parks (3)

Prerequisites: GEOL 10113, or permission of instructor. Study of dynamic geologic systems and the geology of the North American continent through the study of National Parks and Monuments in the United States. The three hours of lecture per week are designed for science majors and interested non-science majors, who wish to gain in-depth knowledge of processes that actively sculpt and have sculpted our continent through time. Particular emphasis is given to interpretation of visual features of the parks through visual aids. Discussions are encouraged and facilitated by the small class size.

GEOL 30163 - Evolution and Exploration of the Solar System (3) Prerequisites: GEOL 10113, or any one of PHYS 10164/12073/10283, or permission of instructor. Three hours of lectures per week. This course will launch you into space with past and present spacecraft missions and bring you back to Earth with meteorite research. Throughout the semester, this course will examine the geology and geologic processes occurring on and within planetary bodies throughout the Solar System. This course is intended for science and non-science majors. (Crosslisted as GEOL/PHYS 30163.)

GEOL 30203 - Catastrophes, Controversies, Genesis and Geology (3)
Three hours lecture per week. The workings of science and scientists considered by examining the emergence of geology as a science in the late 18th and early l9th centuries and its development through the Victorian Age, including the rise and demise of scriptural geology and the impact of geologic thought on social mores and religious beliefs.

## GEOL 30213 - Mineralogy (3)

Prerequisite GEOL 10113 and CHEM 10113. Two hours lecture and one three hour laboratory period per week. A composite course consisting of an introduction to crystallography and a study of the common minerals.

GEOL 30223 - Petrology (3)
Prerequisite: GEOL 30213. Two hours lecture and one three hour laboratory period per week. A basic course in the origin and identification of igneous, sedimentary and metamorphic rocks. Field trip required.

## GEOL 30233 - Rock Cycle (3)

Prerequisite GEOL 10113 or permission of the instructor. Field seminar on the megascopic aspects of igneous, sedimentary and metamorphic rocks. Description and interpretation of features seen at scales between that of the individual outcrop and that of an entire basin.

GEOL 30243 - Sedimentology (3)
Prerequisite: GEOL 30223 or permission of the instructor. Two hours lecture and one three hour laboratory period per week. Principles and techniques of facies analysis, including the description and origin of sedimentary textures and sedimentary structures, and the collection and analysis of paleocurrent data. Field trips required.

GEOL 30363 - Introduction to Geospatial Technology (3)
Introduction to the fundamentals of Geospatial Technologies, including Geographic Information Systems (GIS), Global Positioning Systems (GPS), cartography, remote sensing, and spatial analysis through a series of handson computer-based exercises. Participants will learn how to utilize geospatial technology to address social and environmental issues. This course is designed to be used as a stand-along course to complement other disciplines or as an entry level course into other GIS classes. (Crosslisted as ENSC/GEOL 30363.)

## GEOL 30403 - Field Methods (3)

Prerequisites: GEOL 10113 and major field of study within the College of Science and Engineering. Two hours of lecture and one three-hour laboratory period per week. The course offers instruction and drill in fundamental skills for field work in geology and environmental science. It will be taught in field contexts as much as possible, defining field" to include the TCU campus and environs. This course also includes three mandatory weekend field trips as well as field trips during regularly-scheduled laboratory class. (Crosslisted as GEOL/ENSC 30403.)"

GEOL 30413 - Evolution of Plate Boundaries (3)
Prerequisites: GEOL 10113, PHYS 10154 or PHYS 20474, GEOL 30213 or 30443. Two hours of lecture and three hours of lab per week. An introductory study of the evolution of plate boundaries focusing on the interconnectedness of plate tectonics, structural geology and earthquakes. Credit will not be given for both GEOL 30423 and 30413 .

GEOL 30423 - Structural Geology (3)
Prerequisite: GEOL 10113, PHYS 10154, GEOL 30213 or 30443. Two hours lecture and one three hour laboratory period per week. An introductory study of the deformation of the Earth's crust. Field trips required. Credit will not be given for both GEOL 30423 and 30413.

## GEOL 30443 - Earth Materials (3)

Prerequisites: GEOL 10113 or equivalent, and permission of instructor. This course examines the chemical and physical processes involved in producing minerals, soils and rocks on the earth. Students also learn how these materials are used in our society as well as the economic importance and environmental implications of their use. The class combines lecture and laboratory to provide the most complete experience for students.

## GEOL 30573 - Stratigraphy (3)

Prerequisite: GEOL 30123 and/or permission of the instructor. Three hours lecture. An introduction to the practical and theoretical aspects of stratigraphy and depositional systems. This course uses practical examples and field- and literature-based projects to familiarize students with the basic theoretical stratigraphic framework in which geology exists. An off-road field trip will be required

## GEOL $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

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## GEOL 33990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## GEOL 40013 - Honors Research (3)

Prerequisite: permission of the instructor. The student is required to do independent research on a geologic problem, submit a paper and give an oral presentation of the findings. A faculty supervisor will be appointed for each research problem.

## GEOL 40113 - Structural Geomechanics (3)

Prerequisites: GEOL 30423. Designed for science majors who wish to gain indepth knowledge of advanced structural geology processes by understanding the response of rocks to stress. The course focuses on
geomechanical principles such as rock failure/behavior, rock strength, 3D stress and stress polygon, in situ stress, role of pore pressure, stress resolution on planes and reactivation of preexisting mechanical discontinuities. Particular emphasis is given to the determination of rock strength using micro mechanical tools and derivation of various petrophysical constraints from geophysical well logs.
GEOL 40313 - Invertebrate Paleontology (3)
Prerequisite: permission of the instructor. Two hours lecture and one three hour laboratory period per week. Major groups of invertebrate fossils, their morphology, classification, paleoecology, geologic distribution and phylogeny. Field trips required.

GEOL 40331 - Basic Seismics (1)
Prerequisites: GEOL 30143, 30223, 30423. Three hours lecture per week for five weeks. An introduction to techniques of gathering, processing and interpreting seismic data.
GEOL 40351 - Seismic Stratigraphy (1)
Prerequisites: GEOL 40331 or equivalent. Three hours lecture per week for five weeks. An introduction to the principles of seismic stratigraphy and their application in oil and gas exploration.
GEOL 40361 - Basic Well Log Interpretation (1)
Prerequisite: GEOL 30243. Three hours lecture per week for five weeks. An introduction to the use of borehole geophysical logs in formation evaluation, correlation and subsurface facies analysis.
GEOL 40393 - Soils in the Environment (3)
Prerequisite: one year of chemistry, ENSC 10143, or permission of the instructor. Two hours lecture and one three hour laboratory period per week. This course covers the formation, distribution, and classification of soils: major soil properties; field evaluation of soils; the use of soil survey information; and soil hydrology. The emphasis is on the study of soils as products of biophysical processes, and on soil properties of interest to geoscientists and natural resource managers.

GEOL 40413 - Map Interpretation (3)
Prerequisite: permission of the instructor. Two hours lecture and one three hour laboratory period per week. The construction and interpretation of geological maps.

## GEOL 40423 - Petroleum Engineering (3)

Prerequisite: GEOL 50423. Petroleum engineering concepts and technology that are needed to find and produce oil and gas are discussed. This course focuses on drilling and production operations for non-engineers. Industry professionals will visit to discuss current technologies for producing hydrocarbon fluids.

## GEOL 40433 - Siliciclastic Sequence Stratigraphy (3)

Prerequisites: GEOL 30243. This course introduces sequence stratigraphy within the context of all stratigraphy and overviews the history of sequence stratigraphy. It includes an overview of sequence stratigraphy principles and reviews basic fundamental concepts of surface- and facies-based physical stratigraphy. Included are reviews of architectural element analysis, sequence stratigraphy in seismic, borehole expression of sequences and overview of subsurface stratigraphic techniques.
GEOL 40493 - Geomorphology (3)
Prerequisite: permission of the instructor. Two hours lecture and one two hour laboratory per week. Endogenic and exogenic processes and land forms; geologic control; short-term, long term and human-imposed landscape development; morphometric analysis and study of recent movements; environmental geomorphology.

## GEOL 40516 - Summer Field Course in Geology (6)

Prerequisite: permission of the instructor. Field investigations and mapping. Those planning to enroll should contact the Department of Geology by March 1 of the year in which enrollment is contemplated. Field work in rough and robust terrain required; a high degree of physical fitness recommended.

## GEOL 40893 - Senior Thesis (3)

Prerequisites: junior or senior status, a grade point of at least 3.00, and/or permission of instructor. Three hours independent study with a focus on original research. The student is required to produce a bound thesis in a form suitable for publication in a scientific journal. Students are strongly recommended to enroll for this course in the penultimate semester of their degree plan with the expectation that the work may take more than a semester to complete.

Prerequisite: permission of instructor. Field and laboratory problems for advanced undergraduate students. Fifty clock hours of laboratory and field work for each semester hour credit. 1-6 semester hours.

## GEOL 50233 - Optical Mineralogy and Petrography (3)

Prerequisite: Permission of instructor. Two hours lecture and one three hour laboratory period per week. Analysis of the behavior of light in crystalline substances, complete treatment of crystal optics and the identification of non-opaque, rock-forming minerals using immersion media and thin section techniques. Intensive use of the microscope required.

GEOL 50251 - Scanning Electron Microscopy (1)
Prerequisite: Permission of instructor. Use of the S.E.M. in geological applications.

## GEOL 50341 - Interpreting Seismic Data (1)

Prerequisite: GEOL 30243. Three hours laboratory per week for five weeks. A practicum in interpreting seismic data. Prerequisites: GEOL 50331 or equivalent.

## GEOL 50413 - Global Tectonics and Basin Analysis (3)

Prerequisite: Permission of instructor. Three hours lecture per week. Explores the relationship between plate motion and the evolution of sedimentary basins.

## GEOL 50423 - Petroleum Geology (3)

Prerequisite: Permission of instructor. Origin, migration and entrapment of hydrocarbons, exploration and production techniques used in the petroleum industry.

## GEOL 50493 - Physical Hydrology (3)

Prerequisite GEOL 10113 and permission of instructor. Two hours lecture and two hours of laboratory per week. A study of the occurrence, movement, and exploitation of water in the hydrologic cycle including surface-atmosphere, groundwater, and surface water processes.
GEOL 50523 - Introduction to Geographic Information Systems (3)
Prerequisites: GEOL/ENSC 30363. Basic introduction to Geographic Information Systems using ESRI-ArcGIS. Elements of spatial data, mapping, data representation, and geodatabases. Training in use of a GIS system to infer relationships among spatial features. (Crosslisted as ENSC/GEOL 50523.)

## GEOL 50543 - Sedimentary Environments and Facies (3)

Prerequisite: Permission of instructor. Three hours lecture per week. Facies analysis and facies models applied to the problem of interpreting stratigraphic sequences and reconstructing paleogeography.

GEOL 50553 - Integrating and Interpreting Subsurface Geological Data (3)

Prerequisites: GEOL 50331 and 50361 , or permission of instructor. A workstation-based practicum on managing and integrating geologic data. Students will become familiar with one or more widely-used software packages for handling multiple data sets used in oil and gas exploration and field development.

## GEOL 50563 - From Prospect to Production (3)

Prerequisite: Advanced standing in geology or permission of instructor. A broad overview of the geologic, engineering and business sides of the oil and gas industry. The course will acquaint students with all the steps in the production of oil and gas from developing a prospect to delivering a product: how geologists decide where to drill, how mineral rights are acquired, how contracts are structured, and how financing is obtained for oil and gas deals. Includes the study of drilling and completion operations and the technology required to produce oil and gas. Students will also be acquainted with the legal, regulatory and environmental issues encountered in drilling for oil and gas.

## GEOL 50593 - Hydrologic Modeling (3)

Prerequisite: GEOL 50493, or permission of instructor. Elements of surface and ground water modeling with applications. Topics covered include: modeling procedures, selection of appropriate model, and presentation of results. Class consists of 2 hours lecture, and 2 hours hands-on computer modeling laboratory.

GEOL 50603 - Introduction to Geochemistry (3)
Prerequisite: CHEM 10114 and 10124 or permission of instructor. Three hours lecture per week. Application of basic chemical principles to understanding the origin, distribution and migration of chemical elements in the earth's lithosphere, hydrosphere, atmosphere and biosphere.

GEOL 50613 - Igneous and Metamorphic Petrology (3)

Prerequisite: GEOL 50233, or permission of instructor. Two hours lecture and one three hour laboratory period per week. Petrogenesis of igneous and metamorphic rocks based on field, petrographic, chemical and isotopic data. Inferences on the evolution and dynamics of the crust and mantle. Involves use of microscope.

## GEOL 50623 - Volcanology (3)

Prerequisite: GEOL 50233, or permission of instructor. Two hours lecture and one three hour laboratory period per week. Types and processes of volcanic eruptions; characteristics of modern volcanic products; recognition and significance of ancient volcanic deposits in the stratigraphic record. Involves use of microscope. Field trip required.

GEOL 50713 - Environmental Geology (3)
Prerequisite: Permission of instructor. Two hours per week of lecture, and three hours per week of laboratory work. Geologic processes, earth resources and engineering properties of crustal materials in the activities of society.
GEOL 50731 - Remote Sensing Technology (1)
Prerequisite: Permission of instructor. Three hours lecture per week for five weeks. An introduction to the technology used in remote sensing, including MSS, TM and SPOT, thermal scanners and radar imaging.

## GEOL 50741 - Image Processing (1)

Prerequisite: Permission of instructor. Three hours lecture per week for five weeks. An introduction to processing techniques used to enhance the display of remote sensing images with emphasis on those techniques useful in resource mapping.

GEOL 50751 - Image Interpretation (1)
Prerequisite: Permission of instructor. Three hours lecture per week for five weeks. Geologic and resource mapping and environmental monitoring using satellite images.

## GEOL 50763 - Groundwater Hydrology (3)

Prerequisites: GEOL 30443 and major field of study within the College of Science Engineering with 60 earned hours, or graduate enrollment, or permission of instructor. This course is designed to teach the basics of groundwater hydrogeology including hydrologic cycle, aquifers, groundwater flow, groundwater recharge, water chemistry and groundwater contamination. At the end of this course, students will be able to understand the relationship between surface water and groundwater, groundwater protection, field methods, and groundwater development. (Crosslisted as ENSC/GEOL 50763.)

## GEOL 50773 - Introduction to Environmental Law (3)

Prerequisites: Major field of study within the College of Science \& Engineering with 60 earned hours; or graduate enrollment. Students will be introduced to and will analyze selected federal statutes governing environmental remediation, discharge of pollution, and management of wastes, including the Comprehensive Environmental Response Compensation and Liability Act, the Resource Conservation and Recovery Act, the Clean Water Act, the Clean Air Act, the Endangered Species Act, and others, including the common law (nuisance, trespass, negligence.) Students will be introduced to the American legal system and the role of experts in lawsuits. Students will read and discuss in class statutes, case law, and related materials. (Crosslisted as ENSC/GEOL 50773.)
GEOL 50783 - Environmental Chemistry (3)
Prerequisites: CHEM 10123 or 10124 or 10125 or 20123 or permission of instructor. Three hours lecture per week. Chemistry of water, soil, energy, and air as related to environmental problems. Subjects include: nutrients and eutrophication, fluorocarbons, sulfur and nitrogen oxides, Eh-pH relationship, natural carbonate reactions, and cation exchange phenomena. (Crosslisted as CHEM/ENSC/GEOL 50783.)

## GEOL 50813 - Meteorites, Asteroids, and Planets (3)

Prerequisite: GEOL 30213 or PHYS 30493, or permission of instructor. Three hours of lectures per week. An interdisciplinary course exploring the history and formation of the Solar System from the Big Bang through the formation and evolution of the planets. (Crosslisted as GEOL/PHYS 50813.)

## GEOL 50863 - Spatial Analysis (3)

Prerequisites: MATH 10043 or equivalent, ENSC/GEOL 30363, and ENSC/GEOL 50523 , or permission of instructor. Further development of GIS skills to include 3D data modeling, image analysis using Remote Sensing data, advanced GPS mapping, geoprocessing to infer relationships between spatial features, spatial statistics, model building and good cartographic design. (Crosslisted as ENSC/GEOL 50863.)
GEOL 50883 - Applied GIS (3)

Prerequisites: ENSC/GEOL 50523 and ENSC/GEOL 50863, or permission of instructor. Independent work in specially designed projects not covered by regular course offerings for students to continue to advance their basic GIS skills. The student is required to do independent research on a GIS problem, submit a paper with associated maps and give an oral presentation of the findings. A GIS faculty supervisor will be appointed for each research problem. (Crosslisted as ENSC/GEOL 50883.)

## GEOL 50901 - Computer Applications in Geology (1)

Prerequisites: COSC 10403 or equivalent and permission of instructor. Three hours lecture per week for five weeks. The use of microcomputers in Geology.

## GEOL 50912 - Statistical Applications for Microcomputers (2)

Prerequisite: GEOL 50901. Three hours lecture per week for ten weeks. Statistical treatment of directional data and the use of multivariate and special regression techniques, analysis of variance, discriminate function analysis and factor analysis in solving geologic problems.

## GEOL 50922 - Mapping Applications for Microcomputers (2)

Prerequisite: GEOL 50901. Three hours lecture per week for ten weeks. Selecting and using mapping and drafting software.
GEOL 50963 - GIS Internship (3)
Prerequisites: 2.75 GPA in major, completion of at least 6 hours of approved GIS courses and permission of instructor. Practical experience working in the GIS field. Must include a minimum of 260 work hours in approved practical experience situation with an organization or company approved by instructor. A weekly work journal is required for this course. This course is only offered on a P/NC basis. (Crosslisted as ENSC/GEOL 50963.)

## GREE - Greek

GREE 10053 - First Semester College Greek (Hellenistic) (3)
An introduction to the grammar of ancient Greek, utilizing as the basis of study the elements of the Hellenistic Greek of the first century A.D. found in the best known documents of the period, the New Testament.

GREE 10063 - Second Semester College Greek (Hellenistic) (3)
Prerequisite: GREE 10053 or its equivalent. Continuation of GREE 10053. In the second half of the semester, students will read from the New Testament Gospels.

GREE 20053 - Third Semester College Greek (Hellenistic) (3)
Prerequisite: GREE 10053 and 10063 or equivalent. Further study of Hellenistic Greek grammar, through extensive reading in the New Testament, especially the letters of Paul.
GREE 20063 - Fourth Semester College Greek (Hellenistic) (3)
Prerequisite: GREE 20053 or equivalent. Continuation of GREE 20053, with reading and interpretation of the New Testament and other Hellenistic texts.

## GREE 20990 - International Residential Study (1.00-20.00)

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## GREE 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## GREE 40970 - Directed Studies in Greek (1.00-6.00)

Prerequisite: permission of instructor. Opportunity for independent study of Hellenistic text. ( $1-6$ semester hours.)

## GRMN - German

GRMN 10053 - German for Reading (3)
This course stresses the basic grammar of German and, with its heavy passive vocabulary load, serves those students who wish to develop very rapidly a reading ability so that translation and analysis of scientific, literary and other prose texts may be achieved as soon as possible. Recommended for
graduate students preparing for the graduate reading examination. Open to minors in German for elective credit only.

GRMN 10063 - German for Reading (3)
Prerequisite: GRMN 10053 with a grade of C- or better, or permission. Continues GRMN 10053.

## GRMN 10153 - Beginning German I (3)

A beginning course in German intended for students with no previous knowledge of the language, or insufficient knowledge to qualify for placement into a more advanced course. The four skills of comprehension, speaking, reading, and writing are taught at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in Germanspeaking countries. Substantial language laboratory assignments required. No prerequisite.

GRMN 10163 - Beginning German II (3)
Prerequisite: GRMN 10153 with a grade of C- or better, or appropriate score on the CLEP test, AP exam or G-CAPE placement test, or permission. Continues GRMN 10153. Further develops the skills of listening, comprehension, speaking, reading, and writing. Includes regular language laboratory assignments.

## GRMN 20053 - Beginning German III (3)

Prerequisite: GRMN 10163 with a grade of C- or better, or appropriate score on the CLEP test, AP exam, or G-CAPE placement test, or permission.
Continues GRMN 10163. Further develops the skills of listening comprehension, speaking, reading, and writing. Includes regular language laboratory assignments.

## GRMN 20063 - Intermediate German (3)

Prerequisite: GRMN 10173 with a grade of C- or better, or appropriate score on the CLEP test, AP exam, or G-CAPE placement test, or permission. Enhances language skills on the intermediate level through a combination of readings and oral activities. Emphasizes acquisition of active and passive vocabulary.

## GRMN 20123 - Topics in German Culture (3)

Introduction to German culture through the study of various cultural themes. The particular topic may vary from semester to semester in accordance with the changing interests of students and instructor. Instruction in English. No knowledge of German required.
GRMN 20133 - Berlin: A city in Film (3)
On the basis of films set in Berlin, this course surveys controversies in modern German culture from 1871 to the present. Especially recommended to students planning to attend the summer study abroad program, one week of which is spent in Berlin. Taught in English.

GRMN 20973 - Honors: The Afterlife of the Classical Greek Tradition (3) Prerequisites: Must be in Honors Program. Students will examine examples from modern literature, film, architecture, art, psychology, philosophy, and archaeology that are not just a recuperation of the classical Greek past but also a critical appropriation of it. Students discover how the past is used to understand our present.

GRMN 20983 - Honors: The Afterlife of the Classical Roman Tradition (3) Prerequisites: Must be in Honors Program. Students will examine examples from modern literature, film, architecture, art, historiography, and archaeology that are not just a recuperation of the classical Roman past but also a critical appropriation of it. Students discover how the past is used to understand our present.

## GRMN 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## GRMN 30003 - Junior Honors Seminar (3)

Junior Honors Seminar

## GRMN 30013 - German Literature in Translation (3)

This course explores the German-language literary tradition with a focus on building critical skills in literary interpretation. Course topics will vary. Taught in English.

GRMN 30053 - German Geography, Culture, and Language (3) Prerequisite: GRMN 20063 with a grade of C- or better, or appropriate score on the CLEP test, AP exam, or G-CAPE placement test, or permission. This course and GRMN 30063 may be taken in any sequence and either counts as
a recommended prerequisite to all other higher-numbered courses in German. It is not open to students whose native language is German. Extensive development of the language skills acquired in GRMN 1015310163 and 10173 (20053)-20063 or other elementary and intermediate training. Topical focus on geography and culture.

## GRMN 30063 - German Politics, Culture and Language (3)

Prerequisite: GRMN 20063 with a grade of C- or better, or appropriate score on the CLEP test, AP exam, or G-CAPE placement test, or permission. This course and GRMN 30053 may be taken in any sequence and either counts as a recommended prerequisite to all other higher-numbered courses in German. It is not open to students whose native language is German. Extensive development of the language skills acquired in GRMN 1015310163 and 10173 (20053)-2006 or other elementary and intermediate training. Topical focus on politics and culture.

## GRMN 30173 - German Culture in Cologne, the Rhineland and Beyond

 (3)This site-enhanced course will offer participants an intensive immersion experience in the German culture, and is offered in tandem with GRMN 40970. The program will last approximately 4 weeks in length, the first three weeks being spent in Cologne and other Rhineland sites, the last week being reserved for an excursion to another important German destination, such as Berlin or Munich

## GRMN 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## GRMN 37990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## GRMN 39990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## GRMN 40003 - Senior Honors Research in German (3)

Senior Honors Research in German

## GRMN 40023 - German Culture and Civilization (3)

Prerequisite: GRMN 30053 or GRMN 30063 with grades of C- or better, or permission. This course addresses the main developments in German history, philosophy, science and the arts, with emphasis on the 18th, 19th and 20th centuries. All class discussion and assignments in German, providing advanced practice in grammar and usage.

## GRMN 40163 - Advanced Studies in Language and Culture (3)

Prerequisites: GRMN 30053 and GRMN 30063 , both with a grade of C - or better. This is an advanced proficiency course that builds on the reading, listening, speaking and writing skills acquired its two prerequisites, GRMN 30053 and GRMN 30063. As a means of showcasing these competencies, the course includes a research project on an area of personal interest. The aim is to refine and elevate students' linguistic ability and cultural knowledge. This course is conducted entirely in German.

## GRMN 40193 - Introduction to German Literature (3)

Prerequisite: GRMN 30053 or GRMN 30063 with grades of C- or better, or permission. Critical reading of representative works from various periods for the purpose of developing skill in the analysis and interpretation of literature in German.

## GRMN 40970 - Directed Study (1.00-6.00)

Prerequisite: Permission of instructor. 1-6 hours
GRMN 50033 - The Teaching of Modern Foreign Languages (3)
Prerequisite: junior standing, and GRMN 30063 with a grade of C- or better, or concurrent enrollment. Analysis and consideration of values, objectives, content and methods, reference to the teaching of foreign languages in the high school. Demonstrations of modern techniques, use of audiovisual aids
and realia, and operation of a foreign language laboratory. Required of students seeking Texas Public School certification. Cross-listed under FREN 50033 and SPAN 50033.

## HARE - Human-Animal Relationships

HARE 30403 - Perspectives on Human-Animal Relationships (3)
This course examines topics and perspectives on human-animal relationships (HARE) from multiple disciplines within the humanities, social sciences, and natural sciences. We will explore the complex relationships between humans and other animals, past and present, including the socially constructed meanings of animals that shape animal/human interactions and relations within institutions and social, cultural, geographic and interactional contexts. We will consider many types of relationships between human and nonhuman animals, both beneficial and detrimental, as well as the trends that are impacting the future of animal/human relations on the planet.

## HCHS - Harris College Health Sciences

HCHS 10001 - Discover Your Path:Career Explorations in the Health Sciences (1)
Prerequisites: Freshman or sophomore standing only, or with instructor permission. This course is designed as an exploratory career course for health sciences majors who are considering changing majors. Students will be provided career development tools and resources through career assessments, exploratory activities, and career planning to assist the student in making a thoughtful, career decision. Credit will not be awarded for both UNPR 10001 and HCHS 10001.

## HCOL - Honors Colloquia

## HCOL 40013 - Nature of the Universe (3)

An examination of interdisciplinary aspects of physical and natural science; the submicroscopic world and the cosmos; cosmology; developments in modern biological and genetic research; mathematics and logic; the nature of scientific inquiry and our understanding of the physical world.

## HCOL 40023 - On Human Nature (3)

An examination of the development of our self-understanding, the origins of human culture and the study of contemporary culture as it affects the individual.

## HCOL 40033 - Nature of Values (3)

An examination of contemporary value systems through the study of certain intrinsic values as revealed in a variety of readings, thought patterns and human creations.

## HCOL 40043 - Nature of Society (3)

An examination of the structure, functions, and processes of our social, political, and economic institutions.
HCOL 40053 - Origins (3)
An interdisciplinary course addressing the origins of time, order, change, the universe, earth, man, and human cultures.

## HEBR - Hebrew

## HEBR 10053 - Biblical Hebrew I (3)

The course aims at building a firm foundation in basic biblical Hebrew with a view toward productive academic engagement with the documents of the Old Testament/Hebrew Bible. We will cover the basics of Hebrew morphology (the way words are put together), syntax (the way phrases and sentences are put together), and vocabulary. These will be strengthened by continual review through memorization, exercises, quizzes, and exams.

## HEBR 10063 - Biblical Hebrew II (3)

This course will help students to continue building a firm foundation in basic biblical Hebrew with a view toward productive academic engagement with the documents of the Old Testament/Hebrew Bible. This foundation will be laid by absorption of the basics of Hebrew morphology (the way words are put together), syntax (the way phrases and sentences are put together), and vocabulary, and strengthened by continual review through memorization, exercises, quizzes, translation projects, and exams.

## HHIT - Honors Historical Traditions

Interdisciplinary exploration of how provocative thinkers, artists, and acd activists have developed and expressed concepts of order.

HHIT 20133 - Honors Intellectual Traditions: Change (3)
Interdisciplinary investigation of global cultures as they address change.

## HIST - History

HIST 10203 - Origins of Western Civilization: Europe to 1348 (3)
This course will explore the path of European history from the origins of civilization to 1348. Its principal elements include the early societies of Mesopotamia, Egypt and Israel, the political and cultural contribution of Greece and Rome, the rise of Christianity and Islam, the characteristics of the medieval world, and the Black Death. (EU)

HIST 10213 - The World Expanded: Europe 1348-1789 (3)
This course will explore the history of Europe in the early modern period, bracketed by the Black Death and the French Revolution. Principal themes include the artistic achievements of the Renaissance, the expansion of education and literacy, the invention of the printing press, the religious conflicts of the Reformation, the growth of centralized nation-states, the dramatic discoveries of the Scientific Revolution, and the creation of a global framework for the European experience. (EU)
HIST 10223-Modernization and its Discontents: Europe 1789 to the Present (3)
This course examines the history of Europe in the nineteenth and twentieth centuries, and will identify, explore, and define the developments of modern European history. The course will focus on the common heritage and themes that make it possible to speak of 'European' history, while at the same time developing an appreciation for regional and cultural variations. (EU)

## HIST 10533 - Freshman Seminar in History (3)

Topics may vary each time it is offered.

## HIST 10603 - United States History: A Survey to 1877 (3)

Review of evolution of the American nation from the discovery of the New World to the end of the Civil War era, with emphasis on major forces shaping its development. (US)

## HIST 10613 - United States History: A Survey since 1877 (3)

Review of the emergence of the American nation through the transitional crises of the past hundred years, with emphasis on the roots of movements persisting into the modern period. (US)

## HIST 10703 - African American Experience Since 1619 (3)

Comprehensive survey of African Americans in the United States from 1619 to 1968 with special emphasis on the internal changes (such as citizenship, work, family, culture, religion, and community) and external challenges (such as slavery, racial segregation, urbanization, industrialization, major wars, and mass migrations) faced by African Americans from the start of the Transatlantic Slave Trade to the culmination of the Civil Rights Movement. (US)
HIST 10713 - Multicultural America: A Historical Survey (3) A thematic survey of the making of the United States from a multicultural perspective. Spanning the precolonial era to the present, the course includes units on Native Americans, African Americans, Asian Americans, European immigrants, and Latinos/as--analyzing the different groups comparatively and in relationship to one another. In addition to history, the course includes elements of Critical Race and Ethnic Studies and explores the intersections between race/ethnicity, class, gender, and sexuality. (US)

## HIST 10803 - Introduction to Islamic Civilization (3)

This course surveys the history of the Middle East from the rise of Islam to the end of the sixteenth century. Students will be introduced to basic aspects of the political, social, and cultural dimensions of Islamic civilization from Spain to Iran as they changed over time. Central themes include the emergence of Sunni and Shi'i identities, the relationship of Muslims and non-Muslims, and the unique material and intellectual contribution of Islamic civilization to world history and other societies. (ME)

## HIST 10813 - Introduction to the Modern Middle East (3)

This survey course is an introduction to the history, politics, culture and societies of the modern Middle East. To understand how and why the Middle East changed from a relatively peaceful region into a radicalized environment, we will study the Middle Eastern experiences with European imperialism, authoritarian rule, the challenges of the social and economic development, the rise of political Islam, the Arab-Israeli conflict, the oil, and the role of the United States in the region. (ME)

HIST 10923 - Latin American History: Colonial Period (3)
Hispanic and native backgrounds of the Spanish Conquest; a description and analysis of the evolution of colonial institutions; the independence movements in Hispanic America. (LA)

## HIST 10933 - Latin American History: National Period (3)

The colonial inheritances which influenced national development; political and economic trends of the nineteenth century; revolutionary trends in the twentieth century; inter-American relations. (LA)

## HIST 10943 - Asian Civilization to 1700 (3)

This course is an introduction to the history and culture of traditional Asia from Neolithic times to approximately 1700 . We will focus on the major political, economic, cultural, religious and intellectual trends of the people of East, South and Southeast Asia. Students in this course will pursue a greater knowledge and understanding of Asian history and civilization through a combination of readings, lectures, videos, discussion and writing assignments. (AS)

## HIST 10953 - Asian Civilization Since 1700 (3)

This course is an introduction to the history and culture of modern Asia from approximately 1700 to the end of the 20th century. We will focus on the internal changes and external challenges faced by the people and governments of such Asian states as China, J apan, Korea, and Vietnam. Students in this course will pursue a greater knowledge and understanding of modern Asian history and civilization through a combination of readings, lectures, videos, discussion and writing assignments. (AS)

HIST 20203 - Origins of Western Civilization: Europe to 1348 (Honors) (3) This course will explore the path of European history from the origins of civilization to 1348. Its principle elements include the early societies of Mesopotamia, Egypt and Israel, the political and cultural contributions of Greece and Rome, the rise of Christianity and Islam, the characteristics of the medieval world, and the Black Death. (EU)

HIST 20213 - The World Expanded: Europe 1348-1789 (Honors) (3) This course will explore the history of Europe in the early modern period, bracketed by the Black Death and the French Revolution. Principle themes include the artistic achievements of the Renaissance, the expansion of education and literacy, the invention of the printing press, the religious conflicts of the Reformation, the growth of centralized nation-states, the dramatic discoveries of the Scientific Revolution, and the creation of a global framework for the European experience. (EU)

HIST 20223 - Honors Modernization and its Discontents: Europe 1789 to the Present (3)
A survey of the history of Europe in the nineteenth and twentieth centuries, which examines the development of the political, social and economic systems that characterize the modern world. This course will identify, explore, and define the developments of modern European history, question why they happened, and evaluate their impact. (EU)

## HIST 20603 - The American Mind (HON) (3)

HIST 20603 covers the same era as HIST 10603 but emphasizes interdisciplinary themes of intellectual history developed in Honors Intellectual Traditions or Honors Western Civilization courses. The course will focus upon how ideas translated from the European experience to influence American history and helped create a distinctly American mind. Though a strong historical narrative will be evident, the course will include literature, politics and philosophy. (US)

## HIST 20613 - The American Mind since 1877 (Honors) (3)

Prerequisites: Honors standing. HIST 20613 covers the same era as HIST 10613 but emphasizes interdisciplinary themes of American intellectual history developed in Honors Intellectual Traditions or Honors Western Civilization courses. The course will focus upon how various ideas and issues within the American experience following the Civil War and national westward expansion influenced U.S. history and helped create a distinctly American culture and intellectual tradition. Though a strong historical narrative will be evident, the course will include literature, politics, sociology, religious studies, demography, and philosophy. (US)

HIST 20763 - U. S. Military History (3)
Traces the role of the armed forces in American society through a study of the origins and developments of military institutions, traditions, and practices. Traces principal wars, including their causes, course, and effects, and treats the effects of leadership and new technologies. (US)

HIST 20923 - Honors History of Latin American Civilization to 1830 (3)
Through lectures, reading, classroom discussions, and research assignments, this course examines the indigenous, European, and African roots of Latin American civilization and culture; the evolution of colonial institutions and
ideas; the emergence of a distinctly Latin American culture; and the independence movements that established national states in most of Spanish and Portuguese America by 1830. The course will also include some comparative analysis with other civilizations. (LA)

HIST 20933 - Honors History of Latin American Civilization since 1830 (3) Through lectures, reading, classroom discussions, and research assignments, this course examines the civilization and culture of modern Latin America, including the formation of national states; continuing colonial economic and political characteristics; the impact of ideas on Latin American development; class struggle and conflict between socialist and capitalist models of development; and the emergence of distinctive Latin American and national cultures. (LA)

## HIST 20943 - Honors History Asian Civilization to 1500 (3)

This course is an introduction to the history and culture of traditional Asia from Neolithic times to approximately 1500 . We will focus on the major political, economic, cultural, religious and intellectual trends of the people of East, South and Southeast Asia. Students in this course will pursue a greater knowledge and understanding of Asian history and civilization through a combination of readings, lectures, videos, discussion, and writing assignments. (AS)

HIST 20953 - Honors History of Asian Civilization Since 1500 (3)
This course is an introduction to the history and culture of modern Asia from approximately 1500 to 1989 . We will focus on the internal changes and external challenges faced by the people and governments of such East, South and Southeast Asian states as China, Japan, Korea, India, Pakistan, Indonesia and Vietnam. Students in this course will pursue a greater knowledge and understanding of modern Asian history and civilization through a combination of readings, lectures, videos, discussion and writing assignments. (AS)

## HIST 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## HIST 30003 - The Greek World (3)

Archaeological and cultural survey from pre-Greek beginnings to the Roman conquest of Greece. Emphasis on discovery of the Minoan and Mycenaean world, the origins of Greek civilization, life in the Greek city-state, the Greek world view, and the conquests of Alexander the Great. (EU)

## HIST 30013 - The Roman Republic and Empire (3)

Archaeological and cultural survey of the Roman world from its origins to the barbarian invasions. Emphasis on the origins of Rome, Roman imperialism and its impact on the Roman way of life, the Roman Revolution, the political absolutism of the empire, the historical Jesus and Christianity in the Roman context, and the decline and fall of the Roman Empire. (EU)

## HIST 30023 - Ancient Egypt and the Near East (3)

Archaeological and cultural survey of the ancient civilizations of Egypt and the Near East. Visual presentation of archaeological evidence is emphasized along with the origins of civilization, the life and death of civilization, comparison of different values and world views, the origin of monotheism, and the rise and decline of the Assyrian and Persian Empire. (ME)

HIST 30033 - Ancient Mysteries: Sense and Nonsense (3)
A survey of ancient Mediterranean and Near Eastern history from the Paleolithic Age to the Fall of Rome, including ancient Mesopotamia, Egypt, the Levant, Greece and Rome. The course examines in a scholarly manner various topics from this period to show the history of the interest and expose common misinformation. Typical mysteries considered are the fall of Rome, the historical Jesus, the pyramids, Biblical events, the Neanderthal problem, the search for the Trojan War. (NWH)

## HIST 30073 - Internship in Public History (3)

Public history internships provide valuable opportunities for students to acquire knowledge, apply skills, and gain practical experience in a wide range of history-related fields. These include (but are necessarily limited to) archives, museums, historic sites, historic preservation, oral history, and documentary editing.

## HIST 30133 - The Middle Ages (3)

A political and cultural survey of medieval civilization in the period A.D. 500 450. Topics of emphasis include the reign of Charlemagne, early Byzantine and Islamic civilization, feudalism and the code of chivalry, the manorial
economy, the crusades, the conflict of state and church, the rise of towns and universities, the Hundred Years' War, and the Black Death. (EU)

HIST 30153 - J unior Honors Tutorial (3)
Prerequisite: Junior standing as a history major and membership in the Honors Program. An examination of a major issue in history. This course is only offered as a tutorial and the specific topic is determined by consultation with an instructor. Arrangements for this course must be made with an instructor the semester prior to enrollment. (NWH or WH)

HIST 30203 - The Renaissance (3)
The political, social and cultural development of Europe from 1300 to 1517. Topics include the Black Death and its impact, politics and culture in the citystates, the social and economic bases of Renaissance society, the Renaissance in Northern Europe. (EU)

HIST 30223 - The Seventeenth Century (3)
Europe in crisis? Topics include civil wars, social and religious instability, absolutism, the debate over the crisis of the seventeenth century. (EU)

## HIST 30233 - Enlightenment Europe (3)

A new world in Europe. Topics include the spread of the Enlightenment, the role of intellectuals, social and political changes, challenges to the old order, the coming and impact of the American and French Revolutions. (EU)

## HIST 30243 - Spain: From Columbus to Franco (3)

This course examines Spain's culture, politics, and society from its creation out of a collection of small medieval kingdoms to the age of Columbus and the creation of a colonial empire, the collapse of this empire in the nineteenth century, and the path from dictatorship to democracy in the 20th century. It will include an emphasis on the Spanish values and beliefs that generated periods of religious cooperation and repression, experiments in absolute monarchy and constitutional government, and an ongoing tension between the desire for national unity and the recognition of regional differences. (EU)

HIST 30253 - Popular Culture in Early Modern Europe (3)
Prerequisites: HIST 10213 or equivalent is recommended. While traditional history courses focus on major political and economic trends and individuals, this course addresses the culture, beliefs, and activities of ordinary people the peasants, artisans, and laborers who made up the vast majority of the population in early modern Europe (1300-1800). Topics include food and festivity, witchcraft, popular religion, death, sexuality, and crime. (EU)

HIST 30303 - The Age of Great Transformation: Europe, 1815-1870 (3) The nineteenth century ushered in the industrial age in Europe and the modern consumer society. This course will examine the economic, social, and political change that came with the process of industrialization. Topics include: workers, women, socialism, revolution, nationalism and unification, and imperialism. (EU)

HIST 30323 - Peace or Pause? Europe, 1919-1945 (3)
World War II was the second global conflict in two generations. This course will examine the events of the interwar years that precipitated World War II and the war's impact on Europe. Topics include: the Treaty of Versailles, the Great Depression, the rise of fascism and its national variations, the Resistance. (EU)

## HIST 30333 - A Whole New World: Europe since 1845 (3)

World War II left Europe in ruins. This course will examine Europe's recovery from the war and its position in the post war world. Topics include: the economic miracle, the Cold War and its impact, decolonization and the European Union. (EU)

HIST 30343 - The French Revolution: from Subjects to Citizens (3)
The 1789 French Revolution marked a watershed in modern world history.
This course examines events from 1750 to 1815, exploring the origins of the Revolution, the shifts in the 1790s from constitutional monarchy to the Terror's radical republicanism to Napoleon's dictatorship. Topics include: the emergence of new ideas and new media; the roles of writers, working people, and women; the involvement of other countries, including America; the long term political and social consequences; historians; interpretations of the Revolution. (EU)

## HIST 30363 - Modern Germany, 1815 to the Present (3)

Traces the political, diplomatic, military, economic, and social events in Germany in the period. Topics include the impact of the French Revolution and Napoleon, the rise of nationalism, the social impact of industrialization, political unification under Bismarck, the two world wars and their effects on Germany, the division of Germany following World War II and its reunification. Includes recent developments in the Federal Republic. (EU)

HIST 30373 - European Thought and Culture, 1800 to the Present (3)
Traces European thought and culture in the nineteenth and twentieth centuries. Topics include nationalism, industrialism, romanticism, naturalism, socialism, the search for place, and the rise of fascism. Includes key developments in literature and the arts. (EU)

## HIST 30383 - Experiences and Encounters: Paris and Madrid, 1880-1940

 (3)This study-abroad course has as its focus the historical trajectories of Paris and Madrid in the late nineteenth and early twentieth centuries, and is taught in conjunction with ENGL 40553, Studies in Nineteenth-Century American Literature: American Writers in Paris and Madrid. The two courses together will explore the experience of travel to Europe for Americans in this period, the narratives they wrote about their travel, and the historical context of these experiences. With the cities of Paris and Madrid as a kind of "traveling classroom" to showcase the factual and physical context of these narratives, students in HIST 30383 will gain a familiarity with the principal historical developments surrounding Paris and Madrid in the nineteenth and twentieth centuries, the perceived and real differences between the two cities, and how this historical context shaped the experiences of the writers featured in the English course. This course will use historical sources alongside the literary texts of the English course as catalysts for studying the history and culture of their two cities. (EU)

HIST 30393 - Totalitarianism in Europe (3)
This course examines the most significant examples of the failure of nineteenth-century liberalism in Europe: the rise in the twentieth century of Stalin's Soviet Union, Hitler's Nazi Germany and Mussolini's Fascist Italy. Topics include a comparative analysis of their ideologies, their leaders' seizure of power, the initiatives and policies implemented at home and abroad, as well as the collapse of the Nazi and Fascist regimes and the survival of Stalin's Soviet system at least until his death. (EU)

## HIST 30403 - History of Russia to 1861 (3)

The evolution of the early Russian state and its development under the Grand Princes and Czars to the emancipation of the serfs. Emphasis on the institutions, literature, religion, personalities, and cultural developments as well as major political events. (EU)

## HIST 30413 - History of Russia from 1861 to the Present (3)

The forces and personalities that molded modern Russia after the emancipation of the serfs, the revolutionary movements and their leaders, and the economic and political factors that brought the downfall of the czarist regime. Special attention to the Marxist-Leninist doctrine and the Soviet attempt to implement it, Stalinism, the emergence of rival communist states, and the post-Stalin era. (EU)

## HIST 30423 - Central Europe since 1700 (3)

The nationalist rivalries that led to Sarajevo, the cultural and economic conflicts that kept the Balkans divided, the problems faced by the region in the period following the First World War. Special attention to the struggle of the Czechs and the Poles to maintain their national existence despite threats from Hitler and Stalin. The effects of World War II on the region. (EU)

## HIST 30443 - History of Modern China: from Ming to Mao (3)

Explores the history of modern China, examining the major events and forces that have shaped the development of this important East Asian state. Topics include traditional Confucian society, the internal and external crises of the late imperial period, the revolution and attempts at state-building of the republican period, and the mass campaigns of the Maoist era.(AS)

## HIST 30503 - History of England to 1603 (3)

A survey of British history from pre-Roman times to the death of Elizabeth, emphasizing the constitutional, political, social, cultural, and economic developments. Special stress on the evolution of institutions and ideas which America and England share.(EU)

HIST 30513 - History of England and Great Britain since 1603 (3)
A survey of the revolutionary developments in the seventeenth and eighteenth centuries which brought the development of parliamentary government, social and political reform movements of the nineteenth and twentieth centuries, the transformation from Empire to Commonwealth, and the emergence of the welfare state. Britain's role as a world power will be examined and special emphasis will be given to the diplomatic developments that led to the two world wars. (EU)

HIST 30523 - Tudor-Stuart England, 1485-1714 (3)
Tudor-Stuart kings and their parliaments, emphasizing the English Reformation, the Elizabethan Age, the Puritan Revolution and Oliver Cromwell, the Restoration and the Glorious Revolution, and the rise of cabinet-political parties-civil rights struggles. (EU)

HIST 30533 - England, 1815-1901, Politics, Prudery, and the Pax Britannica (3)
An examination of the political, social and imperial themes in English history for the period 1815-1901, with emphasis on the impact of the Industrial Revolution, the new social order, demands for political reform, and the growth of British imperial power. (EU)

HIST 30543 - Twentieth-Century Britain, Empire to Welfare State: 1901 to the Present (3)
The major political, economic, imperial and intellectual developments of the period. Also discussed will be reforms, the rise of labor, and the impact of the two world wars. (EU)

## HIST 30553 - History of Ireland since 1600 (3)

Examination of Irish history from the plantations of the seventeenth century to the conclusion of the Troubles" in the twentieth century. Particular attention will be given to the era of the penal laws, the place of Ireland within the British Empire, the development of a variety of forms of Irish nationalism, the causes and consequences of the Great Irish Potato Famine, the Anglo-lrish War and the partition of the island and the struggle for civil rights and peace in Northern Ireland. The course will also introduce theories about colonial (and postcolonial) identities in modern Ireland. (EU)"
HIST 30563 - The British Empire, 1603-1857 (3)
Examination of the empire-building experience of Great Britain in the early modern period beginning with its experiences in Ireland, North America, and the Caribbean. Particular emphasis will be given to motivation, cultural collision, and the evolution of systems of control and administration. For the period following the American Revolution, the course will examine the development of new patterns of empire that emerge from the interplay of exploration, the missionary movement, the Napoleonic Wars and technological change. (EU)

## HIST 30573 - British Empire and Commonwealth, 1857-1975 (3)

Examination of the British Empire from its high-point in the second half of the Nineteenth Century to its dissolution after 1945. Particular attention will be given to the so-called New Imperialism and the scramble for African and Pacific territories, the place of empire in Victorian culture, the informal empire of economic investment, the impact of World War I on the imperial system, and the role of nationalism in the empire's eventual dissolution. The course will also introduce the theoretical arguments concerning the nature and function of the British Empire and its role in shaping the post-colonial world. (EU)

## HIST 30583 - Living in London (3)

Focuses on experiences of ordinary men and women living in London during the past five hundred years. Examines the rise of London from its first period of rapid growth in the 1500 s to its emergence as a multi-cultural and multiracial city in the second half of the twentieth century. (EU)

## HIST 30593 - Making of Modern England (3)

This a course that combines lecture, discussion and field trips in order to introduce major themes and developments which have shaped English history. Although the course proceeds chronologically, emphasis will be placed on social structures and contexts rather than a timeline of events. The course is designed to take advantage of resources available in London; therefore, several classes will be held at sites such as Westminster Abbey, Parliament, Battle Abbey, and Bodiam Castle. (EU)

HIST 30603 - History of Women in America (3)
This course analyzes the roles of women in American history since 1492. It examines the history of women in America primarily as they have intersected with the public realm - employment, politics, reform, war - but also considers women at home in their roles as daughters, wives, and mothers. (US)

## HIST 30613 - History of Working People in America (3)

This course analyzes the roles of working people in American history since the colonial period. It examines men and women in the various ways that they have made their livings, from farming to domestic work to manufacturing. The course pays particular attention to the way in which ethnicity has affected people's employment. (US)

## HIST 30623 - History of Science (3)

This is multidisciplinary examination of the history of science beginning with the earliest written record and extending through the end of the twentieth century. In addition to addressing the key figures and seminal events in the evolution of physics, chemistry, biology, and medicine, the course will deal with the evolution of the scientific method and with epistemological issues and challenges faced by current and former scientists. We will also address the relationship between those challenges and current controversies in science and society. (US or EU)

HIST 30633 - Women in European History 1789 to the Present (3)
In this course, students will explore the experiences of women in the history of Europe from 1789 to the present. Many of the topics and events will be familiar, industrialization, the French Revolution, the women's movement, the Russian Revolution, the World Wars, and the Cold War. Students will examine these events to investigate women's experiences and to discover women's contributions to the history of modern Europe. (EU)

## HIST 30643 - History of Food in America (3)

This course investigates changes in American food from European contact to the present. Topics will include the impacts of immigration and industrialization. (US)

## HIST 30653 - The Life and Times of Benjamin Disraeli (3)

Explores Britain's nineteenth century through the career of Benjamin Disraeli, by turns novelist, dandy, romantic poet, Tory democrat, statesman, and twice prime minister. The story of how this middle-class, Jewish outsider became the ultimate political insider reveals the role of class, religion, and race in British society. Particular attention will be given Disraeli's role in the development of the British empire, the promotion of a modern monarchy, and democratization of the political system. (EU)

## HIST 30703 - Modern Egypt: A History (3)

From the formation of the Egyptian state in the beginning of the 19th century until the current regime of President Mubarak, this course traces the struggle of Egyptian state and society to build a modern, but authentic, nation. The course addresses European imperialism, westernization, the rise of Arab nationalism, authoritarianism and political Islam among other forces that shaped the unique Egyptian experience. Social issues such as the formation of modern classes, women's position in society, and the contribution of minorities will be examined to understand continuity and change in Egyptian society. (ME)

## HIST 30713 - Revolutionary Iran:A History (3)

This course provides students with a comprehensive understanding of the historical developments in Modern Iran that made its experience unique among Middle Eastern and Muslin nations. Students will learn how Iranian society, culture, and politics have evolved throughout the nineteenth and twentieth centuries to provide an appropriate historical context in which the 1979 Islamic Revolution took place and created the first Islamic Republic in the modern Middle East. (ME)

## HIST 30723 - Women in the Middle East (3)

This course examines the position, contribution, cultural representation and socio-economic status of women in the Middle East from the advent of Islam to the present with particular focus on the nineteenth and twentieth centuries. By tracing women's legal status, sexuality, public morality, family and social life, and female economic and political participation, this course seeks to shed light on the history of women in predominantly Muslin societies. (ME)

## HIST 30733 - Syria and Iraq: Troubled History from WWI to the Rise of ISIS (3)

This course provides students with a comprehensive understanding of the historical developments of Syria and Iraq during the last hundred years, thus students will have a better understanding of the contemporary crisis that both states and societies are going through. Throughout the semester students will engage in learning through community services experience. Students will gain firsthand knowledge on the ongoing crisis through volunteering to provide services to Iraqi and Syrian refugees in Fort Worth community.

## HIST 30803 - U.S. Urban History (3)

An introduction to U.S. urban history, focusing on race, space, community activism, labor, and urban politics from the Civil War to the present.

## HIST 30813 - Oral History Field Research Seminar (3)

This service-learning field research course introduces students to community-based research and oral history theory and methodology, including interviewing techniques and debates within the discipline. Students will conduct extensive independent research outside the comfortable confines of the university. (US)

## HIST 30903 - Indigenous Movements in Latin America (3)

This course examines Native American movements in modern Latin America and their impact on conceptions of nation and citizenship, focusing on the late twentieth and early twenty-first centuries. (LA)

## HIST 30913 - History of Central America (3)

Survey of Central America from colonial times to the present with emphasis on the region's economic and political development and the emergence of revolutionary movements in the twentieth century. (LA)

HIST 30923 - The United States and Latin America (3)
Early diplomatic relations among the independent republic; the Monroe Doctrine in Hemispheric politics; the movement for Pan American union; the Big Stick and Dollar Diplomacy; the Good Neighbor Policy and the Alliance for Progress. (LA or US)

## HIST 30933 - Revolution in Latin America (3)

Survey and analysis of revolutionary movements in modern Latin America, with special emphasis on Argentina, Brazil, Chile, Cuba, Mexico, and Central America. (LA)

## HIST 30943 - The Spanish Borderlands (3)

The clashing and mingling of cultures in regions formerly held by Spain in the southeastern and southwestern United States. (US)

HIST 30953 - History of Argentina and Chile (3)
Southern South America from colonial times to the present; a comparison of the colonial experiences of both countries and their impact on national development; problems of modernization and the movements of social revolution. (LA)

## HIST 30963 - History of Brazil (3)

The growth of the Brazilian nations and civilization from colonial plantation beginnings through experiments with monarch and republic, to the rank of major nation. (LA)

## HIST 30970 - Topical Studies in History (1.00-20.00)

Courses dealing with problems and historical questions in a particular area of specialization. The topics will be changed from semester to semester and the course may be repeated when the topic is different. (3 hours NWH or WH)

## HIST 30973 - Biography in Latin American History (3)

Examination of a selected period of colonial or modern history through biography of prominent individuals. Individuals will include people such as Sor Juana or Fidel Castro although biographies and periods will vary with each semester. (LA)

HIST 30983 - Aztecs, Incas, and Mayas: The Indians of Middle and South America (3)
Investigation and analysis of the Indian Civilizations of Mexico, the Caribbean Region, Central and South America with particular emphasis on the Mayas, Aztecs, and Incas. Also discussed will be the impact of European culture on the native population and the contemporary problem of integrating the Indian into modern society. (LA)

## HIST 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## HIST 30993 - History of Mexico (3)

The native peoples, the Spanish Conquest and cultural conflict, evolution of colonial society, the movement for independence, 19th century efforts at modernization, revolutionary Mexico and U.S.-Mexican relations. (LA)

## HIST 31903 - Summer Study in Ghana (3)

This course is aimed at introducing participants to the cultural and sociopolitical development of Ghana through a four-week intensive, interdisciplinary study and travel-abroad experience in this West African nation. It is expected that participants will come away with a sense of the vast differences manifest in the way human societies work and, at the same time, develop a sincere respect for these differences. Course is open to students of all majors. Instructor's permission is required.

## HIST 31990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## HIST 32990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

HIST 36690 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## HIST 36790 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## HIST $\mathbf{3 6 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## HIST $\mathbf{3 8 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## HIST 39990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## HIST 40003 - The Women's Movement in England and America, 1792-

 1972 (3)A survey and analysis of women's role in modern history with special emphasis on monarchs, scholars, laborers, and political activists. (NWH)

## HIST 40103 - Senior Honors Project (3)

Prerequisite: Departmental major, enrollment in the Honors Program, and completion of HIST 30153. The execution of a project or paper reflecting creative investigation or research. Supervision by a three-member faculty committee is required. HIST 40103 must be completed prior to the student's final semester of undergraduate work. May be based on subject matter explored in HIST 30153. (NWH or WH)

HIST 40603 - Colonial America: From the Age of Discovery to 1763 (3) Examination of the political, ideological, religious, social, economic and institutional development of colonial America from the earliest discoveries and settlements to the end of the French and Indian War in 1763. Emphasis is on the English colonies that became the United States with some consideration given to other empires. (US)

## HIST 40613 - Revolutionary America, 1763-1789 (3)

Introduces the origins of the revolutionary movement; analyzes the social, economic, political and diplomatic consequences of independence from Great Britain; and examines the emerging political and constitutional order of the postwar years. (US)

## HIST 40623 - The Age of J efferson, 1789-1828 (3)

The period of the Virginia Dynasty, with emphasis on the shaping of Jeffersonian ideals and the rise of the national spirit after the War of 1812. (US)

HIST 40633 - The Age of Jackson, 1829-1860 (3)
The period of Manifest Destiny, with special attention to the developing antagonisms between North and South before, during and after the War with Mexico. (US)

HIST 40643 - Civil War and Reconstruction, 1861-1876 (3)
The Civil War and slow recovery from the effects of conflict.(US)
HIST 40653 - Beer Drinkers, Hell Raisers, and Robber Barons: America in the Gilded Age and Progress Era (3)

The rise of industrial America, reform movements, urbanization, and immigration and their influences on U.S. society and politics between the administrations of U.S. Grant and Woodrow Wilson. (WH)

## HIST 40663 - America Between World Wars, 1919-1941 (3)

Detailed analysis of political scandals, prohibition, immigration, labor, women's rights, and the Great Depression, with emphasis on the response of the New Deal to these problems. (US)

## HIST 40673 - The United States from 1941 to 1975 (3)

Domestic and foreign policies of the starting with entry into World War II through 1975. Special attention to social, cultural, and ideological development. (US)

## HIST 40693 - American Empire (3)

Prerequisite: HIST 10613. Explores the relationship between culture and foreign relations by examining the ways race, gender, and culture have framed American interactions with the world in the twentieth century, both in peacetime and in war.

## HIST 40703 - Indians of the United States (3)

A survey of Native American history, organized chronologically beginning with native origin stories and scientific theories and ending with present issues of urbanization, self-determination, and the political economy of bingo. (US)

## HIST 40713 - Indians of the Greater Southwest (3)

The major Indian tribes of the cultural area comprising the southwestern United States and northern states of Mexico. (US)

## HIST 40723 - The Early American Frontier (3)

Topical study of the westward movement from the Atlantic seaboard to the Appalachians, and the Mississippi Valley, with emphasis on America's emerging institutions in a pioneer environment. (US)

## HIST 40733 - The American West to 1900 (3)

Surveys the U.S. conquest of its trans-Mississippi domain. Topical study includes indigenous peoples, exploration, fur trade, mineral rushes, immigration, Mormons, railroad construction, cattle industry, farming, and the region's economic, political, social, and cultural integration into the nation. (US)

## HIST 40743 - History of Texas (3)

The political, social, and economic study of Texas from the coming of the Spaniards in 1528 to the present. The role of ethnic groups in the development of Texas is emphasized, and a study of the state constitution is made. (US)

## HIST 40763 - The Old South (3)

How and why antebellum Southerners differed from Northerners (and many other folk). Lectures and discussions focus on the cultural heritage of the South, the social life of Southerners before the American Civil War, the survival of European and African traditions, immigration and settlement patterns, herding, slavery, plantation life, sectionalism, various southern ways and values, and some of the myths about the Old South. (US)

## HIST 40783 - Constitutional History of the United States (3)

The historical background and impact of judicial decisions that have changed and directed the economic, social, political, and legal patterns of federal and state governments as well as other human institutions. Includes a detailed analysis of majority and minority opinions in leading Supreme Court cases. (US)

## HIST 40793 - Business in American Life (3)

Survey, development and structure of the American economy and business enterprise in response to changing markets and technology. (US)
HIST 40803 - History of Medicine and Public Health (3)
An examination of medicine and public health in the United States with emphasis on social and cultural factors. (US)

HIST 40813 - American West since 1900 (3)
Surveys the 20th-century history of the trans-Mississippi United States.
Topical study of natural resource development, military-industrial development, border and immigration issues, political movements, gender, indigenous people, and the West in popular culture. (US)

## HIST 40823 - U.S. South since 1865 (3)

This course will examine the enormous changes in the American South brought about by the Civil War and the subsequent fight of southerners for social justice, economic progress, and racial equality into the 1960s.

The history of the presidency from the beginning of the office to the present. (US)

## HIST 40843 - The Vietnam War (3)

Traces the history of pre-European Vietnam, French conquest, Indo-China War, roots of US involvement, Vietnam War and US domestic developments, and events in post-1975 Socialist Republic of Vietnam. (AS or US)

## HIST 40853 - American Environmental History (3)

This course surveys the complex interactions between human beings and their environment in North America from pre-Columbian times to the present. Important topics will include the Columbian exchange, changing conceptions of wilderness, influences of agriculture and industry, and the development of conservation movements. (US)

## HIST 40863 - American Sport History (3)

Prerequisites: HIST 10603 or 10613. This course surveys U.S. history from the colonial era through the present using the arena of sport. The course traces social and cultural history as manifested through sport and follows the development of athletic activities and the evolution of specific sports with their own rules and institutions. (US)

## HIST 40873 - The Civil Rights Movement in America (3)

This course surveys the history of the modern African American civil rights movement and uses it as a vehicle to explore the theory and practice of group-centered leadership development; the nature of social movements and the role of grassroots activism; the connections between civil rights and other struggles for social justice, past and present; and the origins and persistence of structural racial inequality in the U.S. (US)

## HIST 40883 - War and Memory in American Culture (3)

Prerequisites: HIST 10603 or 10613. This course considers the contested and changing nature of war memory in American culture through an examination of the ways memorials and monuments, commemorative actives, films, and historical sites create public memories of wars.

## HIST 40893 - War and Gender in American History (3)

This course examines the ways gender and sexuality shape wartime experiences, investigates the symbolic functions of gender and sexuality in war making, and considers the ways wars shape peacetime gender norms. A study of key moments in the history of American wars, the course explores both how gender has shaped Americans' understandings and experience of war, and how wars have framed social constructions of gender.

## HIST 41903 - History of Cuba (3)

This class will examine Cuban history, from pre-Hispanic times to the present. Major themes will include the evolution of Spanish colonial rule, sugar and the rise of African slavery, the wars of independence, and the role of U.S. interventionism. Special emphasis will be placed on the Cuban Revolution and the causes and results of this historical process. How did Fidel Castro manage to take power, and what have been the most significant effects of his regime? A second major goal of HIST 41903 is to improve students' writing and critical thinking skills. Students will be required to develop theses and to defend their positions using evidence from their readings, lectures, and their own research. Analysis and argument will be the central elements of the course. (LA)

## HIST 49903 - History Major Seminar (3)

Prerequisites: History major; junior or senior standing; at least 15 completed hours in history, or instructor's permission. This course, designed as a capstone experience for History majors, guides students through the process of conducting research and writing an original thesis based on relevant primary and secondary sources. Topics vary by semester and instructor. Course may not be repeated for credit. (US, EU, ME, LA, or AS)

## HIST 50063 - Historical Methods

Techniques of historical research and documentation. Evaluation of documents, applying internal and external criticism to determine validity of use. Oral history research evaluation and interviewing techniques.

HIST 50070-History, Administration, and Management of Archives, I and II
The historical development of archival institutions, procedures and techniques with special emphasis on American federal, state and local records, both public and private. Students will be introduced to professional field work in the archives of the participating institutions.

## HIST $\mathbf{5 0 0 8 0}$ - Archival Internship (1.00-20.00)

Supervised professional training at the Federal Archives and Records Center of Fort Worth, the Regional State Archives of Texas, the Amon Carter Library and the Manuscript Collection of Texas Christian University. Open only to
students who are taking or have completed HIST 50070. Required of all students who select the Archives Studies option.

HIST 50133 - Semina in Literature and History (3)
Prerequisites: Junior standing with a minimum of 9 hours in literature, history, and/or political science, or graduate standing in English or History. Interdisciplinary study of society, culture, or politics through the literature and history of a given era (variable topic). Open to graduate students and to advanced undergraduate students. Students will receive instruction from both an English professor and a History professor n content (literary works, historical studies, primary documents in periodicals or archives) and discipline-specific research methods.

HIST 50933 - Philosophy of History
Prerequisites: six hours of history, three hours of philosophy. A philosophical analysis of historiography: the logical, conceptual and epistemological characterization of what historians do; also includes a study of traditional attempts to discover some meaning which transcends the intelligibility sought and achieved by ordinary historical work.

HIST 50963 - Historiography and Bibliography (3.00-6.00)
The major historians of the past, changes in the interpretation and philosophies of history and the major bibliographic sources utilized in the writing of history.
HIST 50970 - Special Studies in History (1.00-20.00) Special Studies in History. (NWH or WH)

## HITP-Honors-Intellectual-Trad-Purpose

HITP 10113 - Honors Intellectual Traditions: Purpose (3)
Explores the question of purpose or teleology among the most provocative thinkers in Western history, especially in philosophy, religion, science, literature and art.

## HLTH - Health

## HLTH 10603 - Anatomical Kinesiology (3)

Prerequisite: Open to students with freshman or sophomore standing, or by permission. A study of the gross structure of the human body with an emphasis on the relationship of anatomy to the study of physical activity, physical fitness, sport and exercise. (Offered as KINE or HLTH credit.)

HLTH 20203 - Health and Wellness Concepts (3)
A survey course designed to study basic health concepts and information relative to general areas of health. Relation of these concepts to personal lifestyles and healthy decisions.

## HLTH 30203 - Health and Stress Management (3)

A study of physiological, psychological, and sociological aspects of stress as related to overall health. Responses such as anger, fear, and depression with their underlying mechanisms in sates of health and disease will be examined. Emphasis is on identification of stressors and methods of prevention and coping with them.

## HLTH 30213 - Health Aspects of Human Sexuality (3)

Sexuality as a normal aspect of life and as a source of creative energy. Study of physical, mental, emotional, social, and psychological phases of human sexuality as they are affected by male and female relationships.

## HLTH 30233 - Sport and Exercise Pharmacology (3)

Prerequisite: KINE 10603 and BIOL 20214, or consent of instructor. The study of the pharmacological effects of various classifications of drugs commonly utilized to treat and manage various types of hypokinetic diseases such as cardiovascular disease, diabetes, and obesity. The interaction between various drugs and exercise will be examined. In addition, the pharmacological effects of various nutritional supplements commonly used by athletes and other exercising individuals as ergogenic aids will be studied.

## HLTH 30423 - Nutrition and Physical Activity (3)

Prerequisites: KINE 10603 or BIOL 10504 or BIOL 20214. A study of the roles that nutrition and physical activity play in maintaining health and fitness, with an emphasis on evaluating personal nutrition and physical activity habits, and developing an individualized plan for healthful eating and exercise.

## HLTH 30634 - Exercise Physiology (4)

Prerequisite: KINE 10603; Kinesiology majors only: KINE 10101; MOSC, ATTR, and HEFI only: BIOL 20214. Physiological responses of the systems of the human body with an emphasis on the energetics, metabolism,
cardiovascular responses, thermoregulation, and muscular function associated with acute and chronic exercise. (Offered as KINE or HLTH credit.)

## HLTH $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

HLTH 40203 - Study of Human Disease (3)
Prerequisites: KINE 10603 or BIOL 10504 or BIOL 20214 or consent of the instructor. An overview of the processes in human disease. The etiology, symptoms, treatment, and preventive measures of various diseases. Concepts of wellness are discussed.

## HLTH 40213 - Instructional Strategies in Health Education (3)

Selection and application of teaching methods, materials and content, action-oriented classroom strategies and resources appropriate for Health Education at the various educational levels.

HLTH 40770 - Special Problems in Health Education (1.00-3.00)
Prerequisite: Senior standing and consent of instructor. Individual study involving research or other scholarly work in Health Education under the direction of a faculty member (1-3 semester hours.)

## HNRS - Honors - Cultural Visions

HNRS 20003 - Honors: Special Topics (3)
Prerequisite: Acceptance into the Honors College. Occasional course on a selected topic related to interdisciplinary, cross-cultural or inquiry-based study. Different course titles with different content may be repeated for credit.

## HNRS 20103 - Africa Through Film (3)

This discussion-based course uses documentaries and movies to highlight the history, traditions, and lifestyles of African societies. Students cannot receive credit for both ADRN 20103 and HNRS 20103.

HNRS 20213 - Language, Communication and Cultural Identity (3) Prerequisite: acceptance into the Honors College. In this course, students will use interdisciplinary inquiry methods to examine how creation and expression of identities are carried out through diverse social language practices such as interpersonal communication, use of new media, rhetorical performances, and the composing of written texts. Readings and students' performative projects will draw from a range of disciplinary and multidisciplinary perspectives, while promoting experiential learning consistent with TCU Honors College learning goals $n$ the lower division curriculum.

## HNRS 20223 - Gender and Cultural Identity (3)

Prerequisites: Acceptance into the Honors College. In this course, students will use interdisciplinary inquiry methods to examine how the creation and expression of gender identities vary in diverse cultural contexts. Readings and students' projects will draw from a range of disciplinary and multidisciplinary perspectives, while promoting experiential learning consistent with TCU Honors College learning goals in the lower division curriculum.

## HNRS 20503 - Exploring Cultural Contact Zones (3)

Prerequisite: acceptance into the Honors College. An interdisciplinary examination of sites, social practices, and cross-cultural exchange as experienced and depicted in contact zones" where individuals and communities from different backgrounds interact. Student projects will demonstrate awareness of how global issues of diversity and inclusiveness are engaged and expressed in a range of localized cross-cultural contexts."

HNRS 20913 - Cultural Memory in the United States I (3)
This course explores the role of rhetorical, historical, and new-media expression in creating a cultural memory in the United States. The course will concentrate on how technological innovation mediates the historical foundations of that cultural memory.

## HNRS 20923 - Cultural Memory in the United States II (3)

This course explores the role of literature and film in creating a cultural memory in the United States. The course will concentrate on how writers and film directors mediate the literary and historical foundations of that cultural memory.

HNRS 30970 - The Scottish Enlightenment (1.00-6.00)
TCU in Scotland.

## HNRS - Honors - Origins and Images

HNRS 20113 - College Life and Identity (3)
Prerequisite: Honors College admittance. In this discussion-based course, students will use interdisciplinary inquiry and experiential learning to explore aspects of college life that make college years formative in developing and understanding personal and community identities.

## HSPR - Honors Special Problems HSPR - Honors Special Project Courses

HSPR 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## HSPR 40000 - Honors Interdisciplinary Inquiry (1.00-6.00)

Prerequisites: Acceptance into the Honors College. An interdisciplinary inquiry into a special topic. Course may be repeated for credit with different title and content for various offerings. Course may be offered for 1 to 6 hours of credit, depending upon content.

HSPR 40970 - Honors Directed/Independent Study (1.00-6.00) An Honors student interested in undertaking special directed/independent study may, with appropriate permission from instructor and Honors dean, register for HSPR 40970 for 1 to 6 hours of credit. Under special circumstances, this course may be used in lieu of an Honors Colloquium to fulfill requirements for lower-division honors or upper-division university honors.

## IDFM-Interior-Des-Fash-Merchands

IDFM 10011 - Introduction to Graphic Technology (1)
Prerequisites: must be a Merchandising or Interior Design major. Introduction to computer graphics software. Emphasis on technological skills and processes for creating graphic communication.

IDFM 10243 - Introduction to the Fashion Industry (3)
Prerequisite: Merchandising major or permission of chair. A 2.5 GPA is required for non-majors to enroll. Comprehensive introduction to the terminology, processes, practices, and interrelationships involved in marketing fashion goods and services.

## IDFM 10403 - Space and Color Theory (3)

Prerequisites: Declared major in Interior Design, pre-major, or permission. Study of color theory as it applies to the built environment.

## IDFM 10411 - Hand Sketching for Interiors (1)

Introduction to hand sketching for 3 dimensional spaces. Emphasis on quick sketching techniques from observation of the built environment.

IDFM 10413 - Design Fundamentals (3)
Prerequisite: Declared major in Interior Design; pre-major or permission. A design introduction to the traditions of space, form, light and color perception. Freehand sketching, and mechanical drawing used to create spatial representations.

IDFM 10423 - Introduction to Interior Design (3)
An introduction to the discipline and profession of interior design.
IDFM 10433 - Freshman Seminar in Interior Design and Fashion Merchandising (3)
Topics may vary each time it is offered.

## IDFM 10453 - Lighting Fundamentals

Two one-hour lectures, one two-hour lab per week. A series of lectures and laboratory experiments through which students will develop both technical and aesthetic understanding of lighting and space. Special emphasis on the mechanics of light, types of lighting and the electrical systems that support lighting.

## IDFM 20243 - Consumers in the Marketplace (3)

Prerequisites: Must be a Merchandising major, PSYC 10213 or PSYC 10514 or PSYC 10524, and a grade of 'C' or better in IDFM 10243. Study of consumer
decision-making processes and the socio-psychological factors that influence the consumption of fashion products.

IDFM 20253 - Textile Fundamentals (3)
Prerequisites: Merchandising major, a grade of 'C' or better in IDFM 10243. Integrated lecture and lab. Process of producing fibers, yarns and fabrics, and their use in appropriate products.
IDFM 20263 - Fashion Drawing Fundamentals (3)
Prerequisites: Merchandising major. Development of illustration skills to produce technical flats of garments, exploration of color theory, design principles and elements, concept development, presentation skills, and basic fashion illustration.

IDFM 20273 - Apparel Construction (3)
Prerequisites: Merchandising major. Integrated lecture and lab.
Development of basic sewing skills as applied to sewn goods.
Understanding of proper fit and quality construction of apparel.

## IDFM 20283 - Fashion Communications (3)

Prerequisites: Merchandising major, a grade of 'C' or better in IDFM 10243. Analysis of the communication methods used by textile producers, apparel manufacturers, and retailers to disseminate product and brand information to consumers and the trade.

## IDFM 20291 - MS Excel for Merchandising (1)

Prerequisites: Merchandising major, a grade of C" or better in IDFM 10243. Introduction to Microsoft Excel. Emphasis on creating Excel spreadsheets using formulas and functions and applying Excel skills and tools in problem solving."

## IDFM 20303 - Topics in Design and Merchandising (3)

Prerequisites: Declared merchandising or interior design major and permission of instructor. The study of selected topics in Design and Merchandising. These topics will vary and may be repeated for credit with different course material.

IDFM 20413 - Applications in Design Process and Theory (3)
Prerequisites: Passage of first year interior design portfolio review, a grade of 'C' or better in IDFM 10411, 10413 and 10423. Introduction to the application of interior design and architectural theory within the design process.

## IDFM 20433 - Interior Design Illustration (3)

Prerequisites: A grade of 'C' or better in IDFM 10011, 10403, and 20453. Topics include shade and shadows. Interior illustration techniques using plans, elevations and perspectives illustrated in marker, line, tone and color.

## IDFM 20443 - Interior Design I (3)

Prerequisites: A grade of 'C' or better in IDFM 10011, 10403, 20413 and 20453. The design of interiors with a focus upon residential spaces.

IDFM 20453 - Interior Components (3)
Prerequisite: Passage of first year interior design portfolio review; a grade of 'C' or better in IDFM 10411, 10413, and 10423. Introduction to the selection and specification of interior materials.

IDFM 20463 - Building Systems and Interior Construction (3)
Prerequisites: a grade of C" or better in IDFM 10011, 10403, 10453, 20413 and 20453. A study of architectural and construction factors affecting interior design."

IDFM 20503 - Fundamentals of Lighting (3)
A series of lectures and laboratory experiments through which students will develop both technical and aesthetic understanding of lighting and space. Special emphasis on the mechanics of light, types of lighting and the electrical systems that support lighting.

## IDFM 20513 - Digital Media in Lighting (3)

Prerequisites: A grade of 'C' or better in IDFM 20503. This course is focused upon industry-specific digital media used in architectural lighting design. Students will learn how to utilize AutoCAD to create architectural lighting design documents, how to generate day lighting and electric lighting calculations though the AGi32 software, and how to craft renderings through a blending of by hand and digital renderings from AGi32 and Adobe Photoshop.

IDFM 30003 - Honors Tutorial in Interior Design and Fashion Merchandising (3)
Prerequisite: Departmental major and enrollment in the Honors Program. An examination of a significant issue affecting design, merchandising and/or textiles. The specific topic and presentation format oral, written, graphic, model, garment prototype, computer simulation are determined by the student and faculty directing the study. IDME 30003 is the first of two courses
required for departmental honors. Arrangements for this directed study must be made the semester prior to enrollment in the course.

IDFM 30073 - Digital Media for Interior Design (3)
Prerequisites: A grade of ' $C$ ' or better in IDFM 30413, 30093, 30423, and 30473. Application of industry-specific software for interior design.

## IDFM 30093 - Professional Practices I (3)

Prerequisite: A grade of 'C' or better in IDFM 20433, 20443, and 20463 Career research and development of employment resources in preparation for interior design internship. Includes design of visual portfolio.

## IDFM 30213 - History of Costume (3)

Prerequisite: Merchandising major, and a grade of 'C' or better in IDFM 20253, 20283. Study of the interrelationship between costume and the social, cultural, political and economic environment through the 19th century.

## IDFM 30223 - History of Contemporary Dress (3)

Prerequisite: Merchandising major, and a grade of 'C' or better in IDFM 20253, 20283. Study of the interrelationship of costume with the social, cultural, political and economic environment from the 20th century to the present.

## IDFM 30233 - History of Modern Dress and Culture (3)

Prerequisites: Merchandising major, and a grade of C " or better in IDFM 20253 and 20283. The study of the interrelationship of costume with social, cultural, political and economic environments through a comparison study of civilizations from ancient times through to present day. Students may not receive credit for both IDFM 30213 and IDFM 30233, or IDFM 30223 and IDFM 30233. This course is not a substitute for IDFM 30213 and IDFM 30223."

## IDFM 30253 - Merchandise Buying (3)

Prerequisite: Merchandising major, TCU Core Math requirement, ECON 10223 or ECON 10233, and a 'C' or better in IDFM 20253, IDFM 20263, IDFM 20273, IDFM 20283 and IDFM 20291. An analysis of the concepts and tools required for planning, buying and selling merchandise assortments within the soft goods supply chain.

## IDFM 30263 - Product Development (3)

Prerequisite: Merchandising major, CORE math, and a grade of C " or better in IDFM 10011 and IDFM 20291, and completion of or concurrent enrollment in IDFM 30273. Process of product development including research, line development, materials selection, fabric and style specifications, costing, merchandising, and marketing of the line. Identifying stitch and seam classifications, and discussion of production techniques and quality considerations."

## IDFM 30273 - Digital Design (3)

Prerequisites: Merchandising major; a grade of C" or better in IDFM 20253, IDFM 20263, and IDFM 20273. Integrated lecture with lab. Use of current industry software applications to develop textile designs, technical flat illustrations and presentation skills."

## IDFM 30283 - Technical and Creative Apparel Design (3)

Prerequisites: Merchandising major, a grade of 'C' or better in IDFM 20253 and 20273. The creative and technical processes used for design and development of apparel products including industry techniques for pattern development, style and fit analysis, and advanced construction methods for assembly and production.

## IDFM 30291 - Career Development for Merchandising (1)

Prerequisites: Must be a Merchandising major; prerequisite or concurrent enrollment in IDFM 30253, 30263. Study in careers, requisite to completion of a directed internship. Particular emphasis on self assessment paralleled to career research, employment resources, and skills in career development, including resume writing, interviewing, leadership concepts and effective communication and advancement skills.

## IDFM 30413 - Interior Design II (3)

Six studio hours per week. Prerequisites: A grade of 'C' or better in IDFM 20433, 20443, and 20463. Interior design of small-scale commercial spaces.

## IDFM 30423 - Architectural Components (3)

Prerequisite: A grade of 'C' or better in IDFM 20433, 20443, and 20463.
Production of a set of interior construction drawings completed through digital drawing using industry software.

## IDFM 30433 - Rendering Techniques (3)

Six studio hours per week. Prerequisite: A grade if 'C' or better in IDFM 20433. Advanced rendering techniques in timed sketches in graphite pencil and marker as well as refined renderings in colored markers and prismacolor pencil. Includes the illustration of human figures in interior spaces.

IDFM 30473 - History of Interiors I (3)
Prerequisites: ENGL 20803 or ENGL 20833; Interior design major or by permission, A grade of 'C' or better in IDFM 20433. 20443, and 20463. History of the style of architecture, interiors, furnishings and decorative arts from the Stone Age to 1900 A.D.

## IDFM 30483 - History of Interiors II (3)

Prerequisite: A grade of 'C' or better in IDFM 30093, 30413, 30423, and 30473; ENGL 20803 or 20833; Interior design major; or permission of the department. History of the styles of architecture, interiors, furnishings, and decorative arts after 1900 A.D.

## IDFM 30493 - Interior Design III (3)

Prerequisites: A grade of 'C' or higher in IDFM 30093, 30413, 30423, and 30473. The design of mid-scale commercial interiors.

## IDFM 30503 - Lighting and the Human Experience (3)

Prerequisite: A grade of 'C' or better in IDFM 20503. Students will delve into the interdisciplinary factors of lighting and the human experience. The course will draw from anthropology, psychology, neurobiology and sociology to explore how lighting is perceived and experienced by groups and individuals. Students participate in field studies, writing assignments, research projects, and presentations.

## IDFM 30513 - Lighting for Interior Design I (0)

Prerequisites: A grade of a 'C' or better in IDFM 20503 and 20513. This course will delve into lighting design for retail, residential, and hospitality project types. Students will conduct research by means of field studies. Design process will be explored through studio style lighting design projects.

## IDFM 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## IDFM $\mathbf{3 9 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## IDFM 40003 - Senior Honors Project (3)

Prerequisite: Departmental major, enrollment in the Honors Program and completion of IDFM 30003. The execution of a project or paper reflecting creative investigation or research. Supervision by a three-member faculty committee is required. IDFM 40003 must be completed prior to the student's final semester of undergraduate work. May be based on subject matter explored in IDFM 30003.

## IDFM 40013 - Entrepreneurship in Merchandising (3)

Prerequisites: Merchandising major, a 'C' or better in IDFM 30253, and ENGL 20803 or ENGL 20833. Introduction to the opportunities, risks and management problems involved in establishing and operating new enterprises related to the major. Emphasis is on business plan development.

IDFM 40053 - Lighting for Visual Presentation (3)
Prerequisites: A grade of ' $C$ ' or better in IDFM 10453, 20283, and THEA 21413 or permission of instructor. Students conduct research by means of case and field studies to enhance experiential learning and explorations into the interrelationship between lighting and merchandising with a specific concentration on lighting merchandise as three dimensional form, the use of color in merchandising, and the practical applications of lighting as a merchandising tool.

## IDFM 40093 - New York Study Program (3)

One week study tour of New York City's textile, apparel and merchandising industries accompanied by two weeks of on-campus study.

IDFM 40203 - Appearance and Dress (3)
Prerequisite: Merchandising major, ENGL 20803 or 20833, and a 'C' or better in IDFM 30233, or both 30213 and 30223. Exploration of methods used to investigate, develop insights into, and formulate statements about clothing and appearance behavior. Emphasis on the development of critical thinking and writing skills.

IDFM 40223 - Advance Topics in Merchandising (3)

Prerequisites: Declared merchandising major and permission of department. The study of selected topics in Merchandising. These topics will vary and may be repeated for credit with different course material.

## IDFM 40243 - Global Trade of Textiles and Apparel (3)

Prerequisites: Merchandising major, ECON 10223 or 10233, IDME 30291. Study of the economic principles involved in the production, marketing and distribution of textiles and apparel in relation to the global market.

## IDFM 40253 - Textile Testing and Analysis (3)

Prerequisites: Merchandising major; a 'C' or better in IDFM 30263. Two hours lecture and one lab per week. Testing and analyzing the performance of textile products using standardized test methods and industry specifications. Emphasis is on identifying quality and performance characteristics of sewn products.

## IDFM 40263 - Merchandise Planning and Analysis (3)

Prerequisites: Merchandising major, a grade of C" or better in IDFM 30253.
Emphasis on merchandise sales forecasting and analysis, inventory planning and control, assortment planning, merchandise allocation, and vendor relationships."

## IDFM 40283 - Fashion Internship (3)

Prerequisites: TCU cumulative 2.5 GPA, Merchandising major, IDFM 30253, 30263, and a grade of 'C' or better in IDFM 30291. Supervised full-time work experience in a fashion related establishment. Weekly journals, assigned papers and projects will be required.

## IDFM 40401 - Interior Design Senior Show (1)

Co-requisites: IDFM 40474 and 40433. All interior design majors are required to participate in a group exhibition of student work during their senior year. One exhibition will take place during each spring semester. Students expecting to graduate in May will participate during their final semester. Students whose graduation is expected to be delayed until the following December will participate during the preceding May exhibition. (This course is only offered as P/NC.)

## IDFM 40433 - Interior Design Research (3)

Prerequisites: A grade of 'C' or better in IDFM 30493, 30073, 30483, and 40493. Advanced processes of programming and research methods in preparation for thesis project in IDFM 40473, Interior Design V.

IDFM 40453 - Professional Practices II (3)
Prerequisite: A grade of 'C' or better in IDFM 40463 and 40433. Business practices, management and professional procedures for the interior designer.

IDFM 40463 - Interior Design IV (3)
Prerequisites: A grade of 'C' or better in IDFM 30493, 30073, 30483, and 40493. Design of large-scale commercial interiors.

## IDFM 40473 - Interior Design V (3)

Prerequisite: A grade of 'C' or better in IDFM 40463 and 40433.Design of senior thesis project for interior design. Content for the individualized design project is developed in IDFM 40433.

## IDFM 40493 - Interior Design Internship (3)

Prerequisite: A grade of 'C' or better in IDFM 30073, 30483, and 30493. Supervised apprenticeship with a professional interior designer or architectural firm. Seminar and work experience hours to be arranged.

IDFM 40650 - Senior Thesis in Lighting for Visual Presentation
Prerequisites: IDFM 40053 or instructor permission. Independent research and study in lighting associated with architectural, interior design and merchandising in the built and natural environment. (1-6 semester hours).

IDFM 40970 - Special Problems (1.00-20.00)
Hours to be arranged. Special problems requiring independent research and study within a related area, or field experience in design, merchandising and/or textiles. ( $1-6$ semester hours).

## IELP - Intensive English Language

IELP 412 - Advanced Intensive English I (2)
Advanced Intensive English I
IELP 422 - Advanced Intensive English II (2)
Intensive English II

## INSC-Info-Systems-Supply-Chain

INSC 10533 - Freshman Seminar in Business Information Systems (3) Prerequisites: Open to entering freshmen only. Topics may vary each time it is offered.

## INSC 20153 - Statistical Analysis (3)

3 hours. Prerequisite: Successful completion of Excell portion of the MOS test. Basic statistical theory used in analysis and interpretation of numeric data. Topics covered include descriptions of frequency distributions, discrete and continuous probabilities, confidence intervals, hypothesis testing, time series analysis including weighted and exponential smoothing, simple and multiple regression, index numbers and quality control. Students may not receive credit for both MATH 10043 and INSC 20153.

## INSC 20263 - Business Information Systems (3)

3 hours. Prerequisites: Sophomore standing, and must be a Pre-business major or student for whom the course is required by their major. This course focuses on how information technology supports various business initiatives. Students gain an appreciation of today's computer intensive business environment and develop skills essential to function within a networked business community.
INSC 30153 - Manufacturing and Service Operations Management (3) 3 hours. Prerequisites: INSC 20153 or equivalent and junior standing, or consent of the instructor, and must be a Business major. Develops concepts and analytical skill to address the issues related to the creation and distribution of goods and services. Emphasizes the role of operations function as a competitive weapon and examines how operations strategy can be integrated with the corporate strategy and other functional strategies. Discusses the increasingly important role of global competition, technology, and total quality. Other topics include process design, capacity, planning, technology choice, planning and inventory control, and just-intime systems. Technology is emphasized.

## INSC 30313 - Supply Chain Management (3)

3 hours. Prerequisites: sophomore standing. Examines major tools and concepts associated with supply chain management, information systems, SC operations, logistics and transportation. (Credit not awarded for INSC 30153 and INSC 30313.)

## INSC 30353 - Regression Analysis (3)

3 hours. Prerequisite: INSC 20153 or equivalent, and must be a Business major. Simple and multiple linear regression analysis. Applications to business and economics. Additional topics include residual analysis, regression diagnostics, use of dummy variables, analysis of variance, and time series regression. Use of computer statistical packages is stressed.

## INSC 30653 - Supply Chain Management (3)

Prerequisites: Must be a General Business minor; completion of ACCT 20653 with C- or better; May not receive credit for both INSC 30313 and INSC 30653 Examines major tools and concepts associated with supply chain management such as: demand forecasting, inventory strategy, procurement, logistics, transportation, quality management, service response, and supply chain information systems..

## INSC 30723 - Systems Planning and Process Analysis (3)

3 hours. Prerequisites: INSC 20263 with a grade of C" or higher; and must be a declared Business Information Systems major or a declared Supply Chain Management major. Students will learn how to analyze a business, division, or department for an enterprise. They will utilize project management and process analysis skills. Students will also apply communication skills (written, face-to-face, and presentation) in this course."

## INSC 30801 - Business Applications in Excel (1)

1 hour. Prerequisites: Must be a Business major and junior standing. Through lectures students will learn about the use of various advanced functions of spreadsheets that will allow them to become more efficient and effective in making business decisions in the corporate environment. Students will develop skills and gain knowledge through the use of hands-on exercises to be completed outside of class.
INSC 30823 - Data Management for Business Information Systems (3) 3 hours. Prerequisites: INSC 20263 with a grade of C" or better and must be a declared Business Information Systems major. Students will learn business database principles. They will also be introduced to data management concepts such as data warehousing, ERPs, business intelligence, the use of consumer data for marketing and business analysis, and data and information presentation, exchange and reporting."
INSC 30833 - Business Information Systems Development (3)

3 hours. Prerequisites: INSC 30723 with a grade of C or better; INSC 30823 with a grade of C or better; and must be a declared Business Information Systems major. Students will use the results of the business information systems planning to design and implement a business system. They will learn traditional project management techniques in this process. They will examine several different system development methods. This course will use team building skills, as appropriate.

INSC 30843 - Business Integration through Enterprise-Wide Information Systems (3)
Prerequisites: INSC 30723 with a grade of C or better, and must be a declared Business Information Systems major or a declared Supply Chain Management major. This course is designed to introduce students to the underlying need for business process integration in large organizations, the problems that traditionally fragmented information systems create, and the possibility of purchasable enterprise-wide integrated systems. The course also will focus on the difficulties inherent in implementing and using such systems due to the systems requiring considerable changes to business processes. Students will become acquainted with one particular software package (SAP system), including its architecture and user interface, and will become knowledgeable about the issues and challenges in introducing such systems into large organizations.
INSC $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.
INSC 40010 - Business Information Systems Internship I (1.5) 1.5 hours. Prerequisites: INSC 30833 with a grade of 'C' or better; INSC 30843 with a grade of ' C ' or better; senior standing; and must be a declared Business Systems major. A 320-hour internship with a corporation, a nonprofit or governmental agency allowing the student gain professional experience that integrates the theory and practice of information systems. Internships are during the summer following the completion of the prerequisites and must be approved by the department chair or another designee.
INSC 40020 - Business Information Systems Internship II (1.5) 1.5 hours. Prerequisites: INSC 30833 with a grade of 'C' or better; INSC 30843 with a grade of ' C ' or better; senior standing; and must be a declared Business Information System major. The course is a follow-up to the 320hour summer professional internship experience (INSC 40010) and examines how the theory and practice of business information systems was applied during the internship.

## INSC 40030 - Senior Honors Research Paper (1.00-3.00)

1-3 hours. Prerequisite: Honors section of MANA 30153, and must be a Business major. Preparation for and completion of a research paper in the student's area of concentration in business under the direction of an assigned staff member. May be taken for up to three credit hours.

## INSC 40303 - Demand Planning and Management (3)

3 credit hours. Prerequisite: Must be a declared business major; grade of C or better in INSC 30313. This course provides an in-depth study of the processes that balance customer demands with production, procurement, and distribution capabilities. Demand management and planning provides for added flexibility and visibility of inventory, and reduced variability in supply chain outcomes. Core conceptual areas include demand forecasting and management, synchronization of supply and demand, inventory capacity, balancing and positioning, inventory planning, sales and operations planning, and strategic order fulfillment issues.

## INSC 40313 - Logistics and Transportation (3)

3 credit hours. Prerequisite: Must be a declared Business major; grade of C or better in INSC 30313; concurrent enrollment in INSC 30313 is permitted. Logistics can be defined as the management of products, services and information flows from the original source of raw materials to the final customer in a manner which produces customer satisfaction and value". This course will cover many aspects of business logistics: supply chain management, demand management, customer service, procurement, inventory management, warehousing, global logistics, transportation and information systems. Logistics and Transportation for many companies have become a source of competitive advantage and this course will explore some of the reasons why."

INSC 40323 - Procurement/Supply Management (3)

3 credit hours. Prerequisites: Grade of C or better in INSC 30313, and must be a declared Business major. This course focuses on the key issues related to the strategic implications of sourcing of products, the purchasing of goods and services, and the role of purchasing in a supply chain context. It provides students with an understanding of purchasing processes, issues, and best practices. Emphasis areas include supplier quality, relationship management, and global sourcing.

## INSC 40333 - Supply Chain Information Technologies (3)

3 credit hours. Prerequisites: Concurrent enrollment in INSC 30313, and must be a declared Business major. Effective supply chain management is heavily dependent on state-of-the-art analytical tools and information technologies. This course will provide an understanding of supply chain models and practical tools for effective decision making and integrated supply chain management. The emphasis will be on exploring analytical tools and off-theshelf information technology packages that have been proven effective in multiple industries, and on identifying and understanding implementation and utilization requirements associated with effective application of such tools.

## INSC 40343 - Supply Chain Strategy (3)

3 credit hours. Prerequisites: Must be a declared Business major; a grade of 'C' or better in INSC 30313; successful completion of, or concurrent enrollment in the classes necessary to complete a supply chain major; senior standing. Enrollment by permission only. This course serves as the capstone course for a major in supply and value chain management. It provides an indepth study of the practice of supply chain management in manufacturing and service industries. Supply chain management is the integration of the activities associated with the flow and transformation of goods from the raw materials stage through to the end user, to achieve a sustainable competitive advantage. This course provides insights into the conceptual foundations of supply chain planning and coordination and provides an integrative experience relating strategic concepts and tools to meeting the challenges in the management of supply chains. Topics include management of operations and logistics networks, material flows and the role of information systems technology.

## INSC 40353 - Global Supply Chain Management (3)

Prerequisites: INSC 30313 with a grade of C" or better, and must be a Business major. Examines critical challenges in managing global supply chains. Topics include the global environment, globalization of the economy, supply chain management in the multinational company, the global transportation system, import/export processes, and risks and challenges of operating across borders and in multiple countries."

## INSC 40363 - Supply Chain Cross Functional Experience (3)

Prerequisites: Must be a declared Business major. INSC 30313 and permission from Department Chair. This course is the first of a two semester, six credit program designed to provide the selected students the unique opportunity to work side-by-side with supply chain professionals and learn the skills needed to lead in today's important, fast changing supply chain management environment. By rotating through multiple supply chain functional areas within the participant systems. The students will also be responsible for mapping the supply chain of a given product. Through this experience, the student will discover the productivity opportunities that reside in the supply chain and develop a business case for capturing the dollar savings available from changing the processes involved.
INSC 40373 - Supply Chain Capstone Project Course (3)
Prerequisites: Must be a declared Business major; INSC 30313 and 40363, and permission of instructor. This course is the second of a two semester, six credit program designed to provide the selected students the unique opportunity to work side-by-side with supply chain professionals and learn the skills needed to lead in today's important, fast changing supply chain management environment. After spending one semester learning the cross functional nature of the supply chain, students will be assigned an in-depth supply chain project which represents a productivity opportunity.

## INSC 40803 - Business Information Systems Architecture (3)

3 hours. Prerequisites: INSC 30823 with a grade of C or better; INSC 30833 with a grade of C or better, and must be a Business major. Students will examine the information technology infrastructure necessary to support business functions in organizations. Topics include telecommunications, computer networking, server infrastructure, and staffing requirements.

## INSC 40813 - Business Information Systems Consulting (3)

 3 hours. Prerequisites: INSC 30833 with a grade of 'C' or better; INSC 30843 with a grade of 'C' or better, FINA 30153 with a grade of C" or better, and must be a declared Business Information Systems major. Using an existing organization, students will undertake team-based consulting projects. They will complete a corporate project from requirements gathering throughrecommending a solution. Students will complete all the necessary documentation required during the consulting process. While the students are building and implementing the system they will be introduced to the newest tools, topics, and trends in project management for use in the rapidly changing business information systems environment."

INSC 40823 - Business Information Systems Topics and Trends (3) 3 hours. Prerequisites: INSC 40013 with a grade of C or better, and must be Business major. Provides a more advanced inquiry into Electronic Business. This is a continuation of INSC 40813. 3 hours. This is the second of a twocourse sequence INSC 40813 and INSC 40823. Using a real company, the first course, INSC 40813 starts the consultancy phases and the second course, INSC 40423 completes the information systems analysis phase. While the students are building and implementing in the second semester they will be learning about the newest tools, topics and trends for use in the rapidly changing Internet environment. This two-semester sequence will allow them the extra time needed to complete the entire process of creating a real corporate Web presence from beginning to end. Students will work in teams that will last the entire two semesters. A team approach will be used to develop creative ideas and observe the processes and factors crucial to a successful Business Information Systems. The topics and trends section of this course will be constantly changing to reflect the dynamics of the Internet.

INSC 40843 - Business Intelligence and Analytics (3)
3 hours. Prerequisites: INSC 30843 with a grade of ' C ' or better and INSC 30833 with a grade of 'C' or better, and must be a declared Business Information Systems major. This course is an introduction to the fundamentals of business intelligence (BI) and analytics. Business intelligence and analytics allow for the transformation of raw data into information and knowledge that can be used by managers for the purpose of decision-making. The domain of Bl is in the gathering and storage of data. Analytics is considered the task of analyzing an modeling the data to provide competitive information to planners and decision makers. Through the use of the BI and analytics, organizations have potential to build competitive strategies around data-driven insights that yield superior business performance. Examples of analytics in action include the analysis of profitable customers, supply chain optimization, market basket analysis for online sales, recruitment and retention of human resources, among other potential examples. Real-world case studies will show students the ways organizations are using BI and analytics to support both tactical and strategic decision-making.
INSC 40970 - Special Problems in Information Systems and Supply Chain Management (1.00-6.00)
Prerequisites: Must be a Business major. Special Problems in Information Systems and Supply Chain Management

## INTR - Interdisciplinary

INTR 30101 - Interdisciplinary Exploration of Global Issues (1)
1 credit hour. This one hour seminar explores global issue(s) in an interdisciplinary context. The seminar will prepare students for participation in the TCU Global Academy--a holistic approach to study abroad designed to investigate a paramount global issue. TCU Global Academy is intended to move from one corner of the world to another depending upon where the topic is most dominant. The topic of this seminar will depend upon the theme of the Global Academy for any given year. Various global issues that could be studied include sustainability, social justice, ethical leadership, healthcare, and many other topics. Onsite investigation, field trips and guest lecturers will be utilized to gain a U.S. and global perspective on the given topic. Students intending to participate in the Global Academy must participate in the seminar the semester immediately prior to the Global Academy.

## INTR 30203 - TCU Global Academy (3)

3 credit hours. Prerequisite: INTR 30101. The TCU Global Academy explores global issues within an international and interdisciplinary context. Students and faculty from TCU interact with international faculty, students and members of the community in an interdisciplinary approach to study a global issue(s) of world relevance. Various issues that may be studied include sustainability, social justice, ethical leadership, healthcare, and many other topics. The particular issues and location depends upon the most paramount global issue at the time. Teams of U.S. and host country students, faculty, and community leaders will utilize onsite and service-learning, lectures, intensive journaling and reflection to compare U.S. and host country perspectives on the designated topic.

Prerequisites: Junior standing or permission of instructor. This course is a three-week immersion in the land and people of Scotland. It will acquaint you with the landscape and the culture of this small country and the enormous contributions of its peoples to Western civilization and American society. After taking this course you will be able to understand and evaluate the contributions of Scottish culture to Western Europe and the world.

## INTR 30302 - TCU Global Academy:The Capstone Project (2)

 2 credit hours. Prerequisites: INTR 30101 and 30203. TCU Global Academy:The Capstone Project is the mechanism for students to synthesize and apply lessons learned from the TCU Global Academy in context of the their area of study as well as the relationship to other disciplines. The Capstone Project must integrate an interdisciplinary approach to the Global Academy topic and demonstrate application to the student's field of study. Capstone projects must integrate interaction with faculty, students, and community leaders from TCU and the Global Academy in order to demonstrate the essential interdisciplinary approach to addressing global issues and to make informed judgements.
## INTR 50903 - Indigenous Peoples of the South Pacific and the Global

 Flow (3)Prerequisites: permission of instructor. The course will focus on the potential and challenges of the global flow and indigenous peoples of the South Pacific. Students will travel to the South Pacific to conduct service learning activities with indigenous peoples.

## ISLP - Intensive Spanish Language

ISLP 412 - Intensive Spanish I (2)
Intensive Spanish I

## ITAL - Italian

## ITAL 10153 - First Semester College Italian (3)

A beginning course in Italian intended for students with no previous knowledge of the language, or insufficient knowledge to qualify for placement into a more advanced course. The four skills of listening, speaking, reading, and writing are taught at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in Italy or any other Italian-speaking region (e.g., southern Switzerland). No prerequisite.

## ITAL 10163 - Second Semester College Italian (3)

Prerequisite: ITAL 10153 with a grade of C- or better, or permission. Continuation of 10153.

## ITAL 20053 - Third Semester College Italian (3)

Prerequisite: ITAL 10163 with a grade of C- or better or appropriate score on a college-level placement test, or permission. Continuation of ITAL 10163. Further develops the skills of listening comprehension, speaking, reading, and writing. Includes language laboratory assignments.

## ITAL 20063 - Fourth Semester College Italian (3)

Prerequisite: ITAL 20053 with a grade of C- or better, or permission. Combines a targeted" review of grammatical topics with work in reading and writing that goes beyond the level of third semester. Class discussions in Italian. In addition, there will be substantial assignments involving audio and video material."

ITAL 20123 - Italian Culture from Unification to the Present (3) By taking a detailed look at the social and historical backdrop to major moments and events in the modern history of Italy, this course will examine Italian culture through a historical filter, from the period of Unification to today. We will look at historical and cultural readings; literature; films; newspaper articles; high and low art; and political manifestos; as well as secondary readings that interpret and/or criticize these primary texts. The course seeks to enhance students' reading, analytical, and writing skills. The language of instruction is English and all readings will be in English. Films are in Italian with English subtitles.
ITAL 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

Prerequisites: ITAL 20063 with a grade of C- or better, or permission. This course focuses on short readings, writing short compositions, and use of idiomatic expressions in Italian at the intermediate level. This course is taught entirely in Italian and counts toward the minor in Italian.
ITAL 30063 - Italian Culture as Reflected in Italian Cinema (3) Prerequisites: ITAL 20063 with a grade of C- or better, or instructor's permission. This course is a study of Italian culture as reflected in Italian cinema. The course, conducted in Italian, has as a primary goal the improvement of students' knowledge of both contemporary and historical Italy. Spoken and written Italian skills are developed through authentic readings, class discussions and individual presentations. Italian cinema from the 1940's to the present will be covered, emphasizing major directors, such as Visconti, De Sica, Fellini, Tornatore, and Benigni. Topics to be addressed include: the unification of Italy, the North-South divide, fascism, the realities of La Dolce Vita" or sweet life, regional identify, racism, gender relations, the mafia and immigration."

## ITAL 30083 - La Novella Italiana: Topics in the Italian Short Story (3)

 Prerequisites: ITAL 30053. This course examines the genre of the novella, the Italian short story. In this course, we will explore the development of the genre within a specific time period (for example: Medieval-Renaissance, Baroque-early 19th Century, or mid-19th Century-present) and socio-cultural backdrop of the Italian literary scene of that period. This course fulfills the (WEM) writing emphasis core requirement, as well as the (LT) literary traditions core requirement; thus, requirements include several short papers and a longer research paper in the field of Italian literature. This course counts toward the minor in Italian. This course is taught entirely in Italian.ITAL 30123-19th Century Italian Literature (3)
This course examines various literary movements, genres, and authors in 19th century Italy. Literary movements and genres studied may include the historical novel, theatre, the short story, and poetry. We will also examine the political, social, and cultural backdrop that shaped and was in turn shaped by its literature. This course is taught entirely in English, and all readings will be in English.

ITAL 30163 - Southern Italy as Reflected in Italian Cinema (3)
Prerequisites: ITAL 20063, or the equivalent. This course examines stereotypes of southern Italy as depicted in Italian cinema from neorealism to the present. Spoken and written Italian skills are developed through authentic readings, class discussion and student presentations. Taught in Italian.

## ITAL 30176 - Study Abroad in Italy: Language and Culture (6)

 Prerequisites: ITAL 10163 with a grade of C - or higher. A summer course conducted by TCU in Italy. The course offers students the opportunity to improve linguistic and cultural proficiency by interacting directly with culture and native speakers. Students will study topics related to the region in which the program is held.
## ITAL 30623 - Topics in Italian Cinema (3)

Investigation of the historical and cultural developments of Italian cinema including the examination of film structure and aesthetics in the selected cultural setting particular to Italy. This course is taught in English.

## ITAL 30970 - Independent Study in Italian (1.00-6.00)

Prerequisite: permission of instructor. Independent work in specially designed projects not covered by regular course offerings. (1-6 semester hours, 3 hours maximum per semester.)

## ITAL 30980 - Independent Study in Italian (1.00-6.00)

Prerequisites: ITAL 20063 with a grade of C- or better, or permission. This course offers the opportunity for a student to pursue independent studies in Italian culture, language or literature. Topic and credit hours to be arranged by supervising faculty member and student.

## ITAL $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ITAL 39990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## ITAL 40103 - Boccaccio's Decameron (3)

This course examines the entirety of Giovanni Boccaccio's Decameron and the socio-cultural backdrop of the Italian literary scene of the early modern period. We will also explore the roots of the The Decameron, as well as works (literary, cinematic, etc.) that it has inspired throughout the centuries since it first appeared. This course is taught entirely in English, and all readings will be in English; the film shown in Italian will have English subtitles.

## ITAL 40623 - Gender in Italian Cinema (3)

Prerequisites: ENGL 20803. The purpose of this course is to provide students with a sound basis in Italian film, film studies, and gender students. We will reach this goal by engaging in the thoughtful discussion about films from the 1940s through the present, and through numerous readings in Italian film, gender studies, film studies, and cultural issues. This course is taught entirely in English, and all readings will be in English; films shown in Italian will have English subtitles.

## ITAL 40970 - Directed Study in Italian (1.00-6.00) <br> Directed Study

## JAPN - Japanese

## JAPN 10153 - First Semester College Japanese (3)

No prerequisite. A beginning course in Japanese intended for students with no previous knowledge of the language or insufficient knowledge to qualify for placement in a more advanced course. Aural comprehension, speaking, reading, and writing are taught, with emphasis on J apanese as it is spoken today in J apan. Japanese kana will be introduced.

## JAPN 10163 - Second Semester College J apanese (3)

Prerequisite: JAPN 10153 with a grade of C- or better, or permission. Continues JAPN 10153.

## JAPN 20053 - Third Semester College Japanese (3)

Prerequisite:JAPN 10163 with a grade of C- or better, or permission, or acceptable score on appropriate competency test. Continues JAPN 10163. Further develops aural comprehension, speaking, reading, and writing skills. Assignments will include written work in J apanese.

## J APN 20063 - Fourth Semester College J apanese (3)

Prerequisite: JAPN 20053 with a grade of C- or better, or permission. Continues JAPN 20053.

## JAPN 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## J APN 29990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## J APN 30113 - J apanese Culture and Civilization (3)

No prerequisite. This course emphasizes modern Japan from a sociocultural perspective, focusing on contemporary J apanese life and perceptions of the West. So as to allow maximum class time for discussion, substantial reading assignments are required. Taught in English.

## JAPN 30123 - Japanese for Daily Use (3)

Prerequisite: J APN 20063 with a grade of C- or better, or permission. This course is designed to advance students' overall ability in J apanese. Journal writing and speech making are emphasized.

## JAPN 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

J APN 38990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian

University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

JAPN 40970 - Directed Study: Japanese (1.00-20.00)
Prerequisite: Permission of instructor. Opportunity for work on one's own under supervision. ( $1-6$ semester hours).

## JOUR-Journalism

## JOUR 10103 - Media Literacy (3)

Open to students in all departments. This course is designed thelp students develop an informed, critical, and practical understanding of communication media, including analysis of digital media. We will explore the goals and methods of various media industries, identify the effects media has on society and examine benefits and potential negative effects of media content.

## JOUR 10113 - Media Writing and Editing (3)

Prerequisite: Open to journalism majors and minors only. Introduction to basic writing skills of journalism, advertising, and public relations. Style and story structure for the print and electronic media.

## JOUR 10203 - Introduction to Journalism (3)

This course is an introduction to journalism, its skill sets and its issues. This class will consist of lectures, readings in the text, and the development of news skill sets.

## JOUR 20003 - Diversity and the Media (3)

Prerequisites: Grade of C or better in JOUR 10113 and either JOUR 10103 or JOUR 10203. This course explores the historical, economic, legal, political and social implications of the relationship between marginalized groups and the mass media. The class will explore how the media help in constructing notions of social reality. The primary focus of this class is on media representations of marginalized groups in the United States.

## JOUR 20101 - Introduction to Media Web Tools (1)

An introduction to the tools needed throughout study in the Journalism department, how to update skills, and discover latest Web technologies.

## JOUR 20203 - Radio/TV Newswriting (3)

Prerequisite: JOUR 10113 with a grade of C or higher. Newswriting for the electronic media with emphasis on mastery of professional abilities required of news writers for all forms of media. Writing for the on-camera performer will be stressed. Required of Journalism majors and minors.

## JOUR 20453 - Interactive Communication Design (3)

Study of the Web and interactive communication, its history, social and business perception and application. Introduction to advanced design software. Overview of planning and construction of convergence platforms including blogs, Web sites and Flash multimedia.
JOUR 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## JOUR 30003 -Junior Honors in Journalism (3)

Studies, reports and discussions of literature of journalism and mass communication and of significant trends. This is generally offered to juniors in journalism on a tutorial basis. Specific topic is determined jointly by the student and the journalism instructor. JOUR 30003 and 40003 cannot be taken simultaneously.

## JOUR 30204 - Reporting (4)

Prerequisites: JOUR 10113, 10203, 20001 and 20203, with a grade of C or higher in each. Applying the principles of good writing to journalism practice. Development of skills in evaluating the news, interviewing, gathering information, and objective reporting for the media. Faculty supervised laboratory training provides practical experience on the TCU student media and initial instruction in multimedia skills.
JOUR 30233 - Visual Journalism - Advanced (3)
Prerequisite: J OUR 10113 and permission of instructor. Advanced skills in digital photography and video in modern mass communication with goal of producing distinctive publishable images.

Prerequisite: JOUR 30204. The evaluation of copy written for mass audiences, including consideration of grammar, style, precision, clarity, conciseness and implications of libel.

## JOUR 30523 - Media Marketing and Promotions (3)

Prerequisites: A 2.0 C" grade or higher in FTDM 20523; FTDM and Sports Broadcasting majors only. JOUR majors need JOUR 20313 or permission of instructor. Principles and techniques of developing successful marketing and promotions campaigns in the media industries. Course focuses on issues of market research, advertising strategies, identity and image development, and creative execution. (Offered as FTDM or JOUR credit.)"

## JOUR 30543 - Multimedia Reporting (3)

Prerequisite: JOUR 20203 and 30204 . Principles and practices of news gathering, writing and editing video, audio and emerging story forms.

## JOUR 30853 - Historical Development of Mass Media (3)

Development of American journalism. Political, social and economic interaction of the media and society

## JOUR 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## JOUR 32990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## JOUR 39990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## JOUR 40003 - Senior Honors in Journalism (3)

A major research study involving a substantial topic or project under the supervision of a three-member faculty committee. The sequence of JOUR 30003 and 40003 must be planned so that 40003 is taken prior to the student's final semester of undergraduate work.

## JOUR 40101 - Computer-Assisted Information Gathering (1)

Using computers to gather and analyze information for news stories. Includes on-line search techniques and database analysis.

## JOUR 40153 - Global Communication in Context (3)

An examination of the impact of globally conveyed information in different cultural contexts to better understand how information is likely to be received based on experience, knowledge, culture, access to media and how sources of information and media delivery systems impact global discourse.

## JOUR 40203 - Newscast (3)

Prerequisites: JOUR 30543. Reporting, editing, and anchoring for television; application of advanced production techniques; production newscast(s). Course may be taken twice for six hours credit.

## JOUR 40213 - Television Sportscast (3)

Prerequisites: JOUR 30543. Reporting, editing, and anchoring for television; application of advanced production techniques; production sportscast(s).

## JOUR 40223 - Issues in Global Media (3)

Issues affecting the availability of information globally, its content and method of distribution are considered in a format that is flexible enough to consider issues as these are anticipated or develop from changes in media management, systems of distribution and regulations.

## JOUR 40333 - Crisis Communication

Prerequisites: Strategic Communication or Journalism majors. Non-majors will required permission of instructor. Strategic Communication students must complete the four gateway courses: JOUR 10113, 20003, 20313 and 20403. They would also have completed JOUR 30803 (for PR or Integrated concentration) or 30553 (for Advertising concentration) with a grade of C" or higher and a combined GPA of 2.5. This course covers the way issues of
public concerns are detected by news media and by strategic communication professionals as the issues develop

JOUR 40443 - Issues in Coverage of Business and the Economy (3) Prerequisites: JOUR 30204 or JOUR 30803 and ECON 10233. The critical study of business and economic coverage in all forms of media. Students will produce a final news project appropriate to their degree plan.

## JOUR 40450 - Internship (1.00-3.00)

Prerequisite: Minimum of 75 total semester hours with 2.5 GPA plus minimum of 9 semester hours in journalism skills courses. A 2.5 GPA required in the major and approval of department chairman. Practical experience with Journalism or in public relations/advertising situations. Must work a minimum of 75 hours in approved practical experience situation for each semester hour. Variable credit up to three hours for each course. Course may be taken multiple times to reach a maximum credit of six hours in segments of one, two or three hours. Open only to Schieffer School majors.

JOUR 40453 - Business J ournalism (3)
Prerequisites: JOUR 30204 or JOUR 30803. Development of skills and knowledge in coverage of business news, including breaking and in-depth reporting.

## JOUR 40463 - Public Affairs Reporting (3)

Prerequisite: J OUR 30204. Study of community news sources such as city, county, state and federal governmental agencies, courts. Depth reporting of significant and complex news, with emphasis on fact-finding and investigation.

## JOUR 40473 - Specialized Reporting (3)

Prerequisite: JOUR 30204. Development of skills and knowledge in audience-driven news channels. Niche channels and content verticals such as entertainment, health and lifestyles are covered at the instructor's option.

## JOUR 40483 - Sports J ournalism (3)

Prerequisite: JOUR 30204. Gathering and writing the news on a sports beat. Development of skills in information-gathering, interviewing, and writing for multiple platforms. Faculty-supervised laboratory training provides practical experience on the TCU Daily Skiff and other media writing under newsroom conditions.

## JOUR 40493 - Opinion and Commentary (3)

Prerequisite: J OUR 30204 or 30803. Editorial and other interpretive forms of media communication about public affairs, the arts and culture. Style and research for editorials, columns, critical reviews, blogs, audio and video commentaries, and other formats. The policies, problems, and responsibilities and comment functions of the press.

JOUR 40523 - Law and Ethics of Mass Communication (3)
Prerequisite: Senior standing, open to journalism majors and minors only. Ethical and legal responsibilities, rights, and restrictions. Survey of Constitutional guarantees, libel, contempt of court, invasion of privacy, privilege, copyright, obscenity, and federal agencies.

JOUR 40543 - International and Intercultural Communication (3) Course examines the political, social and cultural aspects of communication across and within national boundaries, as well as the impact of globalization on the news media, advertising and public relations.

## JOUR 40553 - Issues in News (3)

Analysis of news, techniques of investigative reporting, newsroom decision making, political coverage, election coverage and polling, crisis coverage, and other topics. Study of the daily operation of the news profession.

## JOUR 40563 - Media Management (3)

This course provides an intensive study of the management, organization, and leadership structures of contemporary news media organizations and their business models.

JOUR 40573 - Contemporary Issues in Sports J ournalism (3)
Prerequisites: JOUR 30204, or the instructor's permission. This course will examine the state and practice of sports journalism through case studies of news coverage, emerging trends, and controversial issues that reflect the sociological, psychological, political, legal, ethical, and technological influences on the coverage of organized sport.

JOUR 40603 - Global Strategic Communication in Theory and Practice (3) Prerequisite: JOUR 20313 and 20403 or permission of instructor. Course focuses on the underlying theories and principles governing advertising and public relations in market economies and democratic societies and explores the practice of these disciplines in a global economy/society. Cultural/legal obstacles and marketing/communication opportunities will be explored as future practitioners work across borders.

## JOUR 40613 - Media Ethics (3)

Prerequisite: Senior standing, enrollment open only to journalism majors. This course will introduce the study of ethical issues in the media. Students will look critically at current media practices and develop an understanding of prominent ethics questions, as well as the ability to analyze the important ethical issues faced by the mass media industry.

## JOUR 40643 - Long-Form J ournalism (3)

Prerequisite: J OUR 30204. Non-fiction journalism for long-form narratives presented in a variety of formats. Includes research methods, feature writing, audio and video documentaries and multimedia packages.

## JOUR 40773 - Media in Britain (3)

An overview of contemporary media in Great Britain, focusing on the press, television, and cinema. Taught only in London.

## JOUR 40813 - Media in Washington (3)

Prerequisites: Enrollment in the Washington program and permission of the director. Three credit hours. How media functions in the context of the political system in Washington. Required course for students in the Washington program.

## JOUR 40820 - Washington Internship (1.00-6.00)

Prerequisites: Acceptance in the Washington program and permission of the designated coordinator of the Washington program, and corequisite: JOUR 40823. Maximum six credit hours. Practical experience overseen by a faculty member in a media organization in the Washington, D.C. area consistent with the student's major in Journalism or Strategic Communication. Credit hours are based on approximately 75 hours in internship activities for each semester credit hour. A maximum of six credit hours can be applied toward the J ournalism or Strategic Communication major, with the remaining three hours counting as general electives outside the unit.

## JOUR 40823 - Washington Center - Portfolio (3)

Prerequisites: Acceptance in Washington program for Journalism and Strategic Communication majors and permission of the designated coordinator of the program. Development of knowledge and skills by engaging in professional environments that applies academic knowledge to the professional world in Washington, D.C. This is accomplished through the Media \& Communications program and the Leadership and Civic Engagement Forum that are required of internships co-managed by our academic partner, The Washington Center, and the TCU School of Journalism and Strategic Communication's Washington program. Washington Center Portfolio is required of all students accepted into the Washington program.

JOUR 40833 - Washington Center Study I (3)
Prerequisites: Acceptance in Schieffer School in Washington and permission of the director. Three credit hours. This course represents credit earned through a semester study experience in Washington DC with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official grade report from the Washington Center. Courses appearing on a student's official transcript will have been included in the student's grade point average. Washington Center Study I is also a requirement of The Washington Center for participation in Washington Center programs.

JOUR 40843 - Washington Center Study II (3)
Prerequisites: Acceptance in the Washington program and permission of the director. Three credit hours. This course represents credit earned through a semester study experience in Washington DC with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official grade report from the Washington Center. Courses appearing on the official grade report will be included in the student's grade point average.

## JOUR 40963 - Topics in International and Ethnic Media (3)

Investigation of the cultural, technological and historical developments of a selected national or ethnic media group, including the examination of culture, images and identity, politics and economics. Topics may vary and will include: Latin American and Hispanic Media, British and European Media, and Asian and African Media.

## JOUR 40970 - Special Topics (1.00-20.00)

Prerequisite: Permission of the Journalism department chair. Variable credit. Special problem areas requiring independent or small group research and study within a related area of journalism/mass communications.

## JOUR 40983 - Multi-Platform Capstone (3)

Prerequisites: J OUR 30204 and senior standing. A capstone course in which students will demonstrate their ability to bring together multimedia journalistic skills and produce a significant journalistic project or product. Students must show a firm understanding of writing, reporting, visual
storytelling, research, analysis, investigative techniques and multi-platform delivery.

## JOUR 40993 - Mass Media and Society (3)

A seminar course designed to pull together for senior students all of the relationships of the mass media - both among various aspects of the media and between media and society. Senior standing or permission of instructor.
JOUR 50123 - Foundations (3)
Seminar devoted to the analysis and discussion of significant issues in journalism and strategic communication with a focus on related literature, research areas and professional practice. Offered as STCO/JOUR 50123.

## JOUR 50143 - Social and Cultural History of the Media (3)

Seminar designed to explore the history of mass media. Issues discussed in this class will improve historical knowledge about the mass media and give a foundation for understanding the professional development of journalism and mass communication.

## JOUR 50173 - International Reporting (3)

Prerequisite: JOUR 30204, or permission of instructor. The course will critically analyze the coverage of international affairs by U.S. and other media. It will help the student develop competency in researching, analyzing and reporting about international issues, including the impact of international communication.

## JOUR 50183 - Management and Leadership (3)

This course will give students a survey of some of the latest management and leadership communication theories and practices, including a new sense of social responsibility. Students will apply theories to solve problems in existing case studies. Crosslisted as JOUR 50183.

## JOUR 50193 - Economics and Finance of the Media (3)

The course will examine the economic environment and financial practices of the mass media, including the World Wide Web. The course will also examine how the media are affected by advertisers, competition, financial markets, and other economic forces. Understanding and structuring debt and equity, valuing media companies, and writing a business plan are included in the course work.

## JOUR 50523 - Information Law and Policy (3)

Prerequisites: Open to graduate students in Journalism and Strategic Communication. Undergraduate students must have passed JOUR 40523 or STCO 46403 with a grade of $C$ or higher and must have permission of the instructor. Advanced media law course for students focusing on contemporary challenges faced by journalism and strategic communication professionals. The course emphasizes how the law of mass communication has adapted to new and emerging technologies such as the Internet and social media, with a particular focus on privacy, access to information, and intellectual property. Students will learn and apply normative legal research methods to answer modern questions relevant to professional communicators. Crosslisted as JOUR 50523.

## KINE - Kinesiology

KINE 10011 - Personal Fitness (1)
Principles, concepts, and components of physical fitness. Emphasis on design and practical implementation of individualized fitness program.

## KINE 10101 - Introduction to Kinesiology (1)

Prerequisite: Open to students with freshman or sophomore standing, or by permission. A discussion-based course that provides an introduction to the discipline of Kinesiology. Students will gain an understanding of career and professional options in kinesiology, exposure to relevant professional organizations, and instruction in writing, literature searches, presentation and data management skills needed to succeed in the kinesiology major.

## KINE 10102 - Foundations of Athletic Training (2)

Prerequisite: ATTR majors only. An introduction to the basic skills in athletic training and the Texas Christian University athletic training program in a hands-on learning environment.

## KINE 10202 - Perspectives in Athletic Training (2)

Prerequisite: ATTR majors only. This course will provide the entry-level athletic training student with an initial look at the organizations that govern the profession of athletic training. Athletic training students will continue to gain knowledge through clinical experiences.
KINE 10533 - Freshman Seminar in Kinesiology: Sports in America: A Socio-Cultural Perspective (3)

This freshman seminar course provides students with a forum to explore the influences of sport in American society. Students learn to formulate opinions on main topics as a result of readings, direct observation, and class discussion. Students then defend their opinions and ideas in written assignments, or during class discussions.

## KINE 10603 - Anatomical Kinesiology (3)

Prerequisite: Open to students with freshman or sophomore standing, or by permission. A study of the gross structure of the human body with an emphasis on the relationship of anatomy to the study of physical activity, physical fitness, sport and exercise. (Offered as KINE or HLTH credit.)

## KINE 20102 - Clinical Education I (2)

Prerequisite: ATTR majors only. The review and evaluation of selected National Athletic Trainers' Association educational competencies and clinical proficiencies.

## KINE 20202 - Clinical Education II (2)

Prerequisite: ATTR majors only. The review and evaluation of selected National Athletic Trainers' Association educational competencies and clinical proficiencies.

## KINE 20303 - Care and Prevention of Athletic Injuries (3)

Prerequisite: ATTR majors only. Study of recognition, prevention, reconditioning, and referral of athletic injuries.

## KINE 20313 - Foundations of Sport Injuries (3)

Prerequisites: KINE 10603. This course will provide an overview of the recognition and referral of sports injury for non-athletic training majors.

KINE 20403 - Physical Education for Elementary School Children (3)
Prerequisite: KINE 10101 or instructor permission. Presentation of various teaching strategies, procedures, classroom management, and evaluation techniques in order to meet goals and objectives of elementary physical education programs.

## KINE 20412 - First Aid: Responding to Emergencies (2)

Theory and practice of first aid and accident prevention techniques as well as CPR instruction. Standard Red Cross certificate issued on successful completion of course and practical evaluation.

## KINE 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## KINE 30003 - J unior Honors Research (3)

Prerequisites: Admission to the Honors College, junior standing, and permission of the department. The first of two courses required for Departmental Honors in Kinesiology to be taken in the spring semester of the junior year. In this course, the candidate will carry out a program of research under the direction of a faculty member. The student will work on the development of an extensive literature review in the intended area of research and the acquisition of the laboratory and/or research skills necessary to conduct the research project.

## KINE 30102 - Clinical Education III (2)

Prerequisite: ATTR majors only. The review and evaluation of selected National Athletic Trainers' Association educational competencies and clinical proficiencies.

## KINE 30202 - Clinical Education IV (2)

Prerequisite: ATTR majors only. The review and evaluation of selected National Athletic Trainers' Association educational competencies and clinical proficiencies.

## KINE 30303-Orthopedic Assessment I (3)

Prerequisite: ATTR majors only. KINE 10603 and KINE 20303, or instructor permission. This course is designed to provide advanced knowledge and clinical skills in the assessment of sports related injuries to the lower extremity and lumbar spine. This course will also serve to enhance the student's decision making skills in initial injury management.

KINE 30313 - Orthopedic Assessment II (3)
Prerequisite: ATTR majors only. KINE 30303. This course is designed to provide advanced knowledge and clinical skills in the assessment of sports related injuries to the upper extremity, head and neck. This course will also serve to enhance the student's decision making skills in initial injury management.

KINE 30343 - Theory of Coaching (3)
Prerequisites: KINE 10101, 10603 or permission of instructor. This course is designed to examine theories and techniques in coaching that the learners need in order to gain insight into the many intangibles of coaching that, until now, could only be learned through the trial and error of experience. The course addresses the differences in levels of competitive sports, the personal roles that coaches should exhibit, the professional roles expected and the organizational influences on the world of a coach. Development of technical information, safety aspects and human relationships will be studies as well.

## KINE 30403 - Motor Behavior (3)

Prerequisite: KINE 10603 or consent of instructor. Investigation of current theories of motor control, motor learning, and their relationship to the acquisition of motor skill.

## KINE 30423 - Motor Development (3)

Prerequisite: KINE 10101 and 10603, or instructor permission. An examination of human motor behavior from birth to adulthood. Emphasis placed on the development of fundamental skills and their effect on future motor performance.

## KINE 30503 - Fitness Assessment (3)

Prerequisite: KINE 10603 or consent of instructor. Practical experience in aspects of physical fitness and prescription. Students receive hands on experience in areas of testing required for ACSM health/fitness instructor certification.

## KINE 30513 - Health and Fitness Management (3)

Prerequisites: Kinesiology majors only -- KINE 10101. This course is designed to provide students interested in careers in the health and fitness industry with the knowledge necessary to develop and operate a fitness facility. The design and operation of health/wellness programs and facilities will be presented, including program design and administration, facility design, organizational development, management theory, marketing, financial management, legal issues, strategic planning, and evaluation models. Through a major simulation project, students will participate in all phases of program and facility development, such as budget development, recruiting and retaining employees and clients, market niche, and conflict resolution.

## KINE 30523 - Exercise Assessment and Prescription (3)

Prerequisites: KINE 10101 and 10603, or permission of instructor. This course is designed to cover the theory and techniques for evaluation and determination of exercise capacity and cardiovascular disease risk factors in healthy and diseased populations; exercise prescription for disease prevention and cardiac rehabilitation.

## KINE 30603 - General Pathology and Applied Pharmacology (3)

Prerequisites: ATTR major. This course will provide an advanced level of knowledge and clinical skills in the signs, symptoms, and management of general medical conditions commonly seen by the practicing athletic trainer and discuss common pharmaceuticals used in the treatment of these conditions.

## KINE 30623 - Biomechanics (3)

Prerequisite: KINE 10101 and 10603, or instructor permission. Mechanical foundation and analysis of human movement. Emphasis is placed on the concepts of linear and angular kinetics to include forces and torques that act on the human body during movement.

## KINE 30634 - Exercise Physiology (4)

Prerequisite: KINE 10603; Kinesiology majors only: KINE 10101; MOSC, ATTR, and HEFI only: BIOL 20214. Physiological responses of the systems of the human body with an emphasis on the energetics, metabolism, cardiovascular responses, thermoregulation, and muscular function associated with acute and chronic exercise. (Offered as KINE or HLTH credit.)

## KINE 30713 - Psychology of Sport (3)

Prerequisite: KINE 10101 and PSYC 10213 or 10514, or instructor permission. Selected theories and practical applications germane to the understanding of psychological aspects of human behavior in sport and exercise settings.

## KINE 30723 - Sociology of Sport (3)

Prerequisites: KINE 10101 and SOCl 20213, or instructor permission. The sociology of sport focuses on examining the interaction between society and sport. In particular, the course examines issues such as youth sport, violence in sport, commercialization of sport, the media and sport, politics and sport, religion and sport, and the role of gender, race, and socioeconomic status within sport.

KINE 30733 - Exercise Psychology (3)

Prerequisite: KINE 10101 and PSYC 10213, or 10514, or instructor permission. Selected theories and practical applications germane to the understanding of psychological aspects of human behavior in exercise settings.

## KINE 30753 - Curriculum and Program Design in Secondary Physical

 Education (3)Prerequisite: KINE 10101. The development of goals, objectives, and scope of secondary physical education. Emphasis is placed on the systematic process of designing and evaluating curriculum in secondary schools.

## KINE 30790 - Departmental Research (1.00-3.00)

Prerequisite: Sophomore or junior standing only, and nomination and selection by faculty member in the Kinesiology Department. The purpose of this course is to provide a mechanism for students with a strong interest in research to become involved in one of the departmental research labs early in their academic careers. Students showing promise as an undergraduate researcher during their freshman year will be nominated by faculty. If they choose to accept the nomination, they will complete an application for acceptance into this course, and in the process will select a faculty mentor with whom they will work for a minimum of one credit per semester. Upon completion of three credit hours of research in this course, and completion of KINE 40103 and KINE 40793, students will earn the designation of Departmental Research Scholar.

## KINE 30803 - Adapted Physical Activity (3)

Prerequisite: KINE 10603 or consent of instructor; Kinesiology majors only also need KINE 10101. An overview of common disabilities and the relationship to appropriate physical activity experiences. Stress is placed on learning how to develop and adapt programs for individuals with disabilities primarily in school physical and special educational settings.

## KINE 30833 - Physical Activity and Disability (3)

Prerequisite: KINE 10101 and 10603, or instructor permission. An overview of common disabilities and relationship to appropriate physical activity experiences. Emphasis is placed on motor, fitness, and sport needs of persons with disabilities in clinical, therapeutic, and community settings.

## KINE 30843 - Neuromuscular Pathophysiology (3)

Prerequisites: KINE 10101 and KINE 10603. This course provides in-depth information on the pathophysiology of various neuromuscular disorders. An overview of motor control and atypical motor function will be presented as well as principles and clinical presentations of various motor disorders in a selected topics format.

## KINE $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## KINE 40003 - Senior Honors Research (3)

Prerequisites: Admission to the Honors College and senior standing, and KINE 30003 and 40103. The second of two courses required for Departmental Honors in Kinesiology. In this course, the candidate will carry out a program of research under the direction of a faculty member. The student will conduct the actual research project, which includes the collection, analysis, interpretation, and presentation of the data. The results of the research must be presented in poster format at the Harris College Research Symposium, and in the form of a paper written in research report format. Credit will not be given for both KINE 40003 and 40793.

## KINE 40102 - Clinical Education V (2)

Prerequisite: ATTR majors only. The review and evaluation of selected National Athletic Trainers' Association educational competencies and clinical proficiencies.

## KINE 40103 - Seminar in Kinesiology (3)

Prerequisite: Junior or senior MOSC or SPPS majors, or instructor permission. An examination of current issues in the field of Kinesiology. Emphasis is on a critical examination of research processes, and the application of research finds relevant to disciplines within Kinesiology.

## KINE 40202 - Clinical Education VI (2)

Prerequisite: ATTR majors only. The review and evaluation of selected National Athletic Trainers' Association educational competencies and clinical proficiencies.

## KINE 40301 - Senior Seminar in Athletic Training (1)

Prerequisites: ATTR majors only. KINE 30303, 30313, 40523, and 40533. This course will serve as a comprehensive overview of athletic training. This
course will provide the senior level athletic training student the opportunity to synthesize coursework and discuss the care of athletic injuries from the time of injury until return to play. An overview and discussion of national, district, and state athletic training organizations will also be included.

KINE 40303 - Organization and Administration in Athletic Training (3) Prerequisite: ATTR majors only. This course provides the student with the background and skills necessary to administer and manage an athletic training program. Topics such as athletic training program management, budget, insurance, facility design, legal issues, and ethics in the profession of athletic training will be discussed.

## KINE 40313 - Individual and Dual Sports (3)

Prerequisite: KINE 10101 and 10603, or instructor permission. The development of knowledge, skill and play relative to selected individual and dual sports and activities in the field of Physical Education and recreation. Focuses on phases of skill development and teaching progression.

KINE 40343 - Team and Group Sports (3)
Prerequisite: Kinesiology majors only need KINE 10101. The development of knowledge, skill, and play relative to selected team and group sports and activities in the field of Physical Education and Recreation. Focuses on various phases of skill development and teaching progression.

## KINE 40503 - Fitness Programming (3)

Prerequisites: KINE 10603 and KINE 30503 or consent of instructor. Kinesiology majors only also need KINE 10101. Theoretical and practical applications of exercise assessment and exercise prescription in commercial fitness, community fitness, and cardiac rehabilitation.

## KINE 40513 - Principles of Strength and Conditioning (3)

Prerequisites: KINE 30523 or instructor permission. This course will provide students with the theoretical and practical applications of strength training and conditioning. The successful students will acquire a level of proficiency in the development of sport and event specific strength and conditioning programs and plans based upon: athlete / client specific fitness assessment characteristics, sports specific performance demands; and individual performance optimization. Programs shall be based upon the performance requirements associated with the specific sport or event and include, but not be limited to: musculoskeletal symmetry, strength, and flexibility; body composition; cardiovascular endurance, and nutritional recommendations.

KINE 40523 - Therapeutic Modalities (3)
Prerequisite: ATTR majors only. KINE 20203 or instructor permission. The purpose of this course is enhancement of the athletic training student's understanding of the proper role of physical agents in the rehabilitation of sports related injuries. Emphasis is placed in the physiological effects, indications and contraindications, and clinical application of thermal, electrical, and mechanical agents. Appropriate selection of modalities for therapeutic intervention in connective tissue repair will be discussed.

## KINE 40533 - Therapeutic Exercise (3)

Prerequisite: ATTR majors only. KINE 30303, KINE 30313, KINE 40523, or instructor permission. This course is designed to teach the student to plan and implement sport-specific functional rehabilitation programs. Emphasis is placed on development of comprehensive, individualized rehabilitation protocols incorporating open and closed kinetic chain activities, proprioceptive training techniques, plyometrics, core stability, and other functional activities based on predetermined therapeutic goals and objectives.

## KINE 40543 - Advanced Strength and Conditioning (3)

Prerequisites: KINE 10101, KINE 30634, KINE 40513. This course examines the function and adaptability of the various physiological systems involved in training for and participation in sport and tactical physical activity. Further, this course examines the role training (resistance, anaerobic, and aerobic conditioning) plays, with special emphasis on manipulation of variables associated with training in improving performance. In addition, nutritional intake, ergogenic aids, and overtraining are covered within the context of their effects on human performance.

KINE 40623 - Physical Education for Secondary School Youth (3) Prerequisite: KINE 10101, KINE 10603 and KINE 20403, or instructor permission. Examination of scope and value of Physical Education in the secondary schools. Factors essential to curriculum planning and instruction included. On-site clinical experiences.
KINE 40633 - Teaching Outdoor Education in the Secondary School (3) Prerequisites: KINE 10101 andKINE 20403. This course will prepare students to teach a state outcome-based outdoor education course in the secondary public schools. It will prepare students in the areas of group and individual
initiatives, low and high ropes initiatives, leadership activities, orienteering and overnight camping skills.

## KINE 40661 - Athletic Training Internship (1)

Prerequisites: ATTR majors only, and instructor permission. Internship opportunity that allows student to gain additional experiences in various Athletic Training settings. Internships are during the summer and require approval by the Athletic Training Program Director.

## KINE 40700 - Practicum in Adapted Physical Activity (3)

Prerequisite: Instructor permission. This course will provide hands-on teaching opportunities at schools servicing a variety of individuals with disabilities. Students will participate in the planning and implementation of appropriate physical activity programs. On-site clinical experiences.

## KINE 40713 - Global Perspectives in Health: Ireland (3)

Prerequisites: must be a student in Harris College. This course examines the cultures of Ireland in a combined local/international setting. Social and scientific factors as related to health beliefs and practices and health care delivery systems of Ireland will be examined from an interprofessional perspective. Critical analysis of selected topics will be accomplished. Open to all majors in the Harris College. This course will be taught during the spring semester with travel occurring over spring break.

KINE 40760 - Practicum in Kinesiology (1.00-20.00)
Prerequisite: Senior standing and consent of department. Kinesiology majors only also need KINE 10101. Practical experience in an area of Kinesiology ( $1-3$ semester hours.)

KINE 40780 - Special Problems in Kinesiology (1.00-20.00)
Prerequisite: Senior standing and permission of department. Individual study involving research or other scholarly work in Kinesiology under the direction of a faculty member (1-3 semester hours.)

KINE 40793 - Senior Research in Kinesiology (3)
Prerequisite: Senior standing and consent of department. Students work with individual faculty on a research project in an area of interest. The project involves formation of hypotheses, collection of data, and data analysis and interpretation.

## KINE 40903 - Senior Internship (3)

Prerequisite: Senior standing, a minimum of a 2.5 GPA in the major, and approval of the Kinesiology Department internship coordinator. Internship for the movement based professions. Students work with local professionals in an area related to their career interest.

KINE 50970 - Special Topics in Kinesiology (1.00-20.00)
Prerequisite: Approval of adviser and course instructor.

## LTNO - Latina o Studies

LTNO 20003 - Introduction to Latina/o Studies (3)
This course is an introduction to the study of characteristics and experiences of the Latina/o community in the United States. As we review the historical, social, political, religious, anthropological aspects, among others, we will evaluation the diversity within the community in order to locate this group within the United States society. Finally, we will concentrate on topics that are relevant to this group, like immigration, transnationalism, popular culture, among others.

## MANA - Management

MANA 10533 - Interpersonal Influence in Business (3)
Topics may vary each time it is offered.
MANA 20153 - Legal and Social Environment of Business (3)
3 hours. Prerequisite: Sophomore standing and must be a Pre-business major or student for whom the course is required by their major/minor. Legal and social aspects of business. Legal aspects and social impacts of common business transactions. The course is designed to assist the future business person in the design and implementation of policies within the legal and social framework and to create awareness of the government pitfalls which would require professional advice.

## MANA 20653 - Business Law for Minors (3)

3 hours. Prerequisites: Business minor and ACCT 20653 with minimum grade of C ". This course will examine legal issues that arise in the course of doing business. Following an introduction to court systems and dispute resolution, the course will examine various business torts, contract law, the law of
principal and agent, intellectual property, employment law and securities regulation."

MANA 20970 - Special Problems in Management (1.00-6.00)
(1-6 semester hours) This course may be repeated for credit.
MANA 20990 - International Residential Study (1.00-6.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MANA 30153 - Organizational Management (3)

3 hours. Prerequisite: Junior standing, and must be a declared Business major. Tasks of the manager are studied in the context of his/her role as an administrative decision maker. Emphasis placed on understanding the organization as a system where the manager needs to examine a variety of variables in order to arrive at problem solutions. Management processes, system concepts, models for decision making, and behavioral concepts involving motivation, leadership, group activity, conflict and change are covered. Students may not receive credit for both MANA 30153 and MANA 30653.

## MANA 30303 - Entrepreneurial Leadership (3)

Prerequisites: MANA 30153 with a grade of at least C, and must be a business major. This course cannot be taken for credit by students admitted to or enrolled in the BNSF Next Generation Leadership Program. This course is designed to give Entrepreneurial Management majors an understanding of leadership processes that underlie the survival, effective functioning and self-determination of new and growing businesses. To this end, we will examine a number of topics that reflect key individual- and organizationalissues, and critical leadership competencies for entrepreneurs.

MANA 30533 - Entrepreneurial Opportunity Recognition (3) 3 hours. Prerequisites: must be a Business major. Students may not receive credit for both MANA 30533 (Entrepreneurial Opportunity Recognition) and MANA 30773 (Entrepreneurship and Energy). The course provides an indepth overview of the challenges involved in identifying and systematically evaluating opportunities for creating new ventures across a wide range of contexts, including startups, social enterprises, and large, established corporations.

## MANA 30653 - Survey of Management (3)

Prerequisites: Junior standing; must be a business minor or receive departmental approval; completion of ACCT 20653 or concurrent enrollment. Students may not receive credit for both MANA 30653 (Survey of Management) and MANA 30153 (Organizational Management.) Survey of Management is a required course within the business school minor that exposes students to the basic knowledge and skills that future managers will need to be effective. A student in this course will learn about the environment of business and the issues facing modern managers and employees such as how to engage in effective decision making, planning, and strategic processes that help guide organizations; how to best organize and manage organizations for maximum effectiveness; how to lead and motivate employees and how to work in teams. Students will learn about these components through a combination of assigned readings, in-class exercises, case studies, and team projects.

## MANA 30703 - Business in Emerging Economies (3)

Prerequisites: Sophomore standing; must be a business minor, or receive permission of the department. The course will provide students with foundational experience in countries with emerging economies. The goal is to provide understanding of how to do business in countries with emerging economies and how businesses operate in the base of the pyramid. Specific attention will be provided to the culture of entrepreneurship. This course is not intended for business majors.

## MANA 30773 - Entrepreneurship and Energy (3)

3 hours. Students may not receive credit for both MANA 30533
(Entrepreneurial Opportunity Recognition) and MANA 30773
(Entrepreneurship and Energy). This course provides insight into the entrepreneurial process with a focus on the Energy Industry. Students are introduced to the entrepreneurial approach for solving problems and developing solutions. Specific areas of coverage include identification of entrepreneurial opportunities, marshaling resources, entrepreneurial leadership, entrepreneurial finance, and the management of rapid growth.

MANA 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian

University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MANA 39990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MANA 40030 - Senior Honors Research Paper (1.00-3.00)

1-3 hours. Prerequisite: Honors Section of MANA 30153, and must be a Business major. Preparation for and completion of a research paper in the student's area of concentration in business under the direction of an assigned staff member. May be taken for up to three hours.

## MANA 40123 - Managing the Emerging Venture (3)

3 hours. Prerequisites: ACCT 20153, ACCT 20163, MARK 30153, MANA 30153, with a grade of at least a C" in MANA 30153, and must be a Business major. Includes coverage of aspects involved in operating a small business including accounting, financial controls, management and human resource practices, marketing and customer development, production, service level quality, and legal issues."

## MANA 40143 - New Venture Development (3)

Prerequisites: MANA 30153 with at least a grade of C" or better or concurrent enrollment, MANA 30533 with a grade of " C " or better and must be a Business major. The focus is on strategic assessment and preparing plans capable of attracting necessary financing for new entrepreneurial ventures. Successful implementation and the preparation and use of pro forma financial statements as a management tool are emphasized. Students will work through the process of developing a business plan for an entrepreneurial venture."

## MANA 40153 - Strategic Management (3)

3 hours. Prerequisite: Senior standing, Business major, MANA 30153, MARK 30153, FINA 30153, and INSC 30153 or INSC 30313. Students are strongly encouraged to enroll in this class during their final two semesters before graduation. This is the final integrating course for the senior business student. The policies and problems of management with respect to coordination of production, finance, marketing, human resources and accounting in a going concern under conditions of uncertainty.

## MANA 40163 - Ventures in Transition (3)

3 hours. Prerequisites: A business major and MANA 30533 with at least a grade of $C^{\prime \prime}$. This course examines the changes likely to affect an entrepreneurial venture as it matures. The focus of the course is on how to effectively manage the growth of an entrepreneurial venture. Other implications of growth will also be discussed, such as changes in the strategy of the venture, performance downturns, sale or liquidation of the business, acquisition of another business, and initial public stock offerings."

MANA 40203 - Strategic Human Resource Management (3)
3 hours. Prerequisite: MANA 30153 with a grade of at least C, and must be a Business major. The study of how organizations strategically align people practices to business strategy to gain competitive advantage. Explores key HR levers available to managers in the development of an effective work system, including: design of jobs, hiring selectively and for fit (staffing), investing in people (training and development), participation and involvement (team-based systems), performance management (and information sharing), design of incentives (compensation), employee separation, and employment law.

## MANA 40223 - International Management (3)

3 hours. Prerequisite: MANA 30153 with a grade of at least C, and must be a Business major. In an increasingly interconnected world, companies find themselves on the one hand forced to contend with a host of new competitors, but on the other hand facing a broad range of new opportunities for expansion abroad. This course addresses both the pitfalls and opportunities that await mangers tasked with setting a direction for their organizations in this changing environment.

## MANA 40233 - Family Business (3)

Prerequisites: MANA 30153 with a grade of at least C-" and must be a Business major. Entrepreneurial ventures often evolve into a family business. This course will explore the characteristics, unique strengths and specific challenges of family business. This includes issues of the next generation leaders, the legacy family members, the non-family employees, external service providers and governance of the family business itself."

## MANA 40313 - Values-Centered Entrepreneurship (3)

Prerequisites: MANA 30153 with a grade of at least C- and must be a Business major. Sustainable values-centered enterprises aim to address a vast array of economic and social problems, or leverage beneficial opportunities for relevant stakeholders, in an entrepreneurial fashion. This course is designed to introduce students to social and values-centered enterprises and provide them with the tools to contribute to the field through the generation of realworld solutions to socioeconomic problems or opportunities. The course will draw on some of the most accomplished practitioners of sustainable enterprising, as well as on historical and contemporary models to explore the unique range of issues and challenges facing a values-centered enterprise.

MANA 40333 - Corporate Entrepreneurship (3)
Prerequisites: MANA 30153 and MANA 30533, both with a grade of at least C, and must be a Business major. Corporate entrepreneurship refers to entrepreneurship within existing for-profit or not-for-profit organizations. It is the practice of seeking innovative uses, markets, or owners of the organization's existing products, services, and technologies. It draws the creativity of the organization's personnel to new business possibilities that go beyond the current business model of the organization. It engages the entrepreneurial spirit in spawning a new vision from within the organization. By imparting impart proven, useful, and effective techniques for managing innovation and entrepreneurship within corporations, this course will position students to participate in the economic renewal of their companies, and potentially, their cities, states, and nations. Students will further learn to recognize organizational challenges; create innovative, value oriented solutions; and sell those solutions to management.

MANA 40633 - Principles of Negotiation (3)
3 hours. Prerequisites: MANA 30153 with a grade of C , and must be a business major. Study of distributive and integrative/principled methods of negotiation in interpersonal and intraorganizational contexts. Includes such topics as negotiation strategies, tactics, preparation, social structure, power, ethics, coalition building, and multi-party and international negotiations. Conflict resolution techniques that incorporate negotiation (such as mediation) will also be covered.

## MANA 40653 - Survey of Entrepreneurship (3)

3 hours. Prerequisites: A minimum grade of C" in both ACCT 20653 and MANA 30653 and must be a business minor. This course introduces the student to the field of entrepreneurship. Students will learn about the individual entrepreneur, the importance of new venture creation, business plan development, and the different aspects of the creation, maintenance, and growth of a new venture over time. Students will learn about these components through a combination of assigned readings, in-class exercises, and individual and team projects."

## MANA 40703 - International Management Study Abroad (3)

3 hours. Prerequisites: permission of instructor is required, must be a business major. The objective of the class is to expose students to different aspects of entrepreneurship, leadership, management, and business legal issues from an international perspective. The course provides the opportunity to study variations in business practices and experience distinct cultures in stark clarity in an international setting. Students will have the opportunity to experience topically relevant practices, for example by visiting local firms and interacting with business people in order to obtain a firsthand understanding of the impact of global influences. This course may be repeated for credit.

## MANA 40753 - Managing Business Ethics (3)

3 hours. Prerequisites: MANA 30153 with a least a grade of C", and must be a declared business major. This course addresses ethical conduct and social responsibility in organizations. A multi-level approach to ethical decisionmaking is explored. Students will apply individual, managerial, and organizational analyses to ethical dilemmas faced in the conduct of business."

MANA 40970 - Special Problems in Management (1.00-6.00)
(1-6 semester hours) This course may be repeated for credit.

## MARK - Marketing

MARK 10533 - Freshman Seminar in Business: Interpersonal Influences in Business (3)
3 hours. Prerequisite: First semester freshman only. Developing interpersonal influence skills for business. Includes coverage of interpersonal skills involved in personal selling, leadership, and management. Specific components include fundamentals of selling, the value of selling, making a sales presentation, leadership styles, building consensus, building
commitment, team building, conflict resolution, negotiation, and ethical issues of interpersonal influence.

MARK 20990 - International Residential Study (1.00-6.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MARK 30113 - Marketing Research (3)

3 hours. Prerequisites: Grade of C-" or higher in MARK 30153; INSC 20153, and must be a Business major. Obtaining market information; orientation in use of information gathered; role of management in initiating market studies and in defining problems; types of research; research design; questionnaire construction; sampling; analysis; motivation research; and product research."

MARK 30153 - Marketing Management (3)
3 hours. Prerequisite: Sophomore standing, and must be a Business major. The processes in our society by which needs and wants of consumers are anticipated and satisfied. An examination of a systems approach to and analysis of the movement of goods from the point of production to the point of consumption.

## MARK 30233 - Marketing Tools and Applications (3)

3 hours. Prerequisite: Grade of C-" or higher in MARK 30153, a grade of "C-" or higher in MARK 30113, and must be a Business major. To expose students to the analytical applications underlying many of the strategic marketing tools discussed at a conceptual level in lower-level marketing courses. The course will be taught from the perspective of the marketing tool such as segmentation, with students' learning the relevant data analysis application, such as cluster analysis, to execute the marketing activity. In addition to working through the analysis, analysis interpretation and relating results and recommendations to marketing management (i.e. decision makers) will also be covered."

## MARK $\mathbf{3 0 2 4 3}$ - Customer Insights (3)

Prerequisites: Grade of 'C-' or higher in MARK 30153; must be a Business major. The most complex aspect of marketing is understanding the mind and heart of the consumer. If consumer behavior was easy to explicate, then all products would sell as well as projected, all ads would be effective, economies would be efficient, and marketing would be a simple prospect. In actuality, consumers are frustrating and irrational and difficult to predict. This course focuses on providing you with the basic tools to gain insights into consumer behavior.

## MARK 30253 - Sports and Entertainment Marketing (3)

Prerequisites: MARK 30153 with a grade of C - or higher and be a declared business major. Sports and Entertainment Marketing will build upon a marketing knowledge base and provide an overview of the issues faced by marketing managers both inside the sports and entertainment industry and outside the industry from firms that market through sports and entertainment. Students will introduced to the unique qualities of the sports product and also examine the promotion mix, pricing, and distribution issues as they relate to the sports industry.

## MARK 30653 - Principles of Marketing (3)

Prerequisites: Must be a business minor; completion of ACCT 20653 or concurrent enrollment. Students may not receive credit for both MARK 30153 and MARK 30653. This course introduces the theory and practice of marketing, including the basic structure of getting products/services to market; the fundamentals of marketing: consumer research, product planning, promotion of all types, distribution channels, pricing, and retail merchandising. The content will focus on marketing activities in consumer, reseller, industrial, government, and service markets. This course is not for business majors.

MARK 30703 - Consumption and Culture:Marketing Study Abroad (3) 3 hourse. Prerequisites: Permission of instructor; must have at least sophomore standing. An intensive, on-site study of marketing practices abroad. Sites include Europe, Asia, Central America,and South America. This course may be repeated for credit when taken at a different site and may not be taken pass/no credit.

## MARK $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MARK 39990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MARK 40030 - Senior Honors Research Paper (1.00-3.00)

1-3 hours. Prerequisite: Honors Section of MANA 30153 and must be a Business major; Preparation for and completion of a research paper in the student's area of concentration in business under the direction of an assigned staff member. May be taken for up to three credit hours.

## MARK 40103 - Digital Marketing (3)

Prerequisites: A grade of 'C-' or higher in MARK 30153 and must be a business major; a grade of 'C-' or higher, or concurrent enrollment in both MARK 30113 and MARK 30243. As more money gets shifted away from traditional media and into digital marketing, it is important that students understand how digital marketing gets integrated into marketing strategy, branding, and integrated marketing communication concepts. Broadly, digital marketing refers to everything that an organization does online to support its business. This can include display advertising, social media, social media monitoring, search engine optimization and search engine marketing and other emerging ones as they develop. However, the primary objective will be to examine:(1) driving business with digital marketing, (2) linking strategy to tactics, and (3) measuring outcomes and results.

## MARK 40203 - Marketing Strategy (3)

3 hours. Prerequisites: A grade of C-" or higher in MARK 30153 and must be a business major; a grade of "C-" or higher in MARK 30113 (Marketing Research) and a grade of "C-" or higher or concurrent enrollment in MARK 30243 (Customer Insights). Taught primarily through case analysis, the emphasis is on the analysis, planning, implementation and control of marketing systems, policies, programs and actions in domestic and international settings. A comprehensive marketing analysis and plan will also be developed and presented by students working in teams. Enrollment by permission only."

## MARK 40213 - International Marketing (3)

3 hours. Prerequisites: A grade of C-" or higher in MARK 30153 and must be a business major; a grade of "C-" or higher in MARK 30113 (Marketing Research) and a grade of "C-" or higher or concurrent enrollment in MARK 30243 (Customer Insights). This course introduces the field of international marketing and provides a broad perspective from which to explore and examine various aspects of what changes when firms compete internationally. Half the course focuses on unique aspects of the international marketing environment; half concentrates on how the marketing mix is affected by the globalization of markets and competitors."

## MARK 40223 - Services Marketing (3)

3 hours. Prerequisites: A grade of C-" or higher in MARK 30153 and must be a business major; a grade of "C-" or higher in MARK 30113 (Marketing Research) and a grade of "C-" or higher or concurrent enrollment in MARK 30243 (Customer Insights). The primary objective of this course is to prepare students to be successful marketers in an increasingly service-oriented economy. The course is designed to help students understand the unique characteristics of services, the marketing challenges created by these characteristics, and effective ways to address these challenges. Examines marketing strategies unique to public and private, for-profit and not-forprofit services marketing organizations."

## MARK 40233 - Marketing Communications and Social Media (3)

Prerequisites: A grade of C-" or higher in MARK 30153 and must be a business major; a grade of "C-" or higher in MARK 30113 (Marketing Research) and a grade of "C-" or higher or concurrent enrollment in MARK 30243 (Customer Insights). Course explores the strategic, organizational, process, and implementation issues involved in coordinating all forms of marketing communications--traditional advertising, direct marketing, interactive, public relations, sales promotion, personal selling, event marketing, and every other contact point with a target market."

## MARK 40243 - Product Innovation and Brand Management (3)

Prerequisites: A grade of C-" or higher in MARK 30153 and must be a business major; a grade of "C-" or higher in MARK 30113 (Marketing Research) and a grade of "C-" or higher or concurrent enrollment in MARK 30243 (Customer Insights). Companies must continuously develop and bring to the market new and improved products. We will study new product planning and management of both goods and services. New Product planning and management of the product Portfolio are essential activities in all companies, and involve various business functions and external partners. We look at the
concepts and applications involved in managing an organization's brand portfolio. An understanding of new product planning and brand portfolio management is an essential capability for many positions in business."

## MARK 40253 - Sales Management (3)

3 hours. Prerequisites: A grade of C-" or higher in MARK 30153 and must be a business major; a grade of "C-" or higher in MARK 30113 (Marketing Research) and a grade of "C-" or higher or concurrent enrollment in MARK 30243 (Customer Insights). An examination of the basic principles involved in personal selling and the administration of this function in the organization. Emphasis is placed on the sales executive's job, the duties and responsibilities, and the various roles played as an important participant in the making of marketing decisions."

## MARK 40263 - Personal Selling (3)

Prerequisites: A grade of C-" or higher in MARK 30153 and must be a business major; a grade of "C-" or higher in MARK 30113 (Marketing Research) and a grade of "C-" or higher or concurrent enrollment in MARK 30243 (Customer Insights). There are several learning objectives for students in Personal Selling. Primary to the course is the student's mastery of communication and presentation skills in the interpersonal and formal speaking environments. One part of the course covers the text materials providing the student with a background in the fundamental aspects of persuasive communications, overcoming objections, and presentation planning. Once these topics are mastered, the student then executes a persuasive and formal sales presentation, which is videotaped and critiqued. Also, this course is designed to provide an understanding of the sales process and its role in business (and non-business) organizations and society. The student is expected to acquire a working knowledge of sales concepts and terminology pertinent to the field. You will explore the nature of the sales process and its functions, including presentation strategy,informative delivery, closing techniques, and an exploration of the various opportunities in sales as a career. We will also cover areas such as personal attire, speaking skills, and interpersonal transactions. Your most important assignment in this class is to sell yourselfand to do that you must believe in the product."

## MARK 40273 - Advanced Personal Selling (3)

Prerequisites: Grades of 'C-' or higher in both MARK 30153 and MARK 40263, and must be a declared business major. This class will seek to prepare students more fully for excellence in an entry-level professional selling position. Specifically, students will gain advanced instruction and skill development in interpersonal communication skills (especially in team selling situations), career management, personal productivity, negotiation, and coordination with other functional areas.

## MARK 40653 - Principles of Marketing Communications (3)

Prerequisites: Grade of C" or better in both ACCT 20653 and MARK 30653, and must be a business minor. This course introduces the ways in which a firm communicates with its target markets. These forms of communications include advertising, promotion, point-of-purchase, public relations, personal selling, and direct marketing tools. We will be concerned with these from a marketing management perspective and will, therefore, examine topics such as the situation analysis, the use of research tools, consumer behavior theory, setting objectives, positioning, and developing and integrating an underlying strategy for developing effective marketing communications programs."

## MARK 40663 - Principles of Personal Selling (3)

Prerequisites: Grade of C" or higher in both ACCT 20653 and MARK 30653; must be a business minor. Principles of Personal Selling is an introductory course to the area of sales. Primary to the course is the student's mastery of communication and presentation skills in the interpersonal and formal speaking environments. One part of the course covers the text materials providing the student with a background in the fundamental aspects of persuasive communications, overcoming objections, and presentation planning. Once these topics are mastered, the student then executes a persuasive and formal sales presentation, which is videotaped and critiqued."

## MARK 40700 - Marketing Study Abroad (3)

3 hours. Prerequisites: A grade of C-" or higher in MARK 30153 and must be a business major; a grade of "C-" or higher in MARK 30113 (Marketing Research) and a grade of "C-" or higher or concurrent enrollment in MARK 30243 (Customer Insights). An intensive, on-site study of marketing practices abroad. Sites include Europe and Mexico. This course may be repeated for credit."

## MARK 40713 - Ad Competition (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses, plus STCO 45413 (Channel Planning), STCO 35503
(Research) and STCO 35413 (Creative Strategy). Campaign participants are selected after an application process. For Marketing majors: senior standing and permission of instructor. Students research, plan, create, execute and evaluate an advertising campaign for a national client, as part of the American Advertising Federation National Student Advertising Competition. Crosslisted as MARK 40713.

MARK 40970 - Special Problems in Marketing (1.00-20.00)
1-3 hours. Prerequisites: A grade of C-" or higher in MARK 30153 and must be a business major; a grade of "C-" or higher in MARK 30113 (Marketing Research) and a grade of "C-" or higher or concurrent enrollment in MARK 30243 (Customer Insights). This course may be repeated for credit."

## MATH - Mathematics

## MATH 10033 - Topics in Mathematics (3)

Prerequisite: MATH 10023 or two years of high school algebra and one year of geometry. A selection of topics of general interest and some degree of applicability, such as apportionment, voting methods, graph theory, tilings and polyhedra, mathematics of finance, probability, and statistics.

## MATH 10043 - Elementary Statistics (3)

Prerequisite: MATH 10023 or two years of high school algebra. Empirical frequency distributions, binomial and normal distributions. Regression and correlation. Statistical inference. Students may not receive credit for both MATH 10043 and INSC 20153.

## MATH 10054 - Precalculus with Trigonometry (4)

Prerequisites: MATH 10023 or 2 years of high school algebra and one year of geometry. Precalculus treatment of polynomial, rational, exponential, logarithmic, and trigonometric functions with particular emphasis on topics needed for MATH 10524. Note: Credit will not be given for both MATH 10273 and MATH 10054. Note: This course does not satisfy the core mathematical reasoning requirement.

## MATH 10273 - Applied Precalculus (3)

Prerequisites: MATH 10023 or two years of high school algebra. Precalculus treatment of polynomial, rational, exponential and logarithmic functions. Additional special applications from the mathematics of finance and probability. NOTE: Credit will not be given for both MATH 10054 and MATH 10273. This course does not satisfy the core mathematical reasoning requirement.

## MATH 10283 - Applied Calculus (3)

Prerequisite: MATH 10273 with a grade of C- or better, or MATH 10054 with a grade of C- or better, or high school precalculus and a score of 600 or higher on the SAT Math exam. The elements of calculus, with applications to business and economics. Note: credit will not be given for both MATH 10283 and MATH 10524.

## MATH 10524 - Calculus I (4)

Prerequisite: MATH 10054 with a grade of C- or better, or AP Calculus AB or BC score of 3 or better, or SAT Subject Test (SAT II), Mathematics Level 1 (1C) with a score of 560 or better, or SAT Subject Test (SATII), Mathematics Level 2 (IIC) with a score of 520 or better, or a passing grade on the Calculus Placement Test. Differential and integral calculus of elementary functions, including exponential, logarithmic, and trigonometric functions. Applications. Note: credit will not be given for both MATH 10283 and MATH 10524.

## MATH 20043 - Mathematics for Elementary Teachers (3)

Prerequisites: Completion of the Core curriculum Mathematical Reasoning requirement. A mathematics content course for EC-6 Education Majors. The basic foundations of mathematics will be stressed in the development of problem-solving skills and an understanding of the operations and properties of the real number system and basic topics in geometry. Note: this course may not be counted toward a major or minor in Mathematics, nor does it satisfy the core mathematical reasoning requirement.
MATH 20053 - Mathematics for Middle School Teachers I (3)
Prerequisites: completion of the Core Curriculum Mathematical Reasoning requirement. A mathematics content course for Middle School Mathematics Education Majors. Topics will be selected from: an introduction to mathematical reasoning, sets, relations and functions, development of the real number system, systems of enumeration, change of base, elementary number theory. Note: May not be counted toward a major or minor in mathematics. This course does not satisfy the core mathematical reasoning requirement.
MATH 20063 - Mathematics for Middle School Teachers II (3)

Prerequisite: Completion of the Core Curriculum Mathematical Reasoning requirement. A mathematics content course for Middle School Mathematics Majors. Topics will be selected from: an introduction to the geometry of polygons, circles, polyhedra and spheres, transformations, similarity, constructions, measurement, coordinate geometry, networks, logic. Note: may not be counted toward a major or minor in mathematics. This course does not satisfy the core mathematical reasoning requirement.

## MATH 20123 - Discrete Mathematics I (3)

Prerequisite: MATH 10054 or 10273 or 10283 or MATH 10524 with a grade of C- or better; high school precalculus and a score of at least 600 on the SAT Math exam or at least 24 on the ACT Math exam. An introduction to discrete methods used in mathematics and computer science. Topics covered include formal logic, sets, the principle of inclusion-exclusion, functions, proof techniques including mathematical induction, number theory, algorithms, and combinatorics.

## MATH 20524 - Calculus II (4)

Prerequisite: MATH 10524 with a C- or better. Techniques of integration and applications. Infinite series. Differential equations as time permits.

## MATH 20970 - Special Topics (1.00-3.00)

1-3 semester hours.
MATH 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MATH 30000 - Honors Seminar (1.00-20.00)

Prerequisite: MATH 30224 or permission of the instructor. 1-3 semester hours.

## MATH 30123 - Discrete Mathematics II (3)

Prerequisite: MATH 20123 with a C- or better. Continuation of MATH 20123. Topics covered include combinatorics, recurrence relations, equivalence relations, graphs and trees.

## MATH 30133 - Symbolic Logic I (3)

An introduction to the scope and limits of modern logic. The nature of logical systems and the various areas of logic are discussed. Alternative proofprocedures in propositional logic and predicate logic are presented. (Crosslisted as MATH/PHIL 30133.)

MATH 30143 - Symbolic Logic II (3)
Prerequisite: PHIL 30133. A continuation of 30133, with an emphasis on predicate logic, nonstandard logic, and metalogic. (Crosslisted as MATH/PHIL 30143.)

## MATH 30224 - Linear Algebra (4)

Prerequisite: MATH 10524 and either MATH 20123 or MATH 20524, all with a C- or better. Vector spaces, linear independence, bases, and dimension. Linear mappings, matrices, and determinants. Eigenvalues and eigenvectors, diagonalization.

## MATH 30524 - Calculus III (4)

Prerequisite: MATH 20524 with a C- or better. Vector calculus and multiple integration. Optimization and Lagrange multipliers. Vector fields and potential functions. Gradient, curl, and divergence. Line and surface integrals. The theorems of Green, Stokes, and Gauss, as time permits.

## MATH 30603 - Interest Theory (3)

Prerequisite: MATH 20524 with a C- or better. A rigorous development of the theory of interest in both discrete and continuous time. Present value, yield rates, compound interest, amortization, and cash flows. Selected financial applications to bonds and securities.

## MATH 30613 - Differential Equations (3)

Prerequisite: MATH 20524 with a C- or better. Solution techniques for ordinary differential equations. Systems of differential equations. Mathematical modeling and applications.
MATH 30623 - Interest Theory II (3)
Prerequisites: MATH 30603 with C- or better. Treatment of bonds and yield rates, stocks and financial markets, arbitrage, the term structure of interest rates, options and swaps, and topics in interest rate sensitivity including duration, convexity and immunization.
MATH 30803 - Probability (3)

Prerequisite: MATH 20524 with a C- or better. Probability theory.
Permutations, combinations, elementary probability, and the binomial theorem. Discrete and continuous probability distributions in single variable and joint variable settings.

## MATH 30853 - Statistics (3)

Prerequisites: MATH 20524 or 30803, either with a C- or better. Organization and analysis of data. Descriptive statistics. Confidence intervals and hypothesis testing. As time permits, topics in regression, analysis of variance, nonparametric statistics, sampling methods.

## MATH $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

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## MATH $\mathbf{3 1 1 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MATH 40000 - Undergraduate Research (1.00-3.00)

Prerequisite: twelve semester hours of mathematics. ( $1-3$ semester hours).
MATH 40353 - Topology (3)
Prerequisite: MATH 30224 and 30524 both with C- or better. Topological spaces, bases, connectedness, compactness. Continuous functions and homeomorphisms. Separation properties. Product and quotient spaces. Metric spaces.

## MATH 40403 - Higher Geometry (3)

Prerequisites: MATH 20524 with a grade of 'C-' or better. Classical geometric constructions. The basic concepts of Euclidean Geometry and analytic geometry. An introduction to non-Euclidean geometry as time permits. Geometry software applications for each of these topics.

## MATH 40603 - Actuarial Mathematics (3)

Prerequisites: MATH 30524 and 30803 , both with a C- or better. Applications of calculus, probability, and statistics, emphasizing problems in risk management and insurance.

## MATH 40621 - Actuarial Internship (1)

Prerequisites: 2.75 GPA in major, completion of either MATH 30603 or MATH 40603, and approval of department chair. Practical experience in the actuarial field. Must include a minimum of 90 work hours in an approved practical experience situation. This course may only be taken pass/no credit and may be repeated up to a total of 3 credit hours.

## MATH $\mathbf{4 0 6 2 3}$ - Actuarial Internship

Prerequisites: 2.75 GPA in major, completion of either MATH 30603 or MATH 40603, and approval of department chair. Practical experience in the actuarial field. Must include a minimum of 260 work hours in an approved practical experience situation. This course may only be taken pass/no credit.

## MATH 40663 - Numerical Analysis (3)

Prerequisite: MATH 20524, 30613 both with C- or better, and competence in a high-level programming language. Interpolation. Solution of nonlinear equations. Numerical integration and differentiation. Approximate solutions to ordinary differential equations.

## MATH 40801 - Mathematics Internship (1)

Prerequisites: At least five Mathematics courses counting toward a Mathematics major with at least a 2.75 GPA in these course and approval of Department Chair. Students must spend at least 90 hours in approved practical work experience. This course may only be taken pass/no credit and is repeatable up to a total of 3 credit hours.

## MATH 40970 - Special Topics (1.00-20.00)

Prerequisite: MATH 30524 or permission of the instructor. 1-6 semester hours.

## MATH 50073 - History of Mathematics (3)

Prerequisites: MATH 20524 with a C- or better. A survey of the history of mathematics from ancient times to contemporary times. The selection of topics may vary from semester to semester, but topics closely related to contemporary mathematics are usually emphasized.

## MATH 50253 - Abstract Algebra I (3)

Prerequisites: MATH 20123 and 30224, both with a C- or better. Introduction to groups and rings. Homomorphisms, isomorphisms, subgroups, and ideals. Quotient and product structures.

## MATH 50323 - Differential Geometry (3)

Prerequisites: MATH 30224 and 30524, both with a C- or better. Calculus on Euclidean space. Geometry of curves and surfaces.

## MATH 50403 - Complex Analysis (3)

Prerequisites: MATH 30524 with a C- or better. Analytic functions, harmonic functions, and the Cauchy-Riemann equations. Conformal mappings.
Cauchy's integral theorem and formula, with applications. Power series and analytic continuation.

## MATH 50503 - Real Analysis I (3)

Prerequisites: MATH 20123, 30224 and 30524, all with a C- or better. A rigorous development of elementary limit processes. Continuity, sequences, series, differentiation, integration.

## MATH 50613 - Partial Differential Equations (3)

Prerequisites: MATH 30613 and 30524, both with a C- or better. Basic theory of hyperbolic, parabolic, and elliptic partial differential equations.

## MATH 50623 - Applied Mathematics I (3)

Prerequisites: MATH 30224, 30524 and 30613 , all with a C- or better. Selected topics, such as linear and nonlinear systems, equilibria, Fourier series, computational graph theory, optimization and linear programming, calculus of variations, complex integration.

## MATH 50703 - Number Theory (3)

Prerequisites: MATH 20123 and 30224, both with a C- or better. Properties of the integers. Divisibility, prime numbers, modular arithmetic, Chinese Remainder Theorem, Diophantine equations.

## MEDA - Media Arts

## MEDA 50113 - Producing for Film and Video (3)

Seminar assesses the role of the producer in the film and video industry. All phases of production will be examined, including budgeting, financing, rights acquisition, and managing the production.

MEDA 50553 - The Full-Length Screenplay (3)
Opportunity to develop, write, and revise a full-length original script. Includes theoretical models of scriptwriting, development of rough scenarios, beat outlines, first drafts, and revisions.

## MEDA 50613 - Directing (3)

This course explores video and film directing on an advanced level. Combines the examination of techniques used by feature film directors. All phases of the directing process are examined from selecting a script, rehearsal, principal photography, and post-production.

## MILS - Military Science

## MILS 10001 - Leadership Lab (1)

Fall/Spring. One class per week. This course facilitates the development of leadership skills while giving practical experience in military skills. Areas of emphasis include drill and ceremonies, squad level tactics, first aid and land navigation. Advanced Course cadets conduct the training and lead the cadet battalion under cadre supervision. A weekend field training exercise and weekly physical fitness training are included in the course.

## MILS 10041 - Introduction to Leadership I (1)

Fall. One class per week. A progressive overview of the U.S. Army to include its history, its organization, its customs and courtesies, its strategic mission, dynamic structure, and methods of tactical deployment. Included is a field trip, where students are exposed to on- and off-duty Army life and have the opportunity to observe new combat arms lieutenants in action.

## MILS 10081 - Introduction to Leadership II (1)

Spring. One class per week. Fundamentals of basic tactics to include movement techniques, battle drill/assault techniques, squad tactical control measures, land navigation, and first-aid training. Designed to give the student an initial level of tactical proficiency and a degree of leadership training.
MILS 20042 - Basic Leadership I (2)
Fall. One class per week. Challenges the student to become tactically and technically proficient. Students study the military element of power, learn
and practice first aid, use light infantry tactics, and gain a fundamental knowledge of map reading. Prerequisite: Concurrent or past enrollment in MILS 10041 or permission of the department chair.

## MILS 20092 - Basic Leadership II (2)

Spring. One class per week. This course prepares students to be positive and assertive leaders and conduct instruction through the study and application of basic military leadership principles. Includes leadership assessment training and student classroom presentations. Prerequisite: Concurrent or past enrollment in MILS 10041 Introduction to Military Science or permission of the department chair.

## MILS 20970 - Special Topics in Military Science (1.00-20.00)

Fall/Spring. Special study opportunities as directed by the Department Chairman. ( $1-6$ semester hours.)

MILS 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MILS 30053 - Intermediate Leadership I (3)

Fall. One class per week. Students learn effective counseling, writing, and human relation skills necessary to positively influence human behavior. Students develop confidence and leadership experience in addition to land navigation skills and tactical proficiency. Group participation and exposure to leadership reaction situations. Prerequisite: Basic Course or equivalent credit.

MILS $\mathbf{3 0 0 6 3}$ - Intermediate Leadership II (3)
Spring. One class per week. An analysis of the leader's role in directing and coordinating the efforts of individuals and organizations. This professional block of instruction involves student role modeling and analysis of controversial leadership case situations. Students practice and learn the necessary skills to take charge when responsible, as well as control and positively influence personnel under stressful situations. Additional professional skills are also taught. Prerequisite: Completion of MILS 30053 or permission of department chair.
MILS $\mathbf{3 0 9 7 0}$ - Directed Studies in Military Science (1.00-20.00)
Fall/Spring. Opportunity for independent study as directed by the instructor prior to enrollment. ( $1-6$ semester hours)

MILS $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MILS 40053 - Advanced Leadership I (3)

Fall. One class per week. Designed to review the mission and structure of the Army as well as discuss its professional and social aspects. The course focuses on oral and written communication skills, counseling techniques, evaluation, and reporting procedures, as well as introducing the combined arms concept. Prerequisite: Completion of MILS 30053 and 30063 or permission of department chair.

## MILS 40063 - Advanced Leadership II (3)

Spring. One class per week. An examination of the dynamics of modern warfare from the perspective of the combat battalion task force. The integration of maneuver forces, air power, intelligence, logistics, and air mobility by a ground combat commander is studied in both practical exercise and case studies. A variety of other subjects relating to staff procedures and command and control are covered. Prerequisite: Completion of MILS 30053 and 30063 or permission of department chair.

## MOLA - Modern Languages

## MOLA 30023 - Introduction to Linguistics (3)

Prerequisite: Junior standing. Survey of major areas of linguistics: sound systems, language universals, and language in society as well as an introduction to psycholinguistics and how the brain processes language.

MOLA 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian

University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MOLA $\mathbf{3 9 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MUSI - Music

## MUSI 10003 - Fundamentals of Music Literacy (3)

Rudiments of music including notation, intervals, scales, harmony, and form.

## MUSI $\mathbf{1 0 0 1 0}$ - Wind Symphony (0.5)

Wind Symphony.

## MUSI 10020 - Percussion Ensemble (0.5)

Percussion Ensemble.

## MUSI 10021 - Class Guitar (1)

Elementary techniques of playing and teaching guitar for music education majors.

## MUSI $\mathbf{1 0 0 3 0}$ - Choral Union (0.5)

The Choral Union is a non-auditioned ensemble open to all members of the TCU community. Weekly rehearsals will focus on vocal, musical and ensemble development. The ensemble is designed to accommodate singers of all abilities. 0.5 hours credit per semester.

MUSI 10033 - Survey of Jazz and Popular Music (3)
The study of the evolution of Jazz as an American art form, including the study of American popular music. Not available to music majors and minors for degree credit.

## MUSI 10040 - Concert Chorale (0.5)

Concert Chorale.
MUSI 10043 - Music in Northern Italy: The Impact of Place and Proportion upon Creation and Performance (3)
This course will focus upon musicas a by-product of environment. Music produced to be performed in certain buildings and under certain circumstances in Florence and Venice will be studied and analyzed relative to these places and influences.

## MUSI 10051 - String Instrument Technique I (1)

Elementary techniques of playing and teaching violin, viola, cello, and bass for music education and composition majors.

## MUSI 10053 - Survey of Music (3)

An introduction to musical ideas and compositions, intended to give an understanding of the major developments in the music of western civilization. Not available to music majors or minors for degree credit.

## MUSI 10060 - University Singers (0.5)

Prerequisite: Must be a vocal music education major or have permission of instructor through an audition.

## MUSI 10061 - String Technique II (1)

Prerequisite: MUSI 10051 or demonstrated proficiency on a string instrument as approved by the instructor. Continuation of elementary techniques of playing and teaching violin, viola, cello, and bass for music education and composition majors.

## MUSI 10063 - World Music (3)

An introduction to the variety of musics found in cultures around the world outside the Western art music tradition. Not available to music majors or minors for music degree credit.

## MUSI 10070 - Vocal Jazz Ensemble (0.5) <br> Vocal Jazz Ensemble.

MUSI 10071 - Percussion Technique (1)
Elementary techniques of playing and teaching percussion instruments for music education majors.

MUSI 10073 - From Rock to Bach (3)

A survey of current popular and classical musical styles and genres in the United States. Topics include rock, folk, jazz, blues, gospel, country and western, musical theatre, film music, music of and beyond the Americas, and Western European classical music. Emphasis is placed on the sequential development of substantive listening and descriptive skills. Not available to music majors for degree credit.

## MUSI 10080 - Chamber Music (0.5)

Chamber Music.

## MUSI 10081 - Functional Instrumental Technique (1)

Introduction to string, brass, woodwind and percussion instructional techniques for vocal concentration music education majors.

## MUSI 10083 - Introduction to Film Music (3)

Introduction to Film Music is an overview of the history and aesthetics of the cinematic soundtrack. Through lecture, discussion, reading, and listening, students will examine the evolution of film music, its composers and their musical styles. Students will also learn about the different elements of music and how the film composer uses them to support and enhance the film narrative.

## MUSI 10090 - Woodwind Ensemble (0.5)

Woodwind Ensemble.

## MUSI 10091 - Yoga for Musicians (1)

Prerequisite: must be a Music major. This course is a pass/no credit course. The course focuses on flexibility, balance, strength, and relaxation. Using postures and breathing exercises adapted to each person's individual level, students will develop improved alignment, breathing, and a balanced body/mind. Students will unite these elements to aid in performance anxiety, posture, phrasing, and other activities inherent to their particular instrument. Limited discussion may include ways to incorporate yoga techniques into the students' daily activities, particularly in practice, rehearsal, and performance. This class is designed to accommodate both those who are new to yoga practice, as well as those with some experience.

## MUSI 10100-Opera Studio (0.5)

Opera Studio.

## MUSI 10110 - Marching Band (0.5)

Marching Band.

## MUSI 10120-Symphony Orchestra (0.5)

Symphony Orchestra.

## MUSI 10130 - Cantiamo (0.5)

The TCU Cantiamo (Women's Choir) is an ensemble dedicated to performance of quality treble repertoire. Majors and non-majors are encouraged to participate. No audition is required for participation. The ensemble performs a minimum of two concerts per semester.

## MUSI $\mathbf{1 0 1 4 0}$ - Frog Corps (0.5)

Frog Corps is a non-auditioned male ensemble that serves as a spirit group for the university campus. Performances include traditional concerts with other university ensembles, appearances at athletic events, and presentation at university and community social occasions.

## MUSI 10150 - New Music Ensemble (0.5)

The ensemble performs mixed chamber music primarily composed during the past 25 years.

## MUSI 10160 - Brass Ensemble (0.5)

Brass Ensemble.
MUSI 10170 - Undergraduate Collaborative Piano (0.5)
Undergraduate Collaborative Piano

## MUSI 10171 - Diction for Singers (1)

Introduction to the International Phonetic Alphabet and its application to the study of Liturgical Latin, Italian, and English Iyric diction.
MUSI 10180 - Collegium Musicum (0.5)
Collegium Musicum.
MUSI 10181 - Diction for Singers (1)
Prerequisite: MUSI 10171 or permission of instructor. Application of International Phonetic Alphabet to the study of German and French Iyric diction.
MUSI 10190 - Jazz Ensemble (0.5)
Jazz Ensemble.

A study of the techniques of jazz improvisation through performance. May be repeated for maximum of 4 hours credit.

## MUSI 10201 - Elementary Ear Training (1)

Melodic, harmonic, and rhythmic dictation; sight-singing.

## MUSI 10203 - Elementary Theory (3)

Musical notation and definitions, intervals, scales and keys. Emphasis on writing four-voice exercises in major and minor keys using triads and dominant sevenths. Harmonic analysis. Keyboard harmony.

## MUSI 10210 - Symphonic Band (0.5)

Symphonic Band.

## MUSI 10211 - Elementary Ear Training (1)

Prerequisite: MUSI 10201. Continuation of MUSI 10201.

## MUSI 10213 - Elementary Theory (3)

Prerequisite: MUSI 10203. Continuation of MUSI 10203, including study of suspensions and other non-chord tones, the remaining diatonic seventh chords and secondary functions. Harmonic analysis, as well as study of cadences, phrases and periods. Keyboard harmony.

## MUSI 10220 - Concert Band (0.5)

The Concert Band provides students from all academic disciplines with a creative and positive music-making environment with a limited rehearsal schedule. A wide range of musical styles is offered, and opportunities are provided for music majors to develop on their secondary instruments.

## MUSI 10223 - Basic Music (3)

Fundamentals of music performance, composition and listening.
Appropriate for elementary education majors. Not open to music majors and minors.

## MUSI 10271 - Performers Certificate Collaborative Piano I (1)

Practical, comprehensive introduction to all aspects of accompanying a wide variety of vocal and instrumental music. Main topics include development of sight reading and ensemble skills, techniques for rehearsing and working with others in performance, and general concepts of the philosophy of performance.

## MUSI 10281 - Performers Certificate Collaborative Piano II (1)

Performers Certificate Collaborative Piano II

## MUSI 10350 - TCU Cello Ensemble (0.5)

Study and performance of music for cello ensemble

## MUSI 10360 - TCU Harp Ensemble (0.5)

Prerequisites: Instructor's permission required. The study and performance of music for harp ensemble.

MUSI 10433 - Freshman Seminar in Music (3)
Topics may vary each time it is offered.

## MUSI 10511 - Introduction to Music Education (1)

This course is an introduction to a variety of facets of music teaching and pedagogy through observation, reading and discovery experiences. Students will become acquainted with elements of learning and teaching. Micro-teaching experiences will be provided.
MUSI 10601 - Introduction to Performance for Singers (1) Prerequisites: Acceptance in Bachelor of Music Education, Bachelor of Music, or Bachelor of Arts degree plan in Voice. A systematic introduction to the multiple skill sets required of the effective vocal performer and exploration of artistic and practical aspects of the performer's world.

## MUSI 11000 - Recital/Concert Attendance (0)

Music majors are required to attend a minimum of 15 concerts and recitals each semester, with the exception of the student-teaching semester for Music Education majors. Six (6) of these concerts must be from the weekly School of Music Recital Hour Series. The remainder may be chosen from faculty and guest artist recitals, TCU and guest ensemble concerts, and student recitals. Students will submit original printed concert programs signed by a TCU School of Music faculty member in attendance. This course activity is an important element in the development of critical listening skills. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## MUSI 11021 - Introduction to Piano for the Non-Musician (1)

Introduction to Piano for the Non-Musician is a laboratory class which meets twice weekly, designed to teach beginning piano to the college-age student. No previous experience with music or piano is necessary. Classes meet in a piano laboratory setting. The study of piano follows the School of Music
mission to affirm music as an integral part of a classic liberal arts education. Not available to music majors or minors for degree credit.

## MUSI 11030 - Class Piano (0)

Beginning piano for non-keyboard music majors who are preparing to pass the basic piano requirement. (This course is only offered as P/NC.)

## MUSI 11031 - Piano for the Non-Musician (1)

Prerequisites: Completion of MUSI 11021 or permission of instructor. Continuation of MUSI 11021.

MUSI 11040 - Class Piano (0)
Prerequisite: MUSI 11030. Continuation of MUSI 11030. (This course is only offered as P/NC.)

## MUSI 20051 - Class Voice (1)

Class instruction designed to train students in vocal technique and literature.

## MUSI 20071 - Functional Piano (1)

Prerequisite: Keyboard, Piano Pedagogy and Music Education piano concentration majors only; MUSI 10201, 10203, 10211, 10213 and two semesters 20201. Functional keyboard skills for keyboard majors, including transposition, harmonization, score-reduction, improvisation

MUSI 20081 - Functional Piano (1)
Prerequisite: MUSI 20071. Continuation of MUSI 20071.

## MUSI 20082 - Piano Chamber Music Performance I (2)

Prerequisite: Sophomore standing in music or permission of instructor. Intensive study of selected works of chamber music with piano. Emphasis on developing the musical and interactive skills needed for chamber music through rehearsal and performance. Weekly coaching with faculty.
MUSI 20182 - Piano Chamber Music Performance II (2)
Prerequisite: MUSI 20082 or permission of instructor.
MUSI 20201 - Advanced Ear Training (1)
Prerequisite: MUSI 10211. Increasingly difficult melodic and rhythmic dictation. Harmonic dictation including seventh chords and modulations. Sight-singing of single line, two-voice, and four-voice music.
MUSI 20203 - Advanced Theory (3)
Prerequisite: MUSI 10213. Modulatory techniques, simple binary and ternary forms, modal mixture, and chromatic chords. Harmonic analysis and compositional exercises. Keyboard harmony.
MUSI 20211 - Advanced Ear Training (1)
Prerequisite: MUSI 20201. Continuation of MUSI 20201.

## MUSI 20212 - Piano Repertoire and Performance I (2)

Prerequisite: Sophomore standing in music or permission of instructor. A workshop class for pianists in which selected works of the piano literature are performed, analyzed and discussed. Special focus is on the etude and its development. Class members perform assigned works and present individual reports on topics relating to the music.

## MUSI 20213 - Advanced Theory (3)

Prerequisite: MUSI 20203. Continuation of MUSI 20203, including tonal harmony in the late 19th century and an introduction to 20th century practice. Harmonic analysis and compositional exercises. Keyboard harmony.

## MUSI 20311 - Field Experience in Music (1)

Observation of and interaction with music students of elementary and middle school age and study of the characteristics of successful teachers.

## MUSI 20412 - Composition I (2)

Prerequisite: MUSI 10203, 10213 and declared major or minor in theory/composition. Beginning compositional exercises in tonal genres with emphasis on basic chromatic usage in short keyboard, vocal, and rondo forms.

MUSI 20422 - Composition II (2)
Prerequisite: MUSI 20203 and declared major or minor in
theory/composition. Continuation of MUSI 20412. Compositional exercises in tonal genres with emphasis on advanced chromatic usage in short keyboard and vocal forms as well as in small chamber ensembles.

MUSI 20511 - Analytical Listening for Vocal Conductors (1)
Auditory skills course for choral music education majors. Skills: analysis of vocal tone quality, detection of discrepancies in pitch and rhythm, analysis and solutions of problems in intonation, blend, and balance. Lab required.

Prerequisite: Sophomore standing, music major or permission of instructor. Conducting patterns, preparation, cues, release, and technical and expressive movements applicable to vocal and instrumental conductors.

## MUSI 20611 - Marching Band Techniques and Design (1)

Marching band methods, techniques, and design tools will be presented in a lecture format. Each student will be given opportunity to teach and learn techniques that are presented as well as practice computer assisted design.

## MUSI 20613 - History of Western Music I (3)

Prerequisite: Successful completion of MUSI 20203 or permission of instructor. This course is designed to help students understand the position of music in history, contributions to musical thought, and the development of musical style in Western culture to the mid-seventeenth century through a detailed study of music literature.

## MUSI 20990 - International Residential Study (1.00-20.00)

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## MUSI 21030 - Class Piano (0)

Prerequisite: MUSI 11040. Continuation of MUSI 11040. (This course is only offered as P/NC.)

## MUSI 21040 - Class Piano (0)

Prerequisite: MUSI 21030. Continuation of MUSI 21030. (This course is only offered as P/NC.)

MUSI 21081 - Artist Diploma Pre-Baccalaureate Collaborative Piano (1)
Prerequisite: Enrollment in the Artist Diploma Program. Study and performance of advanced repertoire for the collaborative pianist, including accompaniment and chamber music. Emphasis on developing the musical and interactive skills needed for collaborative playing through rehearsal, coaching, and performance.

## MUSI 30003 - History of Music (Honors) (3) <br> History of Music (Honors)

## MUSI 30052 - Beginning Piano Pedagogy (2)

Prerequisite: Junior standing in music and in piano. Introduction to methods, materials and techniques employed in the teaching of beginning piano students. Establishing and managing a piano studio public relations, equipment and layout, professional memberships, budget and tax information, studio policy and teacher-student-parent roles. Lecture and observation.

## MUSI 30062 - Intermediate Piano Pedagogy (2)

Prerequisite: MUSI 30052. Examines materials for the intermediate piano student method books, standard piano repertoire, theory and technique, jazz and ensemble works. Also focuses on practice motivation, recital preparation, and auditions, festivals and contests. Also deals with teaching preschool and adult beginners. Lecture and observation.

## MUSI 30151 - Woodwind Technique I (1)

Elementary techniques of playing and teaching clarinet for music education majors.

## MUSI 30161 - Brass Technique I (1)

Elementary techniques of playing and teaching trumpet for music education majors.

## MUSI 30162 - Acting for Singers (2)

Corequisite: Concurrent enrollment in MUSI 10100 Opera Studio is required. Acting for Singers is an introduction to acting for opera and musical theatre. The course is a combination of lecture and discussion along with dramatic and musical exercises and activities based on the classical approach to acting.

## MUSI 30171 - Woodwind Technique II (1)

Elementary techniques of playing and teaching woodwind instruments for music education majors.

## MUSI 30181 - Brass Technique II (1)

Elementary techniques of playing and teaching brass instruments for music education majors.

MUSI 30202 - Form and Analysis (2)

Prerequisites: MUSI 20211, 20213. Structural analysis of simple and compound part forms, rondo, sonata and fugue. Emphasis on the standard designs found in instrumental music from Bach on.

## MUSI 30222 - Modal Counterpoint (2)

Prerequisite: MUSI 20213. Counterpoint in the style of the 16th century including ecclesiastical modes, melodic structure, two-part exercises, threepart textures, cadences, paraphrase technique and canon.

## MUSI 30232 - Counterpoint (2)

Prerequisite: MUSI 20213. Counterpoint in the style of the 18th century including melodic structure, two-part texture, chromaticism, invertible counterpoint, two-part invention, three-part texture, imitation, three-part invention, the trio sonata, fugue, chorale and contrapuntal variation forms.
MUSI 30312 - Instrumentation (2)
Prerequisites: MUSI 20211, 20213. Practical consideration of techniques, capabilities and effective uses of orchestral and band instruments in various combinations. Arranging and scoring.

MUSI 30313 - Elementary Music (3)
Vocal and instrumental expression, rhythmic activities, critical listening, creative experience, and music reading. Course appropriate for pedagogy students.

## MUSI 30322 - Orchestration (2)

Prerequisite: MUSI 30312. Project-based application of concepts learned in MUSI 30312 to music arranging and composition.

## MUSI 30332 - Marching Band Arranging (2)

Prerequisites: MUSI 20203/20213, 30312, or permission of instructor. Study in technique of scoring for the contemporary marching band.

## MUSI 30342 -J azz Arranging (2)

Prerequisites: MUSI 20203/ 20213, 30312, or permission of instructor. Study in technique of scoring for the modern jazz orchestra.

## MUSI 30343 - Electro-Acoustic Music (3)

Prerequisite: Music major or permission of instructor. An investigation of basic acoustic and electronic principles, psychoacoustics, audio recording principles and techniques, the function and operation of music studio equipment including microphones, digital audio workstations, audio editing and effects software, synthesizers, mixers and MIDI devices with an introduction to synthesis techniques utilizing synthesizers and computers.

## MUSI 30420 - Composition (1.00-6.00)

Prerequisite: MUSI 20412 or permission of instructor. Advanced private study in composition. Primarily intended for composition majors. 1-10 semester hours.

## MUSI 30512 - Choral Conducting (2)

Prerequisite: MUSI 20512. Technique of the baton, score reading, tone production, rehearsal routines, vocal materials, organization problems, supervised practice in conducting chorus. Meets choral conducting requirements for secondary school teachers.

MUSI $\mathbf{3 0 5 2 2}$ - Instrumental Conducting (2)
Prerequisite: MUSI 20512. Instrumental conducting technique, score reading and analysis, supervised practice conducting ensembles. Meets instrumental conducting requirements for secondary school teachers. Lab required.
MUSI $\mathbf{3 0 6 0 2}$ - World Music for Music Majors (2)
Prerequisites: Junior-level standing as a music major, or permission of instructor. This course serves as an introduction for music majors to the variety of musics found in cultures around the world outside the Western art music tradition.

## MUSI 30613 - History of Western Music II (3)

Prerequisite: Successful completion of MUSI 20613 or permission of instructor. Exploration of musical genres, forms, composers, and styles in Europe and the New World from the mid-seventeenth to the late nineteenth century.

## MUSI $\mathbf{3 0 6 2 3}$ - History of Western Music III (3)

Prerequisite: Successful completion of MUSI 30613. Historical and cultural overview of trends in Western music from the late nineteenth century to the present, addressing topics including art" music, jazz, and popular music."

## MUSI 30713 - Service Playing and Repertory (3)

Prerequisite: Permission of instructor. Organ and choral works in the church music program. Practical performance of anthems, motets, small cantatas. Modulation and transposition. Sacred wedding music. Accompanying and sight reading. Directing from the console.

MUSI 30723 - Hymnology (3)
Prerequisite: Permission of the instructor. The history of the congregational song from the Old Testament to the present. Emphasis on understanding the historical development with practical application for worship in the decade of the 1990s. No musical training is necessary for non-music majors.

MUSI 30812 - Instrumental Organization and Administration (2) Prerequisite:Junior standing. Development and administration of instrumental music organizations in the secondary school with emphasis on musical aptitudes, teaching comprehensive musicianship, rehearsal techniques and administration of the beginning middle school band and marching band. Lab required.

MUSI 30822 - Instrumental Organization and Administration (2)
Prerequisite: MUSI 30812. Development and administration of instrumental music organizations in the secondary school with emphasis on administration, advanced band, orchestra and jazz band. Lab required.

MUSI $\mathbf{3 0 9 1 2}$ - Choral Organization and Administration (2)
Prerequisite: Junior standing. Study of secondary choral curriculum. Includes vocal and choral techniques, audiation, music reading, choral literature, style and history related to choral music, planning and appraisal and information about UIL and other realities of secondary teaching. Lab required.

MUSI $\mathbf{3 0 9 2 2}$ - Choral Organization and Administration (2) See course under Music Education.

## MUSI 30970 - Directed Study in Music (1.00-6.00)

Prerequisite: Permission of instructor. Specialized work in student's area of concentration. 1-6 Hours

## MUSI 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MUSI 34990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## MUSI 40003-Senior Honors Research Project (3)

Prerequisites: Senior standing and MUSI 30613, 30623 Honors. Under the guidance of a faculty committee, the student will present an Honors Project, e.g., Lecture/Recital, Composition, Research Paper.

MUSI 40033 - Instrumental Performance Pedagogy (3)
Prerequisite: Junior or senior standing as an instrumental performance major. The study and analysis of teaching music literature; teaching concepts and the practical application of these concepts; the comparisons of the schools of performance/teaching methods.

## MUSI 40052 - Group Piano Pedagogy (2)

Prerequisites: Senior standing in music and piano; MUSI 30052, 30062. Explores group piano instruction at all levels pre-K through grade 12, adult non-credit, college non-music majors and music majors. Texts, supplementary materials, electronic instruments; teaching techniques and group dynamics. Lecture, observation and supervised teaching.

## MUSI 40062 - Piano Teaching Internship (2)

Prerequisites: MUSI 40052. Each student will teach two piano pupils for the semester, culminating in an evaluation and recital. Weekly classes serve as a forum for discussion of problems and exchange of ideas, as well as the examination of current trends and research in piano pedagogy. Lecture, observation and supervised teaching.

## MUSI 40063 - Voice Pedagogy (3)

Prerequisite: Upper division standing in vocal performance or vocal concentration. Methods and materials for teaching voice. Lecture, demonstration and observation.

## MUSI 40212 - Piano Repertoire and Performance II (2)

Prerequisite: Senior standing in music or permission of instructor. A workshop class for pianists in which the piano works of a major composer are performed, analyzed and discussed. Class members perform assigned works and present individual reports on topics relating to the music.

## MUSI 50053 - Introduction to Voice Pedagogy (3)

Prerequisite: Appropriate undergraduate degree in Music or Music Education or permission of instructor. Introduction to science, methods, and materials of voice pedagogy. Acoustics, breathing, attack, registration, resonance, vowels, articulation, and coordination of singing.

## MUSI 50063 - Comparative Voice Pedagogy (3)

Prerequisite: MUSI 50053 or equivalent and permission of instructor. Comparisons of research results and concepts of voice pedagogy across national styles, bel canto treatises, 19th century sources, contemporary methods, and artist statements. Students are encouraged to develop their own practical studio procedures in harmony with the common ideals of Western artistic voice culture.

MUSI 50081 - Business Practices for the Independent Music Teacher (1) Prerequisite: Senior or graduate standing. The lecture course will address business practices needed to successfully establish and maintain an independent music studio. The course will discuss business models, selfemployment issues, studio organization, record keeping, tax concerns, marketing, recruiting, and retaining students. Reading and research assignments and preparation of materials will provide the basis for learning.

## MUSI 50203 - Musical Structure and Style (3)

Prerequisites: MUSI 30202. Study of musical style and structure through the analysis of music; organized chronologically from 1750 to the present.

## MUSI 50212 - Choral Conducting (2)

Prerequisites: Senior or graduate standing, MUSI 30512 or 30522, keyboard facility or permission of instructor. Materials and techniques for the experienced choral director.

## MUSI 50222 - Instrumental Conducting (2)

Prerequisite: MUSI 30522; keyboard facility; or permission of instructor. Baton technique and its application to selected works of symphonic and operatic literature

MUSI 50303 - History of Sacred Music (3)
Prerequisite: Junior or Senior standing or permission of instructor. A historical survey of sacred music from ancient times to the twentieth century.

MUSI 50403 - Symphonic Literature (3)
Prerequisite: Senior or graduate standing. Historical development of the orchestra and its repertoire, with emphasis on the symphony.

MUSI 50413 - Survey of Opera Literature (3)
Prerequisite: Graduate standing or approved seniors with Music 30613, 30623. Operatic masterpieces from 1600 to the present with emphasis on selected works of Mozart, Verdi, Wagner, Puccini, Britten and others.

## MUSI 50423 - Choral Literature (3)

Prerequisite: Graduate standing or approved seniors with Music 30613, 30623. The various forms in the field of choral literature with detailed examination of representative works.
MUSI 50433 - Keyboard Literature I Pre-Baroque through Classical (3) Prerequisite: Junior, senior or graduate standing. Historical development, structural and stylistic elements, as well as performance practices of music for keyboard instruments from the pre-Baroque through the Classical periods.

MUSI 50443 - Ethnomusicology (3)
Prerequisite: Senior or graduate standing. The study of various theories concerning the cultural function of music, exposure to the analytical methods of ethnomusicologists, and the examination of examples from diverse musical cultures.

## MUSI 50453 - Music Criticism (3)

Prerequisite: Senior or graduate standing. Study of selected writings on music criticism and aesthetics from antiquity to the present.

Prerequisite: Successful completion of MUSI 30623 or graduate standing. Variable topics in music of the 20th and 21st centuries.

## MUSI 50473 - Survey of Song Literature (3)

Prerequisite: Senior or graduate standing. A socio-musical examination of the repertoire for solo voice from 1750 to the present, with emphasis on German Lieder, French melodie, and art songs in English. Also, a brief survey of art song literature in Spanish and Eastern European languages, including Russian.

MUSI 50483 - Chamber Music Literature (3)

Prerequisite: Graduate standing or approved seniors with Music 30613, 30623. Consent of instructor. The study of the development of chamber music from its beginnings to the present.

## MUSI 50493 - Music in the United States (3)

Prerequisite: Senior or graduate standing in music. An examination of both cultivated and vernacular music in the United States from the Colonial Era to the present.

## MUSI 50503 - History of Sacred Music

Prerequisites: Senior or graduate standing or permission of instructor. An historical survey of sacred music from ancient times to the twentieth century.

## MUSI 50523 - Linear Analysis (3)

Prerequisite: Graduate standing or approved seniors. Development of structural learning through graphic analysis. Readings on Schenkerian concepts as applied to tonal music.

## MUSI 50533 - Keyboard Literature II Romantic through Contemporary

 (3)Prerequisites: Junior, senior or graduate standing. Historical development, structural and stylistic elements, as well as performance practices of music for piano in the 19th, 20th, and 21st centuries.

MUSI 50970 - Special Problems (1.00-6.00)
Prerequisite: Permission of instructor. Specialized work in student's area of concentration. 1-6 hours.

MUSI 51081 - Artist Diploma Post-Baccalaureate Collaborative Piano (1) Prerequisites: Acceptance to Artist Diploma Program, Post-Baccalaureate. Collaborative Piano course for the Artist Diploma Program in the School of Music.

## MUSP - Music Performance

## MUSP 20110 - Voice (1.00-4.00) <br> Voice

## MUSP 20130 - Applied Voice Technology Lab (1)

Prerequisites: Concurrent enrollment in MUSP 20110. This elective course will further the development of vocal technique through the application of measurable analyses to the coordination of vocal-fold vibration, airflow and resonation factors resulting in the desired chiaroscuro tone. The Kayelemetrics Computerized Speech Lab, the Voce Vista program (in conjunction with electroglottography), and recording and video equipment will be used. In addition to analyzing their own singing in the vocal laboratory, students may examine recordings from their studio lessons, and compare technical strategies of recorded professional singers. All work will be coordinated with the studio teacher

## MUSP 20210 - Piano (1.00-4.00)

Piano
MUSP 20220 - Organ (1.00-4.00)
Organ
MUSP 20230 - J azz Piano (1.00-4.00)
Jazz Piano
MUSP 20240 - Harpsichord (1.00-4.00)
Harpsichord
MUSP 20310 - Violin (1.00-4.00)
Violin
MUSP 20320 - Viola (1.00-4.00)
Viola
MUSP 20330 - Violoncello (1.00-4.00)
Violoncello
MUSP 20340 - Double Bass (1.00-4.00)
Double Bass
MUSP 20350 - Viola da Gamba (1.00-4.00)
Viola da Gamba
MUSP 20360 - Jazz Bass (1.00-4.00)
Jazz Bass
MUSP 20410 - Flute (1.00-4.00)
Flute

MUSP 20420 - Oboe (1.00-4.00)
Oboe
MUSP 20430 - Clarinet (1.00-4.00)
Clarinet
MUSP 20440 - Saxophone (1.00-4.00)
Saxophone
MUSP 20450 - Bassoon (1.00-4.00)
Bassoon
MUSP 20460 - Jazz Saxophone (1.00-2.00)
Prerequisite: permission of instructor. The study and performance of saxophone in the jazz style to include interpreting the written page and improvisation. Emphasis will be placed on developing an authentic sound, style and interpretation of jazz repertoire dating from the 1940's to the present. Instruction consists of one on one interaction between faculty and student and is offered for one or two credit hours.

## MUSP 20510 - French Horn (1.00-4.00)

French Horn
MUSP 20520 - Trumpet (1.00-4.00)
Trumpet

## MUSP 20530 - Trombone (1.00-4.00)

Trombone
MUSP 20550 - Tuba (1.00-4.00)
Tuba
MUSP 20560 - Euphonium (1.00-4.00)
Euphonium
MUSP 20610 - Percussion (1.00-4.00)
Percussion
MUSP 20620 - Jazz Drumset (1.00-4.00)
Jazz Drumset
MUSP 20710 - Harp (1.00-4.00)
Harp
MUSP 20810 - Guitar (1.00-4.00)
Guitar
MUSP 20910 - Jazz Guitar (1.00-4.00)
Jazz Guitar
MUSP 21100 - Secondary Voice (1.00-2.00)
Secondary Voice. (for 1 or 2 hours credit.)
MUSP 30991 - Recital I (1)
Recital I
MUSP 40110 - Voice (1.00-5.00)
Voice
MUSP 40120 - Vocal Coaching (1.00-2.00)
Prerequisites: all Music majors who have been accepted for voice study in MUSP 20110 or 40110; concurrent enrollment in MUSP 40110. 1 or 2 credits. Individual instruction providing an introduction to professional methods used in opera companies and musical theatre for aspiring, professional singers. Students will concentrate on in-depth study of details of text and style, ensuring authentic sounding diction and appropriate stylistic interpretation. Repertoire studied will be that assigned by the studio teacher along with repertoire being prepared for performance on campus and off. Course may be repeated for credit.
MUSP 40130 - Applied Voice Technology Lab (1)
Prerequisites: Concurrent enrollment in MUSP 40110. This elective course will further the development of vocal technique through the application of measurable analyses to the coordination of vocal-fold vibration, airflow and resonation factors resulting in the desired chiaroscuro tone. The Kayelemetrics Computerized Speech Lab, the Voce Vista program (in conjunction with electroglottography), and recording and video equipment will be used. In addition to analyzing their own singing in the vocal laboratory, students may examine recordings from their studio lessons, and compare technical strategies of recorded professional singers. All work will be coordinated with the studio teacher.

MUSP 40210 - Piano (1.00-5.00)
Piano

MUSP 40220 - Organ (1.00-5.00)
Organ
MUSP 40230 - J azz Piano (1.00-5.00)
Jazz Piano
MUSP 40240 - Harpsichord (1.00-5.00)
Harpsichord
MUSP 40310 - Violin (1.00-5.00)
Violin
MUSP 40320 - Viola (1.00-5.00)
Viola
MUSP 40330 - Violoncello (1.00-5.00)
Violoncello
MUSP 40340 - Double Bass (1.00-5.00)
Double Bass
MUSP 40350 - Viola da Gamba (1.00-5.00)
Viola da Gamba
MUSP 40360 - Jazz Bass (1.00-5.00)
Jazz Bass
MUSP 40410 - Flute (1.00-5.00)
Flute
MUSP 40420-Oboe (1.00-5.00)
Oboe
MUSP 40430 - Clarinet (1.00-5.00)
Clarinet
MUSP 40440 - Saxophone (1.00-5.00)
Saxophone
MUSP 40450 - Bassoon (1.00-5.00)
Bassoon
MUSP 40460 - J azz Saxophone (1.00-2.00)
Prerequisites: Completion of 4 semesters of MUSP 20460, or permission of instructor. The continuation of study and performance of saxophone in the jazz style to include interpreting the written page and improvisation.
Emphasis will be placed on maintaining an authentic sound, style and interpretation of jazz repertoire dating from the 1940's to the present. Instruction consists of one on one interaction between faculty member and student and is offered for one or two credit hours.

MUSP 40510 - French Horn (1.00-5.00)
French Horn
MUSP 40520 - Trumpet (1.00-5.00)
Trumpet
MUSP 40530 - Trombone (1.00-5.00)
Trombone
MUSP 40550 - Tuba (1.00-5.00)
Tuba
MUSP 40560 - Euphonium (1.00-5.00)
Euphonium
MUSP 40610 - Percussion (1.00-5.00)
Percussion
MUSP 40620 - J azz Drumset (1.00-4.00)
Jazz Drumset
MUSP 40710 - Harp (1.00-5.00)
Harp
MUSP 40810 - Guitar (1.00-5.00)
Guitar
MUSP 40910 - J azz Guitar (1.00-5.00)
Jazz Guitar
MUSP 40971 - Diploma Recital (1)
Diploma Recital
MUSP 40981 - Diploma Recital (1)

Diploma Recital
MUSP 40991 - Recital II (1)
Recital II

## MUSP 50210 - Artist Diploma Lessons (1.00-6.00)

Prerequisites: Acceptance to Artist Diploma program, Post-Baccalaureate.
MUSP 50961 - Artist Diploma Recital I (1)
Prerequisites: Acceptance to Artist Diploma Program, Post-Baccalaureate. First recital in a sequence of four required for the Artist Diploma program in the School of Music.

## MUSP 50971 - Artist Diploma Recital II (1)

Prerequisites: Acceptance to Artist Diploma Program, Post-Baccalaureate. Second recital in a sequence of four required for the Artist Diploma program in the School of Music.

## MUSP 50981 - Artist Diploma Recital III (1)

Prerequisites: MUSP 50971. Third recital in a sequence of four required for the Artist Diploma program in the School of Music.

MUSP 50991 - Artist Diploma Recital IV (1)
Prerequisites: MUSP 50971. Fourth recital in a sequence of four required for the Artist Diploma program in the School of Music.

## NTDT - Nutritional Sciences

NTDT 10003 - Contemporary Issues in Nutrition (3)
A study of contemporary issues in nutrition and food science that impact the individual and span the global community. Two hours lecture and one twohour laboratory period per week is designed for non-science majors. Course is offered with eCollege components that support learning by multiple instructional formats including lecture, class discussions, lab interactives, group learning projects and oral presentations, and a community servicelearning project. Laboratory interactives will include traditional and computer laboratory exercises.

## NTDT 10103 - Food Preparation (3)

Two 1-hour lectures, one 3-hour laboratory per week. Scientific principles and fundamental processes underlying food preparation with practical application.

## NTDT 10433 - Freshman Seminar in Nutrition Sciences (3)

Topics may vary each time it is offered.

## NTDT 20403 - Nutrition (3)

The science of nutrition integrating physiological, biochemical, and psychological aspects of food ingestion and nutrient utilization. Students will not receive credit for both NTDT 20403 and 10201.

## NTDT 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## NTDT 21163 - Food and Culture (3)

This course addresses the cultural and social meanings of food. It explores the study of world food patterns, including food customs of peoples with different ethnic backgrounds. An emphasis is placed upon the significance of the social, economic, religious, and aesthetic aspects of food customs. Learning activities include lectures, group discussions, film/videos, mapping, cooking demonstrations and food tastings, and individual field experiences.

## NTDT 30001 - Honors Seminar (1)

Prerequisite: Advanced standing in Nutrition Sciences, prior credit or concurrent enrollment in NTDT 40411, and recommendation of the chair. Observe and review honors students' presentations.

## NTDT 30003 - Honors Seminar

Prerequisite: Advanced standing in Nutrition and Dietetics and recommendation of the chair. Studies, reports and discussions of literature related to significant problems and trends in Nutrition and Dietetics. Selection and design of a research project.

NTDT 30101 - Career and Professional Issues in Nutrition (1)
Prerequisites: Nutrition major. An introduction to career and professional options in Nutrition, Academy of Nutrition and Dietetics organization and structure, dietetic registration, and dietetic internship application process.

NTDT 30103 - Gourmet Foods (3)
Two 1-hour lectures, one 2-hour laboratory per week. Planning, preparation and presentation of nutritious, attractive gourmet food, with practical laboratory experiences.

NTDT 30113 - Infant and Child Nutrition (3)
Emphasizes the significance and role of nutrition during pregnancy, lactation, and childhood. Nutritional needs and assessment of mother, infant and children under normal and special circumstances will be discussed Credit cannot be earned for both NTDT 30113 and 30123.

NTDT 30123 - Nutrition Throughout the Life Cycle (3)
A study of the relationship of nutritional requirements to the life cycle, prenatal to old age; cultural and socioeconomic factors related to food with major focus on nutrition and health; nutritional assessment; interrelationships of nutrients; other nutrition related issues such as dental health, weight management, athletic training, drugs and alcohol, government agencies, and nutrition education for all age groups. Credit cannot be earned for both NTDT 30113 and 30123.

## NTDT 30133 - Meal Management (3)

Two 1-hour lectures, one 2-hour laboratory per week. Managing resources in meal planning and preparation; technology of food preservation; identification of market places and legislative concerns; aesthetic and practical experience in a laboratory.

## NTDT 30144 - Quantity Food Production (4)

Three 1-hour lectures and one 3-hour laboratory/supervised practice per week. Prerequisite: NTDT 10103. Advanced study in food preparation emphasizing standards, principles and techniques of producing quality food in quantity. Care and use of equipment, work simplification, menu planning, and basic cost controls.

## NTDT 30163 - Sports Nutrition (3)

Prerequisite: NTDT 20403. Psychological effects of exercise and nutrition on the human body. Current topics of interest, current research, and their relationship to athletic performance.

NTDT 30233 - Essentials of Dietetics Practice (3)
Prerequisites: NTDT 20403, NTDT 30123, CHEM 30123, and BIOL 20214. Emphasizes fundamental knowledge for the Registered Dietitian (RD) and the role of the Registered Dietitian within the health care team. Course content includes the Scope of Dietetics Practice, Code of Ethics, Evidence Analysis Library, Nutrition Care Process, and Medical Nutrition Therapy documentation for enhancing development of skills to perform nutrition assessment, diagnosis, intervention and monitoring/evaluation

## NTDT 30303 - Communication and Education for Food, Nutrition, and

 Dietetics (3)Prerequisite: MANA 30153 or permission of instructor. Introductory communications course with applications in counseling and education with emphasis on developing interpersonal and professional practice skills in food, nutrition, and dietetics.

## NTDT 30306 - Supervised Practice in General Dietetics (6)

Two lecture hours and 14 to 16 hours of supervised practice per week. Prerequisite: Admission to Coordinated Program in Dietetics and concurrent enrollment in NTDT 30303. Introduction to the practice of all aspects of dietetics through weekly observation and participation in foodservice and nutrition care settings.

## NTDT 30313 - Food Systems Management (3)

Prerequisites: NTDT 30144 and 30303. Systems approach to the organization and management of foodservice operations including the functional subsystems (procurement, production, service, and maintenance).

NTDT 30317 - Supervised Practice in Food Systems Management (7)
Two lecture hours and 20 hours of supervised practice per week. Prerequisites: Admission to Coordinated Program in Dietetics and concurrent enrollment in NTDT 30313. Selected problems and supervised practice directly correlated with NTDT 30313.

## NTDT 30331 - Medical Terminology (1)

Prerequisites: NTDT 20403 and 30123. Terminology describing normal anatomical, physiological, and psychological conditions and those related to disease and its treatments. For students entering nutrition, dietetics, and allied health professions. Students must be concurrently enrolled in NTDT 30333 - Medical Nutrition Therapy I or obtain permission from instructor.

NTDT 30333 - Medical Nutrition Therapy I (3)
Prerequisites: NTDT 20403, 30123, 30233, CHEM 30123 and BIOL 20214, or permission of the instructor. Knowledge and skills necessary for
implementation of the Nutrition Care Process and evidence-based nutrition intervention among individuals with physiological and biochemical abnormalities associated with various conditions such as, but not limited to, diabetes mellitus, cardiovascular disease, and gastrointestinal (GI) disorders Study of pharmacology and nutrition support as a component of Medical Nutrition Therapy. Lecture format incorporates case studies to provide skill enhancement.

## NTDT 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## NTDT 30993 - A Global Perspective in Food Insecurity (3)

Corequisite: SOWO 30953. A Global Perspective of Food Insecurity provides students with opportunities to actively engage in critical thinking and problem-solving regarding various food and nutrition issues that affect the global community. With a focus on a study abroad experience in Seville, Spain, students will explore the incidence of food insecurity on a local level (Fort Worth, TX) and the global stage (Seville, Spain), utilizing comparisons and contrasts to make informed judgments. Students will experience cultural immersion by living with local host families and participating in Spanish language classes and cultural activities at the Giralda Center Spanish House in Seville, Spain. Hands-on service-learning will take place at nonprofit community social service agencies. Lectures, assigned readings, field trips, guest speakers, threaded discussions, cultural events are included to expand the global awareness and to develop global responsibility of students. The course is open to all majors and taken concurrently with SOWO 30593; Fluency in Spanish is NOT required.

NTDT 32990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## NTDT 40001 - Senior Honors Research (1)

Prerequisite: Advanced standing in Nutritional Sciences, prior credit or concurrent enrollment in NTDT 40421, and recommendation of the chair. Prepare for oral presentation and present research during Honors Week. Present research to Student Nutrition and Dietetic Association. Prepare written research manuscript under the direction of faculty. .

## NTDT 40003 - Senior Honors Research

Prerequisite: Advanced standing in Nutrition and Dietetics and recommendation of the chair. Preparation of a research paper under the direction of the Nutrition and Dietetics faculty. The paper will be designed to partially fulfill the requirement for Departmental Honors.

## NTDT 40101 - DPD Senior Seminar (1)

Prerequisites: Senior standing in the Didactic Program in Dietetics. This course consists of seminar topics designed for planning and preparation for professional advancement, including Dietetic Internships and graduate school placement.

## NTDT 40333 - Medical Nutrition Therapy II (3)

Prerequisites: NTDT 30333 and CHEM 40503, or permission of the instructor. Physiological and biochemical abnormalities associated with various diseases and disorders. Advanced knowledge and techniques necessary for comprehensive medical nutrition therapy. Discussion of the importance of nutrition intervention and the role of the registered dietitian as a member of the health care team.

## NTDT 40337 - Supervised Practice in Medical Nutrition Therapy (7)

Two lecture hours and 20 hours of supervised practice per week. Prerequisites: Enrollment in Coordinated Program in Dietetics, NTDT 30316 and concurrent enrollment in NTDT 40333. Application of principles of nutritional care in a clinical setting under the supervision of a Registered Dietitian.

NTDT 40343 - Nutritional Biochemistry (3)
Prerequisites: NTDT 20403 and 30123; BIOL 20214; CHEM 30123. Biochemical and physiological mechanisms of nutrition science and metabolism are covered.

NTDT 40353 - Experimental Food Science (3)

Two 1-hour lectures and one 2-hour laboratory per week. Prerequisites: NTDT 20403, CHEM 30123 or permission of instructor. Advanced theory and methods used in study of chemical and physical factors affecting food preparation and processing. Application of analytical methods to sensory and instrumental evaluation of food quality.

## NTDT 40363 - Community Nutrition (3)

Prerequisites: NTDT 30123, 30303, or permission of instructor. Nutritiona problems and the services available in the community. Management of nutrition services, provision of nutrition information to the public, and the legislative process.

## NTDT 40364 - Supervised Practice in Community Nutrition (4)

Two lecture hours and twenty hours of supervised practice per week 8 weeks. Prerequisites: Enrollment in Coordinated Program in Dietetics, NTDT 40337, and concurrent enrollment in NTDT 40363. Supervised experiences in selected community agencies and schools with emphasis on the provision of nutritional services and education.

## NTDT 40373 - Culminating Supervised Practice (3)

Two lecture hours and twenty hours of supervised practice per week 6 weeks. Prerequisite: Enrollment in Coordinated Program in Dietetics, NTDT 40364, and concurrent enrollment in NTDT 40363. Supervised experience while working as an independent staff dietitian in an area of chosen specialty

NTDT 40403 - Research Methods in Nutrition (3)
Prerequisites: Junior or Senior, NTDT 20403, NTDT 30123, and statistics or permission of instructor. Fundamentals of research design in nutrition. Completion of an individual research paper which incorporates proper research design, methodology, analysis, writing style, and writing format utilized in a nutrition research journal. Primarily designed for students with an interest in Nutrition and Dietetics.

## NTDT 40411 - Supervised Practice in Nutrition Research I (1)

Prerequisite: NTDT 30303 or concurrent enrollment. Integration of scientific information and nutrition research into practice. Completion of research training and evidence-based practice tutorials. Completion of research design, including purpose and primary research objectives, null hypothesis, literature review, and research methods/procedures.

NTDT 40413 - Procurement for the Foodservice Operation (3)
Prerequisites: NTDT 30144 and 30313. Managerial functions of purchasing, receiving, storing, and inventory control of materials for foodservice operations. Current economic, legislative, commercial, and industrial developments.

## NTDT 40421 - Supervised Practice in Nutrition Research II (1)

Prerequisite: NTDT 40411, or concurrent enrollment. Integration of scientific information and nutrition research into practice. Completion of a Protocol Review Request for Research. Completion of a nutrition research project using appropriate research methods, ethical procedures, and statistical analysis.

## NTDT 40423 - Advanced Food Systems Management (3)

Prerequisites: NTDT 30144, 30303, and 30313. Advanced study of organization and management of foodservice operations. Financial management, marketing, and system analysis concepts applied to the foodservice industry.

## NTDT 40431 - Supervised Practice in Nutrition Research III (1)

Prerequisites: NTDT 40421, or concurrent enrollment. Integration of scientific information and nutrition research into practice. Compilation of nutrition research into visual materials appropriate for presentation at local, state, and/or national professional meetings. Students will present research poster at the annual TCU College of Science and Engineering Student Research Symposium (SRS) during Honor's Week.

NTDT 40970 - Special Problems (1-8)
Hours to be arranged. Special problems requiring independent research and study within a related area of field experience in food, nutrition, or dietetics. (1-6 semester hours)

## NURS - Nursing

NURS 10303 - Human Development (3)
Open to all majors. Prerequisite: a C or better in PSYC 10213. Introduces the student to principles of growth and development throughout life cycle from conception to death. Provides an overview of the major theories of human development.

NURS 20043 - Professional Role I: Member of the Profession (3)
Prerequisites: BIOL 20204, BIOL 20214, BIOL 20234, NTDT 20403, SOCI 20213 and NURS 10303. This course introduces the student to the profession of nursing through an overview of nursing based on historical, theoretical, political, social, and economic perspectives. Students are introduced to nursing roles, the US healthcare system, ethical decision making, cultural competency, health promotion, standards of practice, and professional accountability.

## NURS 20163 - Pharmacotherapeutics

Prerequisite or concurrent: NURS 10043; concurrent: NURS 20224, 20284. The study of specific classifications of medication and their mechanism of action, pharmacokinetics, pharmacodynamics, indications, contraindications, adverse reactions and nursing implications. The course contains a laboratory component, which addresses basic terminology, mathematical dosage calculations and psychomotor skills employed in medication administration.

## NURS 20231 - Special Problems in Nursing (1)

Supervised study for students who transfer into Nursing or for students who exhibit special needs during the freshman or sophomore years.

## NURS 20263 - Health Assessment: Concepts (3)

Prerequisites: BIOL 20204, 20214, 20234, NTDT 20403, SOCI 20213, and NURS 10303. This course presents an overview of client assessments. It will focus on expected findings, normal variations, and most common unexpected findings for diverse clients. Principles and theories of growth and development throughout lifecycle as they relate to assessment will be discussed. Additionally, there will be an emphasis on communication and interviewing strategies, and techniques to conduct comprehensive and focused assessments as well as the use of standardized assessment tools.

NURS 20271 - Health Assessment: Lab (1)
Prerequisites: BIOL 20204, BIOL 20214, BIOL 20234, NTDT 20403, SOCI 20213, NURS 10303. This course guides the student to perform total and focused assessments and in the use of standardized assessment tools for clients across the life span. The student will practice interviewing, assessing, and documenting findings and applying concepts of human development, cultural and ethnic cultural considerations when performing assessments.

## NURS 20363 - Pathophysiology (3)

Prerequisites: BIOL 20204, BIOL 20214, BIOL 20234, NTDT 20403, SOCI 20213, and NURS 10303. Introduction to abnormal functioning of cells, tissues, organs, and systems over the human lifespan. Clinical manifestations of disease processes will be explored.

## NURS 30002 -Junior Honors Seminar (2)

Prerequisite: Junior status. Students with GPA of 3.4 or above will be invited to enroll. Seminar related to contemporary issues related to health practices and behaviors relevant to professional nursing. Research studies emphasized.

## NURS $\mathbf{3 0 0 6 3}$ - Global Perspectives in Health (3)

The course examines selected cultures in an international setting. Social and scientific factors are related to health beliefs and practices and health care delivery systems of the country visited and examined. Critical analysis of selected topics will be accomplished. Open to all majors. Usually taught in summer abroad program.

## NURS 30163 - Pharmacotherapeutics (3)

Prerequisite: BIOL 20204, BIOL 20214, BIOL 20263, BIOL 20271, BIOL 20363; Concurrent: NURS 30263, NURS 30182, NURS 30171. This course begins the nursing student's education on the concepts of pharmacotherapeutics by establishing a knowledge base that applies to safety, patient care, and education. At the completion of this course, the student will understand the major drug classifications and the nurse's responsibility in relation to medication administration and the nursing process. Basic mathematics skills are also necessary.

## NURS 30171 - Foundations of Nursing Care: Lab (1)

Prerequisites: NURS 20263, NURS 20271, NURS 20363, and NURS 20043. This course introduces basic nursing skills with focus on safe performance of psychomotor skills, safety, communication, professionalism, and critical thinking.

## NURS 30182 - Foundations of Nursing Care: Clinical (2)

Prerequisites: NURS 20263, NURS 20271, NURS 20363, and NURS 20043. This course focuses on basic nursing skills with focus on safe performance of psychomotor skills, safety, communication, professionalism, and critical thinking in the clinical setting.
NURS 30243 - Professional Role II: Member of the Healthcare Team (3)

Prerequisite or concurrent: NURS 20263, NURS 20271, NURS 20363, NURS 20043; ENGL 10803, ENGL 20803. This course introduces and explores the role of the nurse as a member of the interprofessional team within the local and global community. Students are introduced to global health care delivery systems and population health principles. The course includes an emphasis on innovative teaching strategies for diverse learners and emerging uses of technology within the healthcare system.

NURS 30263 - Foundations of Nursing Care: Concepts (3)
Prerequisites: NURS 20263, NURS 20271, NURS 20363, and NURS 20043. This course introduces basic nursing concepts to provide a foundation for nursing practice. Major concepts emphasized are health and wellness, health promotion, nursing process, critical thinking, communication, safety, and education.

NURS 30330 - Directed Study in Nursing (1.00-3.00)
Variable credit, 1-3 hours. Prerequisites: Faculty permission required; junior standing. Directed readings or projects in nursing requiring independent or small group study in consultation with a faculty. (This course is only offered as P/NC.)

## NURS 30331 - Dosage Calculations for Nurses (1)

Prerequisite: NURS 20163 and permission of instructor. A one-semester hour course of supervised study for students who exhibit special needs during the junior or senior year in dosage calculation. Offers instruction to the student who needs continued guided learning and practice in the calculation of dosages and solutions. The student will concentrate on the performance of the necessary math skills for calculation, the importance of accuracy and application to specific kinds of nursing situations. This course is taught as a module during the first 6 weeks of the semester. Course completion can range up to 6 weeks depending on concurrent practicum course enrollment and expectations. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## NURS 30333 - Practicum: Medical Surgical Nursing Elective (3)

Prerequisites: permission of the Director of Undergraduate Nursing and the Director of Nursing. Emphasizes clinical reasoning, quality, and safety in medical surgical nursing. Nursing knowledge and application of nursing concepts are validated and reinforced through skill competencies, simulated patient care, and practicum experiences. This course is offered to selected students based on each student's needs. Department permit required.

## NURS 30340 - Directed Study in Nursing (1.00-3.00)

Prerequisite: Permission of faculty. Designed for students who undertake readings or projects in nursing in consultation with faculty. Letter graded and variable credit of 1-3 credit hours.

## NURS 30503 - Issues in Women's Health (3)

Open to all majors. Prerequisite: Junior status or permission of instructor. An overview of women's health issues using various social frameworks for analysis. Emphases include prevention, self-care, and social parameters of issues related to reproduction, aging, stress, and roles.

## NURS 30533 - Forensic Nursing (3)

Prerequisite: Must be a Nursing major. This course provides an introduction to forensic nursing and prepares the student to recognize and manage forensic patients in the healthcare setting and community at large.

## NURS 30543 - Family Health Nursing (3)

Provides an introduction to family systems theory, family dynamics and their application to practice in nursing and allied health disciplines. Emphasis is on family assessment. Family diversity, families with a chronically ill or disabled member and informal caregiving are examined. Students will critically evaluate family health practices, including hospice, home-based care, and families in crisis. (Offered for NURS or SOWO credit.)

NURS 30563 - Care of Adults with Health Alterations I: Concepts (3) Prerequisites: NURS 30263, NURS 30182, NURS 30171, NURS 30163, NURS 30243. This course applies the nursing process to meet the health promotion, restoration, and chronicity needs of clients and families experiencing alteration of selected body systems. Emphasizes the use of critical thinking, interprofessional collaboration, and evidence-based practice in planning care for diverse adults across the lifespan.

## NURS 30573 - Pediatric Oncology Care (3)

Prerequisites: NURS 30714, NURS 30783, NURS 30813, NURS 30882,NURS 30413. This course provides the student an in-depth introduction to pediatric oncology nursing. Observational opportunities in various oncology settings will be provided. Legal, political, socio-cultural, ethical, and research implications for pediatric nursing practice will also be considered. This class builds upon previous knowledge mastered in adult medical-surgical nursing, pediatric nursing, child development, pharmacology, teaching strategies and the sciences.

## NURS 30582 - Adults with Health Alterations I: Clinical (2)

Prerequisites: NURS 30263, NURS 30182, NURS 30171, NURS 30163, NURS 30243. This practicum applies the nursing process to meet the health promotion, restoration, and chronicity needs of patients experiencing health alterations. Students utilize critical thinking, interprofessional collaboration, and evidence-based practice in implementing patient/family-centered professional care.

## NURS 30583 - Aspects of Oncology (3)

Prerequisites: NURS 30714, NURS 30783, or permission of instructor. This course provides the student an introduction to oncology nursing with clinical opportunities in various oncology settings. It will serve as the first course for students interested in an oncology clinical focus.

## NURS 30593 - Oncology Nursing Residency (3)

Prerequisites: NURS 30714, NURS 30783, NURS 30583 or permission of instructor. The student will have the opportunity to provide care in an impatient oncology setting that requires the application of principles and knowledge necessary for interdisciplinary care of cancer patients along the cancer continuum.

NURS 30633 - Professional Role III: Member of the Research and Evidence Based Practice Community (3)
Prerequisites: NURS 30263, NURS 30182, NURS 30171, NURS 30163, NURS 30243. This course examines the research process and the theory and technique related to development of evidence-based nursing practice. The student will learn to critique nursing research and identify examples of evidence based change in the practice setting.

## NURS 30663 - Behavioral Health Nursing: Concepts (3)

 Prerequisites: NURS 30263, NURS 30182, NURS 30171, NURS 30163, NURS 30243. Explores concepts and principles of individual, family, group and community systems experiencing psychopathology. Introduces behavioural health alterations and human responses evoked by those alterations. Emphasizes nursing strategies and actions to promote behavioral health.NURS 30671 - Clinical Reasoning and Simulation I (1)
Prerequisites: NURS 30263, NURS 30182, NURS 30171, NURS 30163, NURS 30243. This course builds on previously learned concepts and nursing skills, introduces selected additional nursing skills and reinforces current levelspecific concepts in simulation-based learning experiences. More complex clinical reasoning concepts and strategies are incorporated into learning experiences.

## NURS 30681 - Behavioral Health Nursing: Clinical

Prerequisites: NURS 30263, 30182, 30171, 30163, 30243. Explores concepts and principles of individual, family, group and community systems experiencing psychopathology. Introduces behavioral health alterations and human responses evoked by those alterations. Emphasizes nursing strategies and actions to promote behavioral health.

NURS 30682 - Behavioral Health Nursing: Clinical (2)
Prerequisites: NURS 30263, 30182, 30171, 30163, 30243. Explores concepts and principles of individual, family, group and community systems experiencing psychopathology. Introduces behavioral health alterations and human responses evoked by those alterations. Emphasizes nursing strategies and actions to promote behavioral health.

## NURS 31003 - Applied Nursing Concepts and Learning Strategies (3)

Prerequisites: NURS 20224. Emphasizes application of nursing concepts and encourages development of learning strategies and self-improvement techniques to foster success in the undergraduate nursing program. This course is offered to selected students in all clinical levels based on individualized assessments. Department permit required.

## NURS 40001 - NCLEX (National Council Licensure Examination in

 Nursing) Review (1)Prerequisites: Completion of NURS 40114 and NURS 40183; instructor permission. This course will reinforce and complement prior knowledge gained in the nursing curriculum. Students will utilize clinical judgement to review previously learned nursing concepts. Completion of the course will assist students to further prepare for National Council Licensure Examination in Nursing (NCLEX).

## NURS 40003 - Senior Honors Project (3)

Prerequisites: Completion of junior honors seminar; grade point average 3.4. Scholarly project is required involving an area of nursing for in-depth investigations.

## NURS 40053 - Critical Inquiry into Health Care Delivery (3)

Prerequisite or concurrent: ENGL 10803, ENGL 20803. Open to all majors with senior status or with permission of the instructor. Focuses on society,
values, rights, and responsibilities of individuals and groups within the health care delivery systems of the United States and selected countries. The role of the health care provider in influencing public policy related to health care is included. Students analyze the economic, human, and physical resources necessary and available for health care.

## NURS 40114 - Adult Nursing II: Concepts (4)

Prerequisites: NURS 30714, NURS 30783, NURS 30813, NURS 30882; prerequisite or concurrent: NURS 30632, NURS 30313, NURS 30382, NURS 30413, NURS 30483; concurrent: NURS 40183. Application of nursing concepts and nursing process to adult clients and families who are experiencing complex acute or chronic disruptions of selected body systems. Concepts of related to chronic and terminal illness, rehabilitation and quality of life issues will be examined. Concepts of pathophysiology, pharmacology, and nutrition are integrated.

## NURS 40183 - Adult Nursing II: Practicum (3)

Prerequisites: NURS 30714, NURS 30783, NURS 30813, NURS 30882; prerequisite or concurrent: NURS 30632, NURS 30313, NURS 30382, NURS 30413, NURS 30482; concurrent: NURS 40114. Students use the nursing process, nursing concepts and research-based nursing interventions in caring for adult clients with complex acute, chronic, or terminal disruptions of selected body systems and their families. Students work with interdisciplinary teams in providing acute and chronic care. Students will have experiences in critical, chronic care, and at a hospice or home health agency. (This course is only offered as P/NC.)

## NURS 40213 - Civic Engagement and Leadership Supporting Healthy Communities (3)

Prerequisite:J unior or senior standing. Students will explore health care systems in relationship to ethical responsiveness, civic engagement, and social responsibility. Using models of leadership and service learning, diverse population health care needs will be identified. The course provides content and service learning opportunities which support students' becoming ethical leaders and global citizens.

## NURS 40543 - Critical Aspects of Pediatric Nursing (3)

Nursing elective. Fifteen class hours and 90 practicum hours. Prerequisites: NURS 40213, NURS 40283, NURS 40713, NURS 40783. Designed to allow the student optimum opportunity for in-depth exploration of aspects of pediatric nursing of particular individual interest to the student.

NURS 40563 - Care of Adults with Health Alterations II: Concepts (3) Prerequisites: NURS 30563, NURS 30582, NURS 30663, NURS 30681, NURS 30671, NURS 30633. This course applies the nursing process to meet the health promotion, restoration, and chronicity needs of clients and families experiencing complex alterations of selected or multiple body systems. Emphasizes the use of critical thinking, interprofessional collaboration, and evidence-based practice in planning care of diverse adults across the lifespan.

## NURS 40582 - Adults with Health Alterations II: Clinical (2)

Prerequisites: NURS 30563, NURS 30582, NURS 30663, NURS 30681, NURS 30671, NURS 30633. This practicum applies the nursing process to meet the health promotion, restoration, and chronicity needs of patients experiencing complex health alterations of multiple body systems. Students operationalize critical thinking, interprofessional collaboration, and evidence-based practice in implementing patient/family-centered professional care.

## NURS 40632 - Research and Theory in Nursing Practice (2)

Prerequisite: MATH 10043; NURS 20224, NURS 20284. The use of theory and research in the construction of a scientific knowledge base for nursing practice will be discussed. Research as a process for developing and examining clinically-based nursing questions will be examined. The importance of evidence-based practice will be emphasized.

NURS 40663 - Maternal, Child and Family Nursing Concepts (3)
Prerequisites: NURS 30563, NURS 30582, NURS 30663, NURS 30681, NURS 30671, NURS 30633. This course focuses on nursing care related to maternal child health within the context of the family. The role of nursing in promoting, maintaining and restoring health will be emphasized.

## NURS 40672 - Clinical Reasoning and Simulation II (2)

Prerequisites: NURS 30563, NURS 30582, NURS 30663, NURS 30681, NURS 30671, NURS 30633. This course builds on previously learned concepts and nursing skills, introduces selected additional nursing skills and reinforces current level-specific concepts in simulation-based learning experiences. More complex clinical reasoning concepts and strategies are incorporated into learning experiences.

NURS 40682 - Maternal, Child and Family Nursing: Clinical (2)

Prerequisites: NURS 30563, NURS 30582, NURS 30663, NURS 30681, NURS 30671, NURS 30633. Provision of nursing care related to maternal child health within the context of the family. The role of nursing in promoting, maintaining and restoring health will be emphasized.

NURS 40763 - Leadership in Nursing Practice: Concepts (3) Prerequisites: NURS 40563, NURS 40582, NURS 40663, NURS 40682, and NURS 40672. Theories and principles of leadership and management provide the foundation for managing health care systems. Analyzes management roles and leadership competencies within various health care settings. Explores entrepreneurial thinking as it relates to nursing practice, process improvement, and business development.

## NURS 40782 - Transition into Practice: Clinical (2)

Prerequisites: NURS 40563, NURS 40582, NURS 40663, NURS 40682, and NURS 40672. Provides an intensive opportunity for the student to integrate prior knowledge in clinical practice. Students are required to demonstrate competence in assessment, planning, prioritizing, and evaluation in the care of multiple clients.

NURS 40813 - Community Health Nursing: Concepts (3) Prerequisites: ENGL 10803, ENGL 20803; NURS 30313, NURS 30382, NURS 30413, NURS 30482, NURS 40114, NURS 40183, NURS 40053, NURS 40632; concurrent: NURS 40882. The concept of community/aggregate as client is examined. Methods of community/aggregate assessment, diagnoses, planning, implementation, and evaluation are analyzed. Roles in Community Health Nursing are explored. Nursing's role in meeting the health care needs of a total population is examined. Systems theory, epidemiology, levels of prevention, and the nation's objectives for health are analyzed.
NURS 40863 - Population Health Nursing: Concepts (3)
Prerequisites: NURS 40563, NURS 40582, NURS 40663, NURS 40682, and NURS 40672. Explores the concept of community/population as client. Examines population-focused methods of assessment, planning, implementation, and evaluation. Emphasizes the public health nurse's role in addressing health care needs of populations using systems theory, epidemiology, levels of prevention, and the national agenda for population health.

## NURS 40871 - Clinical Reasonig and Simulation III (1)

Prerequisites: NURS 40563, 40582, 40663, 40682, and 40672. This course builds on previously learned concepts and nursing skills, introduces selected advanced nursing skills and reinforces current level specific concepts in simulation-based learning experiences. Advanced clinical reasoning concepts and strategies are introduced and incorporated into simulationbased learning experiences.

## NURS 40882 - Community Health Nursing: Practicum (2)

Prerequisite: 40053, 40114, 40183, 40632; concurrent: NURS 40813. The nursing process is applied to community/aggregate as client. Communities/aggregates are assessed, community/aggregate diagnoses are identified, macro-level interventions planned, implemented, and evaluated. Systems theory, epidemiology, levels of prevention, and the nation's objectives for health are discussed. (This course is only offered as P/NC.)
NURS 40883 - Population Health and Leadership: Clinical (3)
Prerequisites: NURS 40563, 40582, 40663, 40682, and 40672. Students assume professional roles that require application of leadership principles and team building for assessment, implementation, and evaluation for population-focused interventions.

NURS 40913 - Role Development and Nursing Management: Concepts (3)

Prerequisites: NURS 30313, 30382, 30413, 30482, 40053, 40114, 40183, 40632; concurrent: NURS 40984; prerequisite or concurrent: NURS 40813, 40882. Theories and principles of leadership and management, which provide the foundation for management of self, health care providers, multiple clients and the profession in the delivery of health care, are introduced. Career paths, job seeking skills and professional responsibilities are explored. The Texas Nurse Practice Act and ANA Standards of Practice are analyzed in depth. Management roles within various health care settings are reviewed within the context of selected theories and research publications.

NURS 40984 - Role Development and Nursing Management: Practicum (4)

Prerequisites: NURS 30313, 30413, 30382, 30482, 40053, 40114, 40183, 40632; concurrent: NURS 40913; prerequisite or concurrent: NURS 40882, 40813. Students assume professional roles that require application of leadership principles and management skills for the provision of care to a group of clients and the management of a group of health care providers in a variety of clinical settings. (This course is only offered as P/NC.)

NURS 50003 - Advanced Pathophysiology (3)
Prerequisites: Admission to Graduate Program or permission of instructor. Provides an understanding of advanced knowledge base of pathophysiologic processes underlying human illness. Content includes systems approach to pathophysiologic processes associated with altered health states in adults and children.

## NURS 50013 - Advanced Health Assessment (3)

Prerequisites: Admission to Graduate Program or permission of instructor. This course focuses on developing comprehensive health assessment knowledge and skill required for advanced practice nursing practice across the life span. Diagnostic and inferential skills are emphasized through systematic approaches. The course includes didactic and practicum experiences.

## NURS 50022 - Advanced Practice Roles (2)

Prerequisites: Admission to Graduate Program. The course provides a foundation for transition to the role of the advanced practice registered nurse (APRN). Content includes roles within advanced practice, theories of change, concepts of negotiation, collaboration, interdependence, advocacy and autonomy, and titling, certification and licensure issues.
NURS 50053 - Advanced Pharmacotherapeutics (3)
Prerequisites: Admission to Graduate Program or permission of instructor. Emphasizes pharmacological principles fundamental to the selection of pharmacologic agents in altered health states in adults across the lifespan. Includes the pharmacodynamic, pharmacokinetic and pharmacotherapeutic properties of drug categories and specific agents, clinical responses to the use of pharmacologic agents, efficacy and cost-effectiveness issues, client education, and adherence.

## PEAC - Phys Educ Activity Courses

PEAC 10101 - Football (1)
Football. (This course is only offered as P/NC.)
PEAC 10111 - Track and Cross Country (1)
Track Cross Country. (This course is only offered as P/NC.)
PEAC 10121 - Golf (1)
Golf. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)
PEAC 10131 - Tennis (1)
Tennis. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)
PEAC 10141 - Basketball (1)
Basketball. (This course is only offered as P/NC.)
PEAC 10151 - Baseball (1)
Baseball. (This course is only offered as P/NC.)
PEAC 10161 - Swimming and Diving (1)
Swimming Diving. (This course is only offered as P/NC.)
PEAC $\mathbf{1 0 1 7 1}$ - Gymnastics (Cheerleaders) (1)
Gymnastics (Cheerleaders). (This course is only offered as P/NC.)
PEAC 10181 - Soccer (1)
Soccer. (This course is only offered as P/NC.)
PEAC 10191 - Volleyball (1)
Volleyball. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)
PEAC 10201 - Varsity Equestrian (1)
Varsity Equestrian. (This course is only offered as P/NC.)
PEAC 10231 - Personal Defense (1)
Techniques and theories of basic personal defense skills.. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## PEAC 10261 - Tae Kwon Do (1)

An introduction to the skills, techniques, strategies and conditioning of Tae Kwon Do.. (This course is only offered as P/NC.)

## PEAC 10301 - Women's Rifle (1)

Varsity rifle. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)
PEAC 10311 - Beginning Softball (1)
Fundamental skills, techniques and strategies of softball. (This course is only offered as P/NC.)
PEAC 10331 - Beginning Soccer (1)

Fundamental skills, techniques and strategies of soccer. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## PEAC 10341 - Basketball (1)

Fundamental skills, techniques and strategies of basketball. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## PEAC 10411 - Body Conditioning (1)

Fundamental principles of exercise, individualized programs with lifetime fitness goals and fitness related activities. (This course is only offered as P/NC.)

## PEAC 10421 - Weight Training (1)

Basic weight training techniques, personalized workout programs, and concepts and knowledge related to the development of individualized programs. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## PEAC 10471 - Rock Climbing (1)

This course covers the basics of safe and responsible rock climbing. Topics include equipment, knots, belaying, rappelling, and a range of climbing techniques.

PEAC 10481 - Cycling (1)
Equipment selection, safety, riding techniques and training programs associated with biking. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## PEAC 10491 -Jogging (1)

Techniques, principles and practice in jogging. (This course is only offered as P/NC.)

## PEAC 10521 - Aerobic Dance (1)

Aerobic conditioning rhythmic workouts, with emphasis on fitness and cardiovascular conditioning while performing directed and individual routines. (This course is only offered as P/NC.)

## PEAC 10601 - Beginning Swimming (1)

Emphasis on stroke development and water safety designed for the nonswimmer. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## PEAC 10611 - Intermediate Swimming (1)

Individual stroke development, conditioning and water safety. American Red Cross standards maintained with emphasis on improving swimming skills. (This course is only offered as P/NC.)

## PEAC 10622 - Lifeguarding and CPR (2)

Knowledge and skill development for life guarding in accordance with American Red Cross standards. Lifesaving and CPR test and certification for those meeting required standards. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)
PEAC 10631 - Water Safety Instructor's Course (1)
Lifesaving skills as well as a training program for students who want to teach swimming. Prerequisite: Current Red Cross Advance Life-saving Certificate and strong execution of swimming skills. (This course is only offered as P/NC.)

## PEAC 10651 - Scuba Diving (1)

Skill and safety instruction for underwater swimming and snorkeling. Equipment safety, rules of diving, skills and recreational benefits. Certification available. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.).

## PEAC 10671 - Water Polo (1)

Fundamental skills, rules and offensive tactics of water polo. Conditioning and game situations. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)
PEAC 10691 - Swim Conditioning (1)
Physical conditioning through aquatic activities. Concepts of swim conditioning and endurance as well as stroke improvement. (This course is only offered as P/NC.)

## PEAC 10711 - Badminton (1)

Skill, techniques of play and competitive strategies of badminton. Singles and doubles play. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.).
PEAC 10721 - Racquetball (1)
Fundamental skills, rules, basic shots, game strategies, equipment and safety of racquetball. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## PEAC 10731 - Advanced Racquetball (1)

Continuation of racquetball. Prerequisite: PEAC 10721 or equivalent
experience. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)
PEAC 10741 - Beginning Tennis (1)
Fundamental skills, basic strokes, rules, strategies and game play of tennis. (This course is only offered as P/NC.)

## PEAC 10751 - Intermediate Tennis (1)

Review of basic tennis skills as well as development advanced strokes, strategies and game play in both singles and doubles. Prerequisite: PEAC 10741 or equivalent experience. (This course is only offered as P/NC.)

## PEAC 10761 - Advanced Tennis (1)

Refinement of advanced techniques and strategies of tennis. Prerequisite: PEAC 10751 or equivalent experience. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## PEAC 10771 - Beginning Golf (1)

Fundamental skills of swing, stance, and basic club use, putting and practice in course play. (This course is only offered as P/NC.)

## PEAC 10781 - Advanced Golf (1)

Emphasis will be on skill and stroke improvement with individual assistance in game play. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## PEAC 10801 - Fundamentals of Bowling (1)

Basic skills rules and strategies of bowling. (This course is only offered as P/NC.)

## PEAC 20031 - Team Sports (1)

Fundamental knowledge and the development of skills associated with selected team sports. (This course is only offered as P/NC.)

## PEAC 20990 - International Residential Study (1)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## PHIL - Philosophy

## PHIL 10003 - Philosophy One (3)

(Subtitle and content may vary in different sections.) This course focuses on the basic human concerns treated under the classical core elements of philosophical inquiry, and prepares students for more detailed treatments of these areas in courses at the 30000 level. Major topics include ethics, epistemology, metaphysics and the philosophies of religion, science, art and mind, and introductory logic.

## PHIL 10103 - Mind, Meaning and Morality (3)

This course provides an introduction to philosophy focused on the metaphysical, ethical, and value questions, What (who) are we? What should we do? and What makes life meaningful? Answers from various figures in Western thought will be explored, compared, and evaluated, providing a basis for further study of these in upper level courses. Note: Credit not awarded for both PHIL 10003 and PHIL 10103.

## PHIL 10113 - Mind, Meaning and Morality II (3)

Prerequisite: PHIL 10103. This course is a continuation of PHIL 10103 (Mind, Meaning, and Morality I) and provides an exploration of various conceptions of freedom, determinism, and objectivity, particularly as they emerge out of ancient and modern explanations of human agency and purpose into 19th and 20th Century attitudes towards the self, moral responsibility, sociopolitical organization, scientific knowledge, and the natural world.

## PHIL 10433 - Freshman Seminar in Philosophy (3)

Topics may vary each time course is offered.
PHIL 10533 - Freshman Seminar in Philosophy (3)
Topics may vary each time it is offered.
PHIL 20103 - Critical Reasoning (3)
How to detect, analyze, and critically evaluate reasoning in ordinary language and its technical counterparts found in business, economics, etc. The course is designed to enhance skills for handling arguments in a variety of texts. Understanding the arguments and theories encountered in one's situations is stressed, along with how one can improve one's own expression of arguments and theories, especially in writing. Topics include techniques of reconstruction and evaluation in a process of self-editing, detection of fallacies, and distinguishing correct from incorrect reasoning.

PHIL 20213 - Philosophy and Film (3)
Students will examine and critically evaluate important philosophical ideas as they are expressed in film. Students will watch films and read accompanying philosophical texts that deal with perennial philosophical questions.
PHIL 20303 - Moral Problems (3)

An examination of contemporary moral issues. Typical topics include abortion, euthanasia, discrimination, preferential hiring, the enforcement of community standards, the morality of war, punishment, the rights of distant peoples and future generations, and environmental ethics.
PHIL 20313 - Death (3)
In this class we will explore some of the classic metaphysical and moral problems that surround the topic of death. Some of the question sthe class may discuss include: What is death? Do we have a soul? Is death a harm? Is life a benefit? Is euthanasia morally permissible? Is abortion morally permissible? Is it morally permissible to kill animals so that we may eat them? May we sacrifice the lives of some in order to save the lives of others?

## PHIL 20323 - Bioethics (3)

An examination of some of the ethical issues that arise in the field of medicine. Topics typically include the moral status of abortion, euthanasia, stem cell research, informed consent, cloning, and the just distribution of scarce medical resources.

## PHIL 20333 - Environmental Philosophy (3)

This course surveys several contemporary approaches for understanding our moral obligation to the environment, including intuitionism, utilitarianism, deontology and feminism. By applying these approaches to concrete environmental issues, the course illustrates how efforts to preserve the environment raise special difficulties for traditional moral categories, such as intrinsic and instrumental value. The course also explores the peculiarly aesthetic dimension of environmental ethics, including claims about the value of natural beauty and unspoiled wilderness.

## PHIL 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## PHIL 30003 - Junior Honors Seminar (3)

Prerequisite: Permission of instructor.
PHIL 30133 - Symbolic Logic I (3)
An introduction to the scope and limits of modern logic. The nature of logical systems and the various areas of logic are discussed. Alternative proofprocedures in propositional logic and predicate logic are presented.
(Crosslisted as MATH/PHIL 30133.)
PHIL 30143 - Symbolic Logic II (3)
Prerequisite: PHIL 30133. A continuation of 30133, with an emphasis on predicate logic, nonstandard logic, and metalogic. (Crosslisted as MATH/PHIL 30143.)

PHIL 30303 - Ethical Theory (3)
Prerequisites: Any 10000-level or 20000-level PHIL course. A systematic treatment of basic issues in moral theory, critically examining such issues as the possibility of providing rational foundations for moral belief, and the nature of moral judgments and moral reasoning, focusing on the work of major historical and contemporary figures.

## PHIL 30313 - Moral Problems

Prerequisite: Any 10000-level course in Philosophy or HHIT 20123. An examination of contemporary moral issues. Typical topics include abortion, euthanasia, discrimination, preferential hiring, the enforcement of community standards, the morality of war, punishment, the rights of distant peoples and future generations, and environmental ethics.

## PHIL 30323 - Philosophy of Religion (3)

RELI 30633 Prerequisite: Any 10000-level or 20000-level PHIL course, or any religion course. Philosophy of Religion today is centrally concerned with issues relating to the rationality and justification of religious convictions. There is also an interest in the coherence of religious concepts. In this course various philosophical models for understanding and evaluating religious convictions and practices are examined and applied.

## PHIL 30333 - Asian Philosophy (3)

Prerequisite: Any 10000-level or 20000-level PHIL course. A survey of the three intellectual traditions of Asia: Japanese, Chinese, and Indian philosophy. Topics include causality, concepts of the individual and Nature, and the nature of reality and knowing.
PHIL 30343-Sex, Society, and Ethics (3)
This course introduces students to the myriad ways in which sexual desire and sexual activity are structured by social relations and to the ways that
sexuality, sexual practices, and sexual identities vary in time and space. We will also consider how those social relations and sexual identities influence ethical judgment regarding various sexual practices and attitudes. Social science and philosophical theories of sexuality will be considered and crosscultural and historical accounts of sexual practices will be reviewed.

## PHIL 30353 - Political Philosophy (3)

Prerequisite: Any 10000-level or 20000-level PHIL course. An introduction to the classical systems and central issues in political philosophy. The approach is largely historical, and selected major thinkers of most recent four centuries form the focus of the course.

## PHIL 30363 - Bioethics

Prerequisite: Any 10000-level course in Philosophy or HHIT 20123, or permission of the instructor. An examination of some of the ethical issues that arise in the field of medicine. Topics typically include the moral status of abortion, euthanasia, stem cell research, informed consent, cloning, and the just distribution of scarce medical resources.

## PHIL 30373 - Existential Philosophy (3)

Prerequisite: Any 10000-level or 20000-level PHIL course. This course offers students an opportunity to reflect on such topics as the search for meaning, being, freedom, the self, embodiment, authenticity, love, and ethics as they are dealt with in texts by major writers in the 19th and 20th century movement known as existentialism.

## PHIL 30383 - Philosophy of Psychology (3)

Prerequisites: Any 10000 -level or 20000 -level PHIL course or an upperdivision Psychology or Neuroscience course. This course will focus on Philosophical issues foundational to Psychology. Specifically, it will involve an interdisciplinary exploration of the nature, mechanisms, and architecture of cognition. Topics include: models of psychological explanation, the nature of commonsense" psychology and the relationship between rationality and mental causation, functionalist approaches to cognition, computational vs. neural network models of mind, and the relationships between perception, action, and cognition."

## PHIL 30393 - Philosophy of Mind (3)

Prerequisite: Any $10000-$ level or 20000-level PHIL course. A survey of past and present accounts of human mentality. Beginning with the classical ideas of the soul the course concentrates on the major theories of mind advanced by Western philosophers in the last four centuries.

## PHIL 30403 - Environmental Philosophy

Prerequisite: Any 10000-level course in Philosophy or HHIT 20123. This course surveys several contemporary approaches for understanding our moral obligation to the environment, including intuitionism, utilitarianism, deontology and feminism. By applying these approaches to concrete environmental issues, the course illustrates how efforts to preserve the environment raise special difficulties for traditional moral categories, such as intrinsic and instrumental value. The course also explores the peculiarly aesthetic dimension of environmental ethics, including claims about the value of natural beauty and unspoiled wilderness.

## PHIL 30413 - Introduction to Philosophy of Law (3)

Prerequisite: Any 10000-level or 20000-level PHIL course. An examination of the basic issues in Legal Theory. Topics typically include the nature of legal reasoning, the relationship between law and morality, and classical theories of law.

## PHIL 30423 - Introduction to Epistemology (3)

Prerequisites: Any 10000 -level or $20000-$ level PHIL course. A systematic examination of the central issues in epistemology (e.g., the nature and structure of knowledge, and external-world skepticism), focusing on a series of papers by leading philosophers in epistemology.

PHIL 30433 - Introduction to the Philosophy of Science (3)
Prerequisites: Any 10000-level or 20000-level PHIL course. A systematic examination of the central issues in the philosophy of science (e.g., theory confirmation in science, and scientific explanation), focusing on a series of papers by leading philosophers in the philosophy of science (for instance, Carl Hempel and Thomas Kuhn).

## PHIL 30443 - Free Will and Moral Responsibility (3)

Prerequisites: any 10000-level or 20000-level PHIL course. While we praise, blame, and punish people for their actions, we don't hold everyone responsible for everything they do. Moral responsibility looks to be intimately tied to a person's free will. We will discuss a range of views on what's required for agents to be free, and therefore morally responsible for their actions.
PHIL 30493 - Philosophy of Cognitive Science (3)

Prerequisites: Any 10000-level or 20000-level PHIL course or an upperdivision Psychology or Neuroscience course. The aim of this course is to focus on philosophical principles that are implicitly assumed in standard" Cognitive Science."
PHIL 30970 - Philosophical Studies (1.00-20.00)
Prerequisite: Permission of instructor. Topics vary as announced. May be repeated for credit. 1-6 hours

## PHIL $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## PHIL 31990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.
PHIL 40000 - Senior Honors Research Paper (1.00-20.00)
Prerequisite: Permission of instructor. 1-3 hours
PHIL 40103 - Seminar in Logic (3)
Prerequisite: PHIL 30133 or MATH 20524 (or permission of instructor). Advanced topics in logic. Course content to vary by semester and will include areas such as formal languages, mathematical logic, deontic logic, modal systems, and philosophy of language.

PHIL 40203 - Seminar in Metaphysics (3)
Prerequisite: PHIL 30383 or 30393 or 30493 . Course content to vary by semester and will include such areas as philosophy of mind, action theory, and ontology.
PHIL 40213 - Ancient Philosophy (3)
Prerequisites: Any 30000 level PHIL course. A survey of the major figures in Western thought between the sixth century BCE and fifth century CE. Among those included are the Presocratics, Plato, Aristotle, and the Hellenistic philosophers. This course also applies to the minor in Classical Studies minor.

## PHIL 40220-20th Century Philosophy (1.00-6.00)

Prerequisite: Any 30000 -level PHIL course and permission of the instructor. An historical study of one or more philosophical movements in the twentieth century. Topics vary and include analytic, existential, or phenomenological philosophy. May be repeated for credit. (3-6 hours).
PHIL 40223 - History of Modern Philosophy (3)
Prerequisites: Any 30000-level PHIL course. A survey of the major figures in Western thought from 1500 to 1800 . Among those included are Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume and Kant.
PHIL 40233 - History of Continental Philosophy in the 19th and 20th Centuries (3)
Prerequisites: PHIL 10003 and 40223. The philosophical tradition after Kant developed in different ways in Continental Europe from the ways it did in English speaking countries. This course examines those developments, especially in Germany and France. Such thinkers as Hegel and the German Idealists, Kierkegaard and Nietzsche, Husserl and Heidegger, Sartre and Merleau-Ponty, Gadamer, Ricoeur and Derrida are discussed.
PHIL 40243 - Anglo-American Philosophy (3)
Prerequisites: PHIL 40223. A historical study of either the analytic or pragmatic tradition. Such figures as Carnap, Neurath, Schlick, Moore, Russell, and Ayer; or Royce, Peirce, Mead, James, Dewey, and Quine; or a combination of philosophers are studied.
PHIL 40253 - Seminar in History of Philosophy (3)
Prerequisites: Any $30000-$ level PHIL course and permission of the instructor. A philosophical study of one or more philosophers or philosophical movements of the ancient, medieval, or modern periods. Course content will vary by semester. Course may be repeated for credit.

PHIL 40263 - Socrates and the Socratic Tradition (3)
Prerequisites: Any 10000-level and any 30000-level Philosophy course. This course is a survey of the philosophy of Socrates and the development of his ideas in Plato and Aristotle. Students will read various Socratic dialogues and
a few of Plato's middle dialogues that show significant Socratic influence. The course will conclude with a brief survey of Aristotle's conception of language, thought, reality, and virtue.

## PHIL 40303 - Seminar in Value Theory (3)

Prerequisite: PHIL 30303. A close examination of advanced issues in value theory. Topics may include the views of major historical figures such as Bentham, Hume, Kant, Locke, and Sidgwick, the moral realism-antirealism, debate, topics in moral psychology, and moral epistemology.
PHIL 40323 - Advanced Issues in Philosophy of Science (3)
Prerequisite: PHIL 30423 or 30433. An examination of advanced issues in philosophy of science, for example, issues concerning theory confirmation and issues concerning explanation.

## PHIL 40333 - Philosophy of Law and Economics (3)

Prerequisites: PHIL 30303 or 30353 or 30413 . Philosophy of Law and Economics asks students to consider economics as a justification for legal decision-making. Different perspectives regarding the nature of law are juxtaposed against different perspectives regarding the nature of economics. Students develop their own synthesis by examining landmark legal cases from various perspectives.

## PHIL 40343 - Advanced Issues in Philosophy of Law (3)

Prerequisite: PHIL 30303 or 30353 or 30413 . A rigorous examination of specific issues in legal theory and jurisprudence. Topics may include the nature of law, legal adjudication, law and economics, theories of punishment, and legal responsibility and obligation.

PHIL 40353 - Seminar in Political Philosophy (3)
Prerequisites: PHIL 30303 or 30353 or 30413 . A philosophical analysis of some selected topics that are central to political philosophy. Topics may include analyses of the nature of human rights, political authority, the moral duty to obey the law, freedom, or justice.

## PHIL 40373 - Art and the Aesthetic (3)

Prerequisite: Any 30000-level PHIL course. Philosophical theories are presented regarding the nature of art and aesthetic experience. The concepts of representation, expression, formalism, the work of art, intention, meaning, truth, and criticism are discussed along with how they contribute to answering the question, What is art?"'

## PHIL 40383 - Advanced Topics in Human Nature (3)

Prerequisite: PHIL 30383 or PHIL 30393. Critical analysis of contemporary theories of human nature advanced by philosophers, psychologists, biologists, cognitive scientists and others. The thinkers under consideration will vary but examples would include E. O. Wilson, B. F. Skinner, Sigmund Freud, John Searle and Daniel Dennett.

## PHIL 40393-Ethical Theory

Prerequisites: PHIL 30353 or PHIL 30313 or PHIL 30363. A systematic treatment of basic issues in moral theory, critically examining such issues as the possibility of providing rational foundations for moral belief, and the nature of moral judgments and moral reasoning, focusing on the work of major historical and contemporary figures.

## PHIL 40403 - Advanced Issues in Epistemology (3)

Prerequisite: PHIL 30423 or 30433. An examination of advanced issues in epistemology, for example, issues concerning rational degrees of belief, issues concerning the intersection of epistemology, philosophy of language, and philosophy of mind, and issues concerning epistemological methodology.

## PHIL 50970 - Directed Studies in Philosophy (1.00-20.00)

Prerequisite: Permission of instructor.

## PHYS - Physics

## PHYS 10073 - Concepts in Physical Science (3)

A laboratory science course for those with no previous background in physics, designed to stress the formulation of physical concepts at different levels of abstraction. Especially useful for education majors to gain insight and experience with science content and for music majors as a prerequisite to an understanding of musical acoustics.

## PHYS 10151 - General Physics I Laboratory (1)

One 2-hour laboratory per week. Prerequisite: PHYS 10153, which is normally taken concurrently. Part one of a two semester sequence recommended for students enrolled in PHYS 10153. The sequence consists of selected experiments associated with PHYS 10153 and 10163. No more than four semester hours of credit (three semester hours for lecture and one semester
hour for lab) will be granted for any combination of PHYS 10151, 10153, 10154, 20471, 20473 , and 20474.

PHYS 10153 - General Physics I (3)
Prerequisites: High school algebra and trigonometry or MATH 10054 or approval of instructor. Part of a two-semester survey of general physics recommended for students in the life sciences and premedical program. Topics covered in the sequence include mechanics of solids and fluids, thermodynamics, sound and wave motion, optics, electricity and magnetism, atomic and nuclear physics. Emphasis given to the application of these concepts to problems in the life and health sciences. No more than four semester hours of credit (three semester hours for lecture and one semester hour for lab) will be granted for any combination of PHYS 10151, 10153, 10154, 20471,20473 , and 20474.

PHYS 10154 - General Physics I with Laboratory (4)
Three hours lecture and one 2-hour laboratory per week selected to reinforce the concepts discussed in lecture. Prerequisites: High school algebra and trigonometry or MATH 10054 or approval of instructor. Part one of a twosemester survey of general physics recommended for students in the life sciences and premedical program. Topics covered include mechanics of solids and fluids, thermodynamics, sound and wave motion. Emphasis will be given to the application of these concepts to problems in the life and health sciences. No more than four semester hours of credit (three semester hours for lecture and one semester hour for lab) will be granted for any combination of PHYS 10151, 10153, 10154, 20471, 20473, and 20474.

PHYS 10161 - General Physics II Laboratory (1)
One 2-hour laboratory per week. Prerequisite: PHYS 10163, which is normally taken concurrently. No more than four semester hours of credit (three semester hours for lecture and one semester hour for lab) will be granted for any combination of PHYS 10161, 10163, 10164, 20481, 20483, and 20484.

## PHYS 10163 - General Physics II (3)

Prerequisite: PHYS 10153. Continuation of Physics 10153. No more than four semester hours of credit (three semester hours for lecture and one semester hour for lab) will be granted for any combination of PHYS 10161, 10163, 10164, 20481, 20483, and 20484.

## PHYS 10164 - General Physics II with Laboratory (4)

Prerequisites: PHYS 10154 (or PHYS 10153/10151), high school algebra and trigonometry or MATH 10054, or approval of instructor. Three hours lecture and one 2-hour laboratory per week selected to reinforce the concepts discussed in lecture. Part two of a two-semester survey of general physics recommended for students in the life sciences and premedical program. Topics covered include electricity and magnetism, optics, atomic and nuclear physics. Emphasis will be given to the application of these concepts to problems in the life and health science. No more than four semester hours of credit (three semester hours for lecture and one semester hour for lab) will be granted for any combination of PHYS 10161, 10163, 10164, 20481, 20483, and 20484.

## PHYS 10263 - Cosmic Origins (3)

This course will examine the development of hum understanding of the critical events in the origin and evolution of the Universe. Two hours of lectures and one two-hour lab per week.
PHYS 10273 - Introductory Astronomy: Earth and Planets (3)
Two hours of lectures and one 2-hour laboratory per week. Structure and origin of the solar system. Laboratory assignments may be scheduled in the evening.

## PHYS 10283 - Introductory Astronomy:Stars and Galaxies (3)

Two hours of lectures and one 2-hour laboratory per week. Stars, galaxies, stellar evolution, and cosmology. Laboratory assignments may be scheduled in the evening.

## PHYS 10293 - Archaeoastronomy (3)

Two hours of lectures and one 2-hour laboratory per week. The course will explore naked-eye astronomy, including motion of the Sun, Moon, planets, and stars. Course will investigate the development of astronomy, calendars, writing and numeration among early civilizations, and how it supported or established their societies.

## PHYS 10433 - Freshman Seminar in Physics: Utter Chaos (3)

Chaos Theory plays a fundamental role in many aspects of our lives: from the workings of the human heart; the prediction of the weather; the motion of planets and galaxies; to the development of personality, to name a few. The course follows the development of the Chaos Revolution" through a study of the personalities of the major contributors and the basic models they used to develop their ideas. Two weekly class meetings are divided between a
discussion of the scientists and their ideas, and a computer lab where we explore the models."

## PHYS 10443 - Freshman Seminar in Physics: The Cosmic Journey: Big Bang to Humans and Beyond (3)

The history of the Universe from the Big Bang 20 billion years ago to the birth of stars, the synthesis of the building blocks for life, the origin and evolution of life on Earth and the emergence of humans and society. The change over the last 300 years in humans' understanding of the cosmos and their role in it: from the static clockwork universe of Newton at the dawn of the age of reason to the expanding universe of Hubble and Einstein in the 20th century and the multidimensional universe of present-day string theory. Future human exploration of the cosmos and the future of the Universe itself.

## PHYS 10503 - Energy (3)

Two hours lecture and one 2-hour laboratory per week. The course will explore the fundamental laws and natural processes related to energy production, transport, storage, and uses.

## PHYS 10901 - First-Year Physics and Astronomy Seminar (1)

Prerequisites: Declared major or minor in Physics or Astronomy. A first year seminar for majors. Introduction of 'modern' physics and astrophysics ideas. Experimental, theoretical, observational, and computational research methods. Areas of application of physics to pure and applied research. Introduction to career opportunities in academic, industrial, and other settings. Physics educational experiences at TCU outside of the academic classroom.

## PHYS 20053 - Physics of Music and Sound (3)

Three hours lecture and one 2-hour laboratory per week. Nature and transmission of sound characteristics of musical instruments and speech, musical intervals, musical scales, musical temperament, and architectural acoustics. The laboratory includes experiments on vibration, resonance, objective and subjective characteristics of sound, and sound synthesis.

## PHYS 20471 - Physics I Laboratory (1)

One 2-hour laboratory per week. Prerequisite: PHYS 20473, which is normally taken concurrently. A sequence of experiments selected to reinforce the concepts of Physics I. No more than four semester hours of credit (three semester hours for lecture and one semester hour for lab) will be granted for any combination of PHYS 10151, 10153, 10154, 20471, 20473, and 20474.

## PHYS 20473 - Physics I Mechanics (3)

Prerequisites: MATH 10524, which may be taken concurrently, or permission of the instructor. The first of a three-semester survey recommended for students majoring in the physical sciences. Newton's laws of motion, the conservation of momentum, angular momentum, and energy; the theory of gravitation; acoustics and wave motion. No more than four semester hours of credit (three semester hours for lecture and one semester hour for lab) will be granted for any combination of PHYS 10151, 10153, 10154, 20471, 20473, and 20474.

## PHYS 20474 - Physics I with Laboratory: Mechanics (4)

Prerequisite: MATH 10524, which may be taken concurrently, or permission of instructor. Three hours of lectures and one 2-hour laboratory per week selected to reinforce the concepts discussed in lecture. The first of a threesemester survey recommended for students majoring in the physical sciences. Newton's laws of motion, the conservation of momentum, angular momentum, and energy; and the theory of gravitation. No more than four semester hours of credit (three semester hours for lecture and one semester hour for lab) will be granted for any combination of PHYS 10151, 10153, 10154, 20471, 20473, and 20474.

## PHYS 20481 - Physics II Laboratory (1)

One 2-hour laboratory per week. Prerequisite: PHYS 20483, which is normally taken concurrently. Selected experiments that demonstrate the concepts of Physics II. No more than four semester hours of credit (three semester hours for lecture and one semester hour for lab) will be granted for any combination of PHYS 10161, 10163, 10164, 20481, 20483, and 20484.

## PHYS 20484 - Physics II with Laboratory: Electromagnetism and Optics

 (4)Prerequisites: PHYS 20474 (or PHYS 20473/20471), MATH 20524, which may be taken concurrently, or permission of instructor. Three hours of lectures and one 2-hour laboratory per week selected to reinforce the concepts discussed in lecture. The second of a three-semester sequence recommended for students of physical sciences. Electric charge, current and field; magnetism, time varying electromagnetic fields; physical and geometric optics. No more than four semester hours of credit (three semester hours for lecture and one semester hour for lab) will be granted for any combination of PHYS 10161, 10163, 10164, 20481, 20483, and 20484.

PHYS 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## PHYS 30003 - Junior Honors Research in Physics or Astronomy (3)

Prerequisites: Admission to Honors Program in Physics and junior standing in Physics. The first of two courses required for Honors in Physics in which the candidate will carry out a program of research under the direction of a faculty member. The results of this research must be satisfactorily communicated to the department in an oral presentation and/or a written report.

## PHYS 30014 - Materials Science (4)

Prerequisite: CHEM 10113 or CHEM 10114. Introduction to the physical, chemical, mechanical, electrical, and optical properties of metals, semiconductors, ceramics, and polymers. Emphasis on the relationship between these properties and how performance is influenced by microstructure and processing. Atomic bonding. Crystal structure. Phase equilibria. Deformation and fracture. Composite materials. Electronic, magnetic, dielectric and optical properties. Laboratory methods for characterizing materials emphasized. (Crosslisted as ENGR/PHYS 30014.)

PHYS 30113 - Intermediate Astronomy (3)
Prerequisites: PHYS 10273 and 10283, PHYS 20474 and 20484, or PHYS 10154 and 10164. Physical properties of planets, stars, and galaxies.

PHYS 30123-Observational Astronomy (3)
Prerequisites: PHYS 10273 and 10283. Two hours of lectures and two hours of lab per week. Topics covered include telescopes, astronomical measurement techniques, modern detectors and instrumentation, the effect of the Earth's atmosphere on light. Selected experiments in telescope properties and resolution, photometry, spectroscopy, geometrical and physical optics, atomic physics, and studies of astronomical survey data.

PHYS 30163 - Evolution and Exploration of the Solar System (3) Prerequisites: GEOL 10113, or any one of PHYS 10164/12073/10283, or permission of instructor. Three hours of lectures per week. This course will launch you into space with past and present spacecraft missions and bring you back to Earth with meteorite research. Throughout the semester, this course will examine the geology and geologic processes occurring on and within planetary bodies throughout the Solar System. This course is intended for science and non-science majors. (Crosslisted as GEOL/PHYS 30163.)

## PHYS 30473 - How the Human Body Works (3)

Prerequisites: pre-calculus, PHYS 10164 or PHYS 20484 or permission of instructor. This course will explore the fundamental lows and natural processes related to the mechanics, biophysics, and biochemistry of the human body. It is designed for pre-health, kinesiology, biology nursing and physics students who want to understand the foundations and biophysical principles that govern human life. The course will focus on the science of physiological processes from simple mechanical motion, breathing, blood flow and oxygen exchange to vision, neuronal processes and the basics of genetics and proteomics. The biophysical elements of human function and human development in the context of environmental influences and live adaptation will be discussed. The evolution of approaches to understanding physiological functions as it has been governed by modern scientific developments will be briefly discusses. The course will also provide a simple understanding of recent technologies that have been applied to the study of physiological processes like muscle contraction, blood transport, cell function, neuronal processing, and DNA replication.

## PHYS 30491 - Physics III Laboratory (1)

Three hours of laboratory per week. Prerequisite: PHYS 30493, which may be taken concurrently. Selected topics in modern physics.

## PHYS 30493 - Physics III Modern Physics (3)

Prerequisites: PHYS 20474 and 20484, or 10154 and 10164, and MATH 20524. Relativity, introduction to quantum mechanics, atomic structure, nuclear physics, and modern physics.

## PHYS 30553 - Mechanics (3)

Prerequisites: PHYS 20474 and MATH 30524.Particle motion in one and three dimensions including oscillatory motion and motion under a central force. Dynamics of many particle systems. Lagrange's and Hamilton's equations.

Prerequisites: PHYS 30493, MATH 30524 or permission of instructor. Statistical formulation of the laws and applications of thermodynamics.

## PHYS 30703 - Digital Electronics (3)

Prerequisites: First year physics, MATH 10524, COSC 10403. An introduction to DC and AC circuits, diodes, transistors, amplifier circuits, basic digital circuits, logic circuits, digital readouts, counters, timing circuits, AD converters, microprocessors, and microcomputers.

## PHYS 30843 - Biomedical Imaging (3)

Prerequisites: PHYS 20484 or10164. An introduction to image formation for molecular and medical applications. This course covers the fundamentals of optic, $x$-ray and MRI, image creation, detectors, basics of image processing, quantitative analysis and a variety of applications in biophysics and in medicine. Includes off-campus lab work. (Crosslisted as BIOL/PHYS 30843.)

PHYS 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## PHYS 33990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## PHYS 40003 - Senior Honors Research in Physics or Astronomy (3)

Prerequisites: Admission to Honors Program in Physics and Senior Standing in Physics. A candidate for honors in Physics will carry out a program of research under the direction of a faculty member. The results of the research must be presented in the form of an acceptable paper.

PHYS 40050 - The Teaching of Physics (1.50-3.00)
Prerequisite: 14 semester hours, 3 of which may be taken concurrently. Members of this class serve one day each week as physics laboratory assistants and share in departmental conferences. (1 1/2-3 semester hours)

## PHYS 40103 - Senior Research in Physics or Astronomy (3)

Prerequisites: Senior standing in Physics or Astronomy. The student will carry out a program of research under the direction of a faculty member. The results of the research will be presented in the form of an acceptable paper.

## PHYS 40113 - Elements of Quantum Mechanics (3)

Prerequisites: PHYS 30493 and MATH 30524 or permission of instructor. The Schrodinger equations, operators, stationary states; Quantum theory of angular momentum; the harmonic oscillator and the hydrogen atom; quantum spin formulation.

## PHYS 40653 - Electromagnetic Fields (3)

Prerequisites: PHYS 20484 and MATH 30524 or permission of instructor Development of Maxwell's equations; electrostatics; potential; magnetostatics; electric and magnetic fields in matter; electromagnetic waves.

## PHYS 40663 - Electromagnetic Radiation and Optics (3)

Prerequisite: PHYS 40653. Electromagnetic radiation in free space and in materials; geometrical optics; interference and diffraction; Fourier optics; introduction to nonlinear optics.

PHYS 50030 - Seminar in Contemporary Physics (1.00-4.00)
Prerequisite: Permission of instructor. Students enrolled will be expected to participate in, prepare, and lead discussions on selected topics in physics as suggested by the current journal literature. (1-4 hours)

PHYS 50703 - Nonlinear Dynamics (3)
Prerequisite: Permission of instructor, PHYS 30553 is recommended. Characterization of chaos, routes to chaos, dissipative dynamical systems, Hamiltonian systems.

## PHYS 50713 - Contemporary Topics in Physics (3)

Prerequisite: Permission of department chair. Regularly scheduled course on a subject of interest to students and faculty. Possible topics: Acoustics, Biophysics, Mathematical Physics, Modern Optics, and Nuclear Physics.

PHYS 50723 - Introduction to Solid State Physics (3)

Prerequisites: PHYS 30493 and MATH 30524. Crystal structure, lattice dynamics, free electron theory, band theory, optical, electric and magnetic properties of solids.

## PHYS 50733 - Computational Physics (3)

Prerequisites: PHYS 20484 and MATH 30524. Computational methods used in physics, systems of linear equations, eigenvalues problems, numerical solution of differential equations using FORTRAN, $C++$, and Mathematica.

## PHYS 50743 - Astrophysics (3)

Prerequisite: Permission of department chair. Spectra and spectral line formation, stellar atmospheres and interiors, star formation and evolution, structure of the Universe, selected topics in cosmology.

## PHYS 50753 - Topics in Biophysics (3)

Prerequisites: PHYS 20474 and 20484 or PHYS 10154 and PHYS 10164 and MATH 10524, or permission of instructor. This course will introduce students to a variety of biophysics topics focusing on the application of physics principles to biological systems. Topics covered might include membrane transport, impulses in nerve cells, external electric and magnetic fields, imaging, ultrasound, electromagnetic radiation, radiation therapy, nuclear magnetic resonance, crystallography, spectroscopy and signal analysis.
PHYS 50763 - Experimental Methods in Biochemistry and Biophysics (3) Prerequisite: Permission of instructor. This course will introduce students to experimental techniques developed and used to investigate biological systems. It will discuss modern techniques used in the biomedical sciences, drug discovery and other biophysical and biochemical fields. The course includes lectures, demonstrations, and hands-on exercises in the TCU Biophysics Laboratory and on instrumentation at the Center for Commercialization of Fluorescence Technologies (CCFT) at the UNT Health Sciences Center campus. (Crosslisted as CHEM/PHYS 50763.)

PHYS 50813 - Meteorites, Asteroids, and Planets (3)
Prerequisite: GEOL 30213 or PHYS 30493, or permission of instructor. Three hours of lectures per week. An interdisciplinary course exploring the history and formation of the Solar System from the Big Bang through the formation and evolution of the planets. (Crosslisted as GEOL/PHYS 50813.)

## PHYS 50901 - Scientific Citizenship (1)

Prerequisites: Junior, Senior, or Graduate standing This is a senior and graduate seminar for majors to prepare advanced undergraduates and graduate students for success within and beyond the TCU Physics and Astronomy program. This class will provide basic skills and knowledge essential for student academic and career success. Five-week topics will rotate on a two to three year cycle and include topics such as: Career Skills, Scientific Public Communication, Intro to Scientific Programing, Publishing Grants, Basic Research Statistics, Research Policy, and Ethics Diversity. Course may be repeated for credit.

## PHYS 50970 - Special Problems in Physics (1-3)

Prerequisite: Permission of department chair. Advanced work in physics, the nature of which is to be determined by the previous preparation and interest of the individual. Credit will depend upon the nature of the study and the amount of work taken. (1-12 hours)

## PORT - Portugese

## PORT 10103 - Portuguese for Beginners (3)

A beginning course intended for students with no previous knowledge of the language. The skills of comprehension, speaking, reading, and writing are taught at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in Portuguese-speaking countries. No prerequisite. (No credit given to native or heritage speakers.)

PORT 10203 - Portuguese for Beginners 2 (3)
Prerequisite: PORT 10103 or equivalent. Continued study of beginning Portuguese. (No credit given to native or heritage speakers.)
PORT 20103 - Portuguese for Beginners 3 (3)
Prerequisite: PORT 10203 or equivalent. Completion of the beginning-level survey of the Portuguese language. (No credit given to native or heritage speakers.)

## PORT 20203 - Intermediate Portuguese (3)

Prerequisite: PORT 20103 or equivalent. Review, reinforcement, and integration of the skills at the beginning level. This course bridges the beginning level and the next level of intensive study. (No credit given to native speakers; heritage speakers may receive credit with permission of the department.)

PORT 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## PORT 30000 - Portuguese Study Abroad (1.00-15.00)

Credits, from 1 to 15 , taken at an approved study abroad site. Credits accepted only for graded courses taught in Portuguese.

## PORT 30863 - Culture of Brazil (3)

Prerequisite: PORT 20203 or equivalent. A study of the cultural institutions, both historical and contemporary, that distinguish Brazilian society.

PORT $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## POSC - Political Science

## POSC 10093 - Introduction to Political Science (3)

Introduces students to varying thought on and divergent practices of politics in a variety of nations.

## POSC 10133 - American and Texas Government (3)

The American political system at national and state levels, including a survey of the federal and Texas Constitutions. This course satisfies the Texas state certification requirements for education majors.
POSC 10433 - Freshman Seminar in Political Science (3)
Topics may vary each time it is offered.
POSC 20093 - Scope and Methods of Political Science (3)
Prerequisites: Prior completion of or concurrent enrollment in MATH 10043, MATH 10283 or MATH 10524. Introduction to political science as a field of study and to the major issues in relating theory and empirical research to the study of political behavior.

## POSC 20123 - Introduction to American Politics (3)

Introduction to the dynamics of American governmental institutions and political processes through the study of significant contemporary issues in the American political arena. The particular issues may vary from semester to semester in accordance with the changing interests of students and instructor. Students cannot receive credit for both POSC 20123 and POSC 20144.

## POSC 20144 - Practicing American and Texas Politics (4)

An introduction to the essential information and skills for individuals to become responsible participants in the civic lives of their communities. The course includes a laboratory segment in which students will participate in the development and implementation of group community projects. Students cannot receive credit for both POSC 20123 and POSC 20144.

## POSC 20203 - Introduction to Political Theory (3)

Introduction to the normative or value dimensions of political inquiry through the study of selected classics in political literature.

## POSC 20303 - International Politics (3)

Introduction to both the major actors and issues which comprise contemporary international politics. A major goal of the course is to familiarize students with non-western perspectives on international phenomena.

## POSC 20403 - Introduction to Public Law (3)

Introduction to the essential elements of U.S. law and how law interacts with politics in the American context. The judicial process, substantive concepts and constitutional law are all studied.

## POSC 20503 - Introduction to Comparative Politics (3)

Introduction to the concepts, theories and literature that enable effective comparison of political phenomena cross-nationally. Both western and nonwestern examples are examined.

POSC 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian

University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## POSC 30003 - Honors in Political Science (3)

Prerequisites: POSC 20093. Examination of a significant political issue and overseeing students' development of formal proposals for their senior thesis research projects. POSC 30003 and 40003 cannot be taken simultaneously.

## POSC $\mathbf{3 0 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## POSC 31003 - Topics in American Politics (3)

Topics related to the study of American political institutions, processes, behavior, and policy, such as Congress, the Presidency, political parties and elections, interest groups, social and defense policy, and Texas politics.

## POSC 31113 - Campaigns and Elections (3)

This course focuses primarily on campaigns and elections for national offices (especially Congress), however comparisons are made with state and local situations when appropriate. The class surveys the significant components of elections and campaigns to illuminate the implications of changes in the recent past, and the impact of these changes on governance in the United States.

## POSC 31123 - Public Opinion (3)

This course examines the origin, content, and measurement of the American public's views toward political matters. Topics include the values that unite us; the controversies that divide us; the social, historical, and psychological roots of contemporary American public opinion; the science of polling; and the responsiveness of the government.

## POSC 31133 - Political Participation (3)

This course is an overview of the factors that influence political participation with a focus on the United States and comparison to other democracies. Models of participation, the role of demographic characteristics, and the influence of the political system and culture are analyzed. Political participation is examined at the individual and aggregate levels.

## POSC 31143 - Political Psychology (3)

The course examines the psychological aspects of the political behavior of individuals, including the general public, elites, and activists. It analyzes their consequent political behaviors in various groups and institutional contexts. Topics may include the development and functioning of ideology, political communication, decision-making, perception, and the impact of experiences on psychological states and processes.

## POSC 31213 - Congress (3)

This course looks at the organization, behavior, and impact of the U.S. Congress. Some of the topics that will be considered are the recruitment and election of members, congressional organization and procedures, legislative policy-making, executive-legislative relations, and congressional reform.

## POSC 31223 - Presidential Leadership (3)

This class examines presidential leadership, the constitutional basis of presidential power, presidential elections, and presidential interactions with other branches of government.

## POSC 31233 - Congress and the Presidents (3)

This course explores the relationship between Congress and the presidency. Topics include the effect of events and individual personalities upon the ebbing and flowing relationship that exists between the legislative and executive branches of our government, and the principle problems and achievements of the most recent presidential administrations.

## POSC 31313 - Parties and Interest Groups (3)

This course focuses primarily on American political parties and interest groups by comparisons are made with several other democracies. The historical development of political parties and their current organizational structure, strengths and weaknesses, and the role in elections and in governing are analyzed. The role of interest groups in shaping public policy and influencing electoral politics is also critically examined.

## POSC 31323 - Media and Politics (3)

This course shines a critical light on the American news media by explaining how political news is made, exploring its effect on political institutions and
process, and critiquing its role in American democracy. Topics include ideological bias, press norms and constraints, corporate ownership, media effects, and new media.

## POSC 31413 - Public Policy (3)

This class is an overview of the policy process in the United States and includes analysis of major issues associated with domestic public policy, including elements of economic and social policy.

## POSC 31423 - Health Care Policy (3)

In this class, the centrality of health care policy is examined. Topics covered include interest group behavior in health care, the core policies related to health care, and the challenges that remain in health care policy.

## POSC 31443 - Human Trafficking in the United States: Public Policy and Political Discourse (3)

This course is an introduction to the public policy issue of human trafficking through analyzing the perspectives of the different stockholders of antitrafficking policy, including law enforcement, prosecutors, policymakers, judges, bureaucrats, the public, competing interest groups, and victims. This course also has a service-learning component that allows students to directly engage with the issue through site visit and research opportunities with local NGOs working to combat human trafficking in North Texas.

## POSC 31513 - Women and Politics (3)

This course examines how the political system, through the policies it establishes and enforces, affects women and their families. It also examines the role of gender in the political arena itself. The course considers what public policy is and what legal, political and social rights women have had in the past and have now.

## POSC 31523 - The Civil Rights Movement in America (3)

This course surveys the history and politics of the modern African American civil rights movement and uses it as a vehicle to explore the theory and practice of group-centered leadership development; the nature of social movements and the role of grassroots activism; the connections between civil rights and other struggles for social justice, past and present; and the origins and persistence of structural racial inequality in the U.S. Credit not awarded for both POSC 31523 and HIST 40873.

## POSC 31533 - American Identity Politics (3)

This course is about identity politics in the United States, which is a complex interdisciplinary topic that covers issues of race, gender, class, religion, age, and myriad of other identities that are core to human self-concept. As such, the course is divided into three sections. First, we will cover the central theories of identity in sociology and social psychology that have been used by political scientists to understand political phenomenon. The second section of the course will critically examine specific identities - those that have received disproportionate attention in political science literature - in light of the identity theories. The final section of the course will reflect on proposed strategies for best handling the oft-contentious nature of identity politics in a diverse democratic society.

## POSC 31613 - Texas Politics in Comparative Perspective (3)

This class examines Texas Politics in a comparative perspective. We will examine Texas's historical role in the national government, its constitution, politics and policies alone and in comparison to other states, and its political environment.

## POSC 31623 - Urban Politics (3)

This course provides a broad survey of the political, economic, and social issues and challenges confronting American cities and metropolitan areas. Major topics include the historical development of cities and governance; theories of urban politics and power; urban economic development; demographic changes; race and ethnicity; metropolitan growth patterns; and select contemporary urban public policies.

## POSC 31713 - Freedom, Order and Equality in American Politics (3)

The class will examine the perennial dilemmas between freedom, order and equality especially as they pertain to political ideology and public policy. To understand the dilemmas, we will examine the basic structure of our government with special attention paid to the structural tensions that augment these dilemmas. Next we will look at how the dilemmas surface in contemporary debate among liberals and conservatives and how the dilemmas impact the definition of policies in the United States.

## POSC 31803 - Transnational Human Trafficking (3)

This study abroad class will explore the political, economic, and social factors that influence the State Department in writing the Trafficking in Persons Report. Students will investigate these issues using India as a case study. Trough meetings with U.S. Government officials in India, Indian government officials, Indian NGOs, and international organizations, students will gain an
understanding of the complexity of foreign policymaking and learn about the sensitive interplay between the U.S. government and foreign governments, NGOs, and international organizations in shaping foreign policy.

## POSC 31990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## POSC 32003 - Topics in Political Theory (3)

Prerequisites: POSC 20203. Topics will be selected from varying periods of Western history: ancient, medieval, modern, and contemporary. Topics may focus on individual thinkers (Hobbes), groups of thinkers (the Liberal Tradition), or on policy questions (Human Nature and Public Policy or Assessing Normative Theories of Politics.)
POSC 32013 - Western Political Thought: Renaissance to the Age of Ideology (3)
Prerequisites: POSC 20203. The course examines new directions in political thought that emerged with the Renaissance and the Reformation, and traces the development of modern political theory through the Enlightenment. Attention is given to the relationship between theory innovation and modernizing revolutions.""

POSC 32023 - Distributive J ustice (3)
Prerequisite: POSC 20203. Examines contrasting concepts of distributive justice and their rival theoretical bases from Aristotle to the present.
POSC 32033 - Applied Ethics (3)
Prerequisites: POSC 20203. This course examines what it means to apply rival general ethical systems (i.e., consequentialism, deontology and virtue ethics) in everyday life, contrasting the relative strengths and weaknesses of these distinctive conceptions of ethics in the process.
POSC 32043 -Justice (3)
Prerequisite: POSC 20203. What would a just society look like? Students examine libertarian, liberal, and socialist answers to this question. Authors assigned typically include Rawls, Noziek, Marx, and others, with an emphasis on contemporary thinkers and debates. Attention is paid to the implications of various theories of justice for practical policy issues such as taxation, income inequality, the size and scope of government services, and moral limits of the market.

## POSC 32053 - Global Justice (3)

Prerequisites: POSC 20203. Students investigate global institutions and international relations from an ethical point of view. Topics include just war theory, global democracy, immigration, and global distributive justice. Readings drawn mainly from contemporary sources. Representative authors include John Rawls, Michael Walzer, and Peter Singer.

## POSC 32113 - Ancient and Medieval Political Thought (3)

This course traces the development of political theory from Greek antiquity through the medieval period. Through close analysis of key philosophical texts by Greek and Christian thinkers, students will learn about the foundations of Western political thought.

## POSC 32990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.
POSC 33003 - Topics in International Politics (3)
Topics studied include such areas as foreign policy, globalization, international political economy, diplomacy and bargaining, and various regional issues.

## POSC 33013 - United Nations Institutions and Processes (3)

Prerequisite: Permission of the instructor. This course is the first of a two-part series of classes for students participating in Model United Nations. Students will study the history of the United Nations, UN institutions, and current issues that the UN addresses. Students are expected to critically analyze the factors that lead to both successful and unsuccessful action by the UN.

POSC 33023 - International Organizations Research (3)

Prerequisite: Permission of the instructor. This course is the second of a twopart series of classes for students participating in Model United Nations. Students will engage in primary-source research on international issues as assigned by the course instructor from the perspective of a country also assigned by the instructor.

## POSC 33033 - Conflict and Negotiation (3)

This class is a theoretical examination of interstate (international) and intrastate (civil) war. In particular, the class will examine whether or not the factors that lead states to fight wars are related to the factors that lead states to negotiate an end to conflicts. After a theoretical introduction to the causes of war and peace, the class will draw on historic and present conflicts to evaluate the various theoretical explanations presented in class.

## POSC 33103 - Feminist International Relations Theory (3)

The objective of this course is to examine the theories of International Relations through a gender-sensitive lens that takes into consideration the role of feminist theory and the positions of women. Throughout the semester students will discover what it means to use gender as a lens for viewing and understanding the world, and how that lens can be used to deconstruct issues of power.

## POSC 33113 - Globalization and Political Economy (3)

Globalization" is often used to describe the increasing interconnectedness of the world in terms of communication, culture, economics, politics, and technology. This course examines the origins and dilemmas associated with globalization and the transnational institutions established to cope with this process. In addition, we will discuss the various theories with regard to globalization and its effects on international political economy."

## POSC 33123 - Globalization (3)

This course is designed to provide a forum for analysis and discussion of some of the most significant and vexing issues of global politics and political economy in the post-Cold War and the Post-Modern era in the context of globalization, and the intellectual debates surrounding it. Some of the concepts discussed include globalization, environmental degradation, the impact of high-tech and global economic interdependence, inequality, migration, hybrid identity and religious revivalism.

## POSC 33133 - Energy and Global Geostrategy (3)

Prerequisites: Upper division standing. This course will introduce students to issues surrounding energy, global political economy and global geostrategy. Through historical analysis, students will reflect on the significant role that energy has played in charting the political map of the twentieth century and continues to shape political and economic events today. Students will investigate and explore the role of fossil fuels, unconventional resources, renewables and other alternative source of energy, while discussing their cost-effectiveness, environmental impact and viability to satisfy the increasing global demand for energy. By the end of the course, students will be able to identify, define and analyze pertinent issues surrounding global energy security and environmental sustainability.

## POSC 33203 - Political Economy of Human Trafficking (3)

This course is designed to be an introduction to the political economy of human trafficking where students will spend two weeks studying abroad with site-enhanced visits. We will meet with government officials and representatives from local NGOs who will discuss some of the factors contributing to human trafficking and will engage in service learning activities that give students hands on experience in the three P's of human trafficking: prevention, prosecution and protection. Through these experiences students will gain a better understanding of the political and economic factors that contribute to the growth of human trafficking around the globe.

## POSC 33503 - Contemporary U.S. Foreign Policy (3)

Examines contemporary challenges and opportunities for U.S. foreign policy.

## POSC 33513 - United States Foreign Policy Making (3)

Examines the processes by which U.S. foreign policy is made and the actors and motivations involved.

## POSC 33523 - U.S. Foreign Policy in Film (3)

Examines the major events shaping U.S. foreign policy from the end of World War II to the present. The course augments a traditional lecturer and discussion format with the use of selected feature films to convey an emotional understanding of the period under study.

## POSC 33533 - International Humanitarian Intervention (3)

The course will examine modern day international responses to the emergency needs of people damaged by both major disasters and by the multitude of inter and intra state conflicts that have arisen in much of the world since the end of the Cold War.

## POSC 33603 - International Relations of East Asia (3)

This course serves as an introduction to the international relations (IR) of East Asia. We will begin with an introduction to Asia's distinct historical and cultural traditions and review some of the commonalities that can be drawn across states in the region. Next, we will focus on some of the key actors in Asia - China, Japan, North and South Korea - examining how they interact with each other as well as how they engage other important actors such as the US. Finally, we will examine economic development, institutions, and security concerns as they relate to the strategic interests of the region and individual states.

## POSC 33613 - The International Relations of J apan (3)

This course examines Japan's relationship with the rest of the world. We begin with a focus on World War Two, but most of the class focuses on Japan's postwar relationships, as they relate to trade, international security, and international norms.

## POSC 33623 - Chinese Foreign Policy (3)

This course will examine China's foreign relations from the founding of the People's Republic of China (PRC) in 1949 to the present. We will explore the theories and concepts involved in the study of foreign policy, followed by an in-depth examination of the domestic factors shaping China's foreign policy goals and implementation.

## POSC 33633 - Russian Foreign Policy (3)

Examines Russianforeign policies and how and why particular policies are (or have been) formulated and implemented from the end of the Cold War to the present.

## POSC 33703 - Mideast Conflicts (3)

Examines the major conflicts shaping the modern Middle East, from the 1890s to the present and seeks to understand these conflicts, their root causes, and the possibilities for peace in the region.

## POSC 34003 - Topics in Public Law (3)

The course sequence includes Judicial Process, International Human Rights, and several courses on American Constitutional Law. A simulation of the U.S. Supreme Court may be offered in alternate years.

## POSC 34013 - Constitutional Law:Powers (3)

An overview of the Supreme Court as a political institution and its role in defining the limits of power among the three branches of the national government and between the states and the national government.

POSC 34023 - Due Process in the Criminal Courts (3)
An overview of the 4th Amendment (searches and seizures,) the 5th Amendment (double jeopardy, privilege against self-incrimination and federal due process of law), the 6th Amendment (speedy trial, confrontation of witnesses, and right to counsel), the 8th Amendment (excessive bail, cruel and unusual punishment, and the 14th Amendment (state due process.)

POSC 34033 - Constitutional Law: Amendment One (3)
An overview of the rights of the First Amendment, including speech, press, religion, association, assembly and petition.

## POSC 34043 - Equality Under the Law (3)

An overview of cases involving categorical discrimination under the 14th Amendment's Equal Protection Clause.

## POSC 34053 - Comparative Judicial Politics (3)

This course explores how courts abroad operate, including organization of courts, selection and appointment mechanisms, judicial independence, judicial review, human rights and the role of courts in the larger political system.

POSC 34063 - International Human Rights and Humanitarian Law (3) An overview of rights recognized under the principle of customary law and under several international or transnational covenants and conventions.

## POSC 34073 - Moot Court (3)

Prerequisite: Must be selected as a member of the TCU Intercollegiate Moot Court Team. Appellate advocacy involving cases taken from the current or recent dockets of the Supreme Court of the United States, as well as the current case problem set by the American Collegiate Moot Court Association.

POSC 34083 - Constitutional Law: Rights and Liberties (3)
This constitutional law course explores how the Supreme Court has defined and applied the rights contained in Amendment I, Amendment XIV and other rights implied from the first nine amendments. The focus is on the Court as a policy-making branch of the U.S. government.

POSC 34093 -Judicial Politics (3)

An overview of law, courts and politics in the United States and the various theories that have been proposed to explain decision-making by judges, prosecutors, law enforcement and juries.

## POSC 35003 - Topics in Comparative Politics (3)

European politics, Asian politics, Latin American politics, Middle Eastern politics, developing political systems, etc.

## POSC 35013 - Comparative Democratic Systems (3)

Examines the rationales for democracy, contrasts the institutional variation among contemporary persistently democratic societies, and introduces rival explanations for this variation.

## POSC 35023 - Comparative Social Movements (3)

Why do people join together in protest, often at great cost to themselves in money, time, and/or risk of serious personal injury? This course will examine this and other questions related to social movement organization, strategy, and impact. It will look at these questions on a theoretical level and as they apply to a variety of real world social movements in different national contexts.

## POSC 35033 - Islam and Politics (3)

This course presents a study of Islam and politics. It attempts to shed light on how Islamic theology molds and provides legitimacy for political discourse of resistance as well as power politics. More specifically, the focus is on politics of Islam and how it sets the political agenda. Among topics of interest would be a discussion of Islam and terrorism, Islam and Human rights, and the prospects for relations between the Muslim World and the West.

## POSC 35043 - Politics of Developing Nations (3)

This course focuses on the political problems associated with development: the problems of poverty, economic development - the colonial heritage, economic dependence, and the character of the Third World state; the problems of political development - clientelism, corruption, and centralized state power; and the problem of establishing a stable form of government transition from authoritarian rule, democracy, liberalization and democratization.

## POSC 35103 - Distinction Program Capstone Course

Prerequisite: POSC 20093 and membership in good standing in the department's Distinction Program. Identifies the rationales for democracy, contrasts the institutional variation among contemporary persistently democratic societies, examines rival explanations for this variation, and oversees students' development of formal proposals for their senior thesis research projects.

## POSC 35503 - The Politics and the Culture of the Middle East and North Africa (3)

This course would present a historical analysis of the rise and decline of the Middle East. We would stress power and authority relationships, the role of political culture in evolution of regional politics. Special emphasis will be placed upon the capacity of Middle Eastern political systems to confront the related challenges of modernization, political development and democratization.

POSC 35603 -J apanese Politics and Society Through Film (3)
In this course we examine Japanese politics and society through both the scholarship of those who have dedicated their lives to studying Japan and through films (mostly films made by and for J apanese audiences.) Ultimately, we will strive to understand how Japanese politics and society work and to use this understanding to deepen our sense of how politics and societies function more generally.

## POSC 35613 - The Politics of J apan (3)

This class will introduce students to Japan's postwar political system. In addition to learning how the political system works in the abstract, we also examine the way that the political system has actually functioned, particularly in regards to the relationship between the state and society, economic governance, and foreign policy.

## POSC 35623 - Politics of China (3)

This course will examine the social, economic and institutional elements that shape the politics of the People's Republic of China. The issues covered in the course include: political culture, civil society, political elites, democracy, development, and environmental politics.

## POSC 35633 - Contemporary Issues in China (3)

This course is designed to be an introduction to Chinese history, politics, economics, and civilization where students will spend two weeks in China with site-enhanced visits. The primary location is Beijing, where students will have an opportunity to visit the Forbidden City, Summer Palace, Lama

Temple and several other sites to see how the city blends tradition with modernization. We will have special excursions to migrant schools, an environmental agency, and meet with a representative of the National People's Congress to learn about some of the political and social dilemmas the country is currently facing. In addition, we will have three short trips outside of the city. Students will do an overnight hike on the Great Wall, visit the terracotta soldiers in Xian, and hike Wutaishan, one of China's five sacred Buddhist Mountains. Through these experiences students will gain a better understanding of China and see how one of the world's most rapidly developing countries is adjusting to the demands of globalization.

## POSC 35643 - Entrepreneurship in China (3)

This course will examine the development of an entrepreneurial mindset in modern China, focusing on the period from 1949 to the present. The course covers the history of entrepreneurship in China and how market reforms introduced in the post-1978 era helped inspire creativity, innovation, and the creation of new values among the Chinese. This transition to an economic model which the Chinese refer to as socialism with Chinese characteristics, has transformed China both economically and politically.

POSC 35703 - Politics of Western Europe (3)
This course introduces students to the various institutions, political cultures and decision-making apparatus of the nations of Western Europe and the European Union.

POSC 35713 - Politics of the European Union (3)
An exploration of the creation and functioning of the European Union and its effects on politics of the Member States.

## POSC 35723 - Political Life in Central Europe (3)

This course is onsite, and is offered as a part of the TCU Summer study abroad program. It is intended to provide a forum for discussion and analysis of post-Communist transition in Hungary and Czech Republic since the 1989 revolution that overthrew Communism.

## POSC 35803 - Latin America: The Challenge of Democratic Consolidation

 (3)The course examines key factors (patterns of conquest, inter-American relations) that have shaped Latin American politics historically and then focuses concentrated attention to the factors that affect Third Wave democratization in the region. Much of the course is centered on case studies.

## POSC 39003 - Topics in Political Science Methods (3)

Prerequisites: POSC 20093 or consent of the instructor. Topics include political science methods applied to various research problems such as political behavior, public policy analysis, and program evaluation.

## POSC 39013 - Survey Research (3)

Prerequisites: POSC 20093, MATH 10043 or its equivalent. This is a course that will study the use of surveys in political science. Students will learn to assess surveys for their quality, to write a survey, to take the survey from concept to fruition, to analyze survey data, and to write a research paper from the analysis they do.

## POSC 39023 - Game Theory in International Relations (3)

Prerequisites: POSC 20093. This class is designed as a workshop to introduce students to the use of game theory in international relations. The first part of the class will provide students with basic instruction on game theory and formal models, including how to create a decision tree, how to find equilibrium points in a game, and how to design a basic game. The second part of the class will be a writing workshop as students progress in their original research and writing in pursuit of a written project that incorporates formal methodology.

## POSC 39033 - Foreign Policy Analysis (3)

Prerequisites: POSC 20093. Teaches the skills associated with traditional decision-making analysis applied to a foreign policy setting.

## POSC 39043 - Case Study Research (3)

Prerequisite: POSC 20093. This course is about case study research - the study of a set of events bounded by space and time. Its emphasis is on how to formulate research questions and design research strategies for the rigorous application of social science standards and logics of inference in those instances where the empirical evidence involved is primarily qualitative rather than quantitative, and where a limited number of cases can and should be studied in significant detail.

## POSC 39053 - Experimental Methods in Political Science (3)

Prerequisites: POSC 20093. This class is an introduction to the use of experimental methodology in political science. The course is broken into three different sections: 1) experimental methods versus other methods of
inquiry; 2) core concepts of experimental methods, including how to design an experiment; 3) exploring the use of experiments to answer questions of political significance.

## POSC 39990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## POSC 40001 - Research Tutorial (1)

Prerequisites: POSC 20093. This course is designed to prepare students to conduct original research generally and to complete an undergraduate thesis specifically. The course lays the groundwork for the formulation, design and completion of an original research project. Through seminars and project assignments, students work through the identification of a research question to the preparation of a specific research design to complete the project, with appropriate training in the techniques and strategies at each stage. Student work culminates in the completion of a research proposal that is presented for approval by a faculty committee, which then leads to the completion of the thesis during the subsequent semester.

## POSC 40003 - Senior Honors in Political Science (3)

Prerequisites: POSC 30003 or POSC 35103, and POSC 40001. The writing of a substantial research paper under the supervision of a three person faculty committee. A grade of Incomplete will be carried in this course until the paper is completed. The sequence of POSC 30003 (or 35103 ) and 40003 must be planned so that 40003 is taken prior to the student's final semester of undergraduate work.

## POSC 40093 - Distinction Program Capstone Course (3)

Prerequisite: POSC 20093 and membership in good standing in the department's Distinction Program. Identifies the rationales for democracy, contrasts the institutional variation among contemporary persistently democratic societies, examines rival explanations for this variation, and oversees development of senior capstone projects.

POSC 40900 - Internship in Political Science/British Studies (1.00-20.00) Washington Center or at the TCU in London Program. Full-time internships with a public or private agency in Washington, D.C. or in London, England, offered either through the Washington Center or through the TCU in London Program. The internship will allow students to integrate theory and practice in a supervised professional setting, up to 12 semester hours credit. (Offered as BRST or POSC credit.)

## POSC 40910 - Washington Internships (1.00-12.00)

Full time internships with a public or private agency in Washington, D.C. offered in collaboration with the Washington Center. Offered during the Fall term only, these internships help students to integrate theory and practice in a supervised professional setting for up to 12 semester hours credit.

## POSC 40920 - London Internships (1.00-12.00)

3-day or 4-day per week interns with public or private agencies in London, England, offered through the TCU in London Program. Offered during the fall and spring terms, these internships accommodate students' long-term professional objectives. Internships are offered for either 9 or 12 semester hours credit. Most of the London interns also take one or two classroom courses while in London. (Offered either for BRST or POSC credit.)

POSC 40950 - Internship in Political Science (1.00-3.00)
Individually arranged local internship for 3 semester hours credit. Students expected to spend 150 hours in a local placement (in a regular term that would amount to 10 hours per week.) (This course is only offered as P/NC.)

## POSC 40960 - Civic Literacy Internships (3)

These are supervised internships in local settings, with bi-weekly meetings to reflect on a variety of experiences of the students. Students are expected to spend 150 hours in a local placement (in a regular term that would amount to 10 hours per week.) (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

POSC 40970 - Independent Study in Political Science (1.00-20.00)
Prerequisite: A specific program of study approved by instructor prior to enrollment. (1-6 semester hours)

## PSYC - Psychology

PSYC 10110 - Techniques of College Learning (3)

Prerequisite: Freshman or sophomore standing or consent of the instructor. The study of the skills and techniques necessary for efficient learning. Application of the principles of learning, cognition, and motivation to the problems of college learning. This class is offered for 3 hours credit.

## PSYC 10213 - General Psychology (3)

One of the prerequisites for higher-level psychology courses. The science of psychology, integrating biological, social, cognitive, and learning influences on behavior; basic behavior processes, and principles of human and infrahuman behavior. Credit cannot be given for both PSYC 10213 and either 10514 or 10524.

## PSYC 10514 - Principles of Behavior I (4)

Recommended for B.S. in Psychology. An introduction to the scientific study of behavior. The nature of scientific inquiry of behavior and relevant basic behavioral processes will be discussed. Three hours lecture and two hours laboratory per week. Credit cannot be given for both PSYC 10213 and 10514.

## PSYC $\mathbf{1 0 5 2 4}$ - Principles of Behavior II (4)

Recommended for B.S. in Psychology. An introduction to the scientific inquiry of behavior. The nature of scientific inquiry of behavior and relevant behavioral processes will be discussed. Three hours lecture and two hours laboratory per week. Credit cannot be given for both PSYC 10213 and 10524.

## PSYC 10533 - Freshman Seminar in Psychology (3)

Topics may vary each time it is offered.

## PSYC 20333 - Basic Leadership Theory and Skills (3)

Prerequisite: Sophomore standing. Students will explore answers to fundamental questions about the psychology of leadership. Emphasis is on psychological theories and how they address the issue of self-leadership". Psychological approaches to the measurement of leadership effectiveness will be used to critically evaluate various contemporary models found in popular culture."

## PSYC 20393 - Psychology of Love (3)

Teaches students how to think critically about the psychological research on romantic attraction and close relationships. The course goal is to educate intelligent consumers of media information and misinformation, teaching them to separate scientifically valid from invalid claims about the causes and consequences of initial romantic attraction, deepening close relationships, sex differences, problems that occur within close relationships, and effective versus ineffective strategies for resolving conflicts in close relationships.

PSYC 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## PSYC 30003 - Honors Tutorial (3)

Prerequisite: Junior standing and membership in the Honors Program. An examination of a major issue in psychology. This course is only offered as a tutorial and the specific topic is determined by consultation with an instructor. Arrangements for this course must be made with an instructor the semester prior to enrollment.

## PSYC 30113 - States of Consciousness (3)

Prerequisite: PSYC 10213, or 10514, or 10524. An overview of contemporary knowledge about various states of consciousness including both theoretical perspectives and contemporary applications.
PSYC 30133 - Parapsychology: Science or Pseudoscience? (3)
Prerequisite: PSYC 10213, or 10514, or 10524. The nature of scientific theories and their application to the claims of paranormal events. The emphasis is on a skeptical analysis of such reputed phenomena as extra sensory perception, psychokinesis, clairvoyance, and precognition. Alternative explanations of claims of the paranormal using established scientific principles, laws and theories of behavior are examined.

PSYC 30263 - Problem Solving in Task Oriented Groups (3)
Two hours lecture and three hours lab. Prerequisite: PSYC 10213, or 10514, or 10524, or approval of instructor. Instruction and practice in the elements of effective participation in task oriented groups and in the strategies and techniques of systematic problem solving. Topics in group processes include group membership roles, task oriented roles, leadership roles, group norms, competition, and conflict management. Topics in problem solving include problem definition, brainstorming, means-end analysis, and structured decision making.

PSYC 30313 - Developmental Psychology (3)
Prerequisites: PSYC 10213 or 10514 or 10524. This course explores the stages of development, including infancy, early and middle childhood, adolescence, adulthood, and the end of life, from a lifespan perspective of human development, including physical, cognitive, and psychosocial changes. Credit will only be given for one of these courses: PSYC 30313, EDUC 50143, or NURS 10303.

## PSYC 30323 - Child Psychology (3)

Prerequisite: PSYC 10213, or 10514, or 10524. Human behavior from conception to adolescence; the influences of heredity and maturation, physical, social and cognitive development, with child observations.

PSYC 30333 - Sexual Behavior in Humans and Other Animals (3)
Prerequisite: PSYC 10213, or 10514, or 10524 or approval of instructor. Emphasis on empirical studies of sexuality, encompassing its varied manifestations, its many determinants, and contemporary theories of sexuality, with an emphasis on evolutionary theory. Bodily mechanisms and their development, sexually transmitted diseases, and aspects of reproduction are also covered.

## PSYC $\mathbf{3 0 3 4 3}$ - Social Psychology (3)

Prerequisite: PSYC 10213, or 10514, or 10524. Methods and principles related to the experience and behavior of individuals in interaction with each other, in group situations, and in relation to items in the sociocultural setting. Credit cannot be given for both PSYC 30343 and PSYC 30353.
PSYC 30353-Social Psychology (3)
Prerequisite: PSYC 10213, or 10514, or 10524. Methods and principles related to the experience and behavior of individuals in interaction with each other, in group situations, and in relation to items in the sociocultural setting. Credit cannot be given for both PSYC 30343 and PSYC 30353.
PSYC 30363 - Abnormal Psychology (3)
Prerequisite: PSYC 10213, or 10514, or 10524. Personality and behavior processes in normal and deviant personalities; variations and causes of psychopathology, problems of classification, diagnosis and management.

## PSYC 30373 - Organizational Psychology (3)

Prerequisite: PSYC 10213, or 10514, or 10524, or approval of instructor. Analysis of methods, accumulated knowledge, and systematic approaches to problems of group behavior in organizations including personnel management, selection, training, motivation, performance appraisal, leadership, working conditions, and human engineering.

## PSYC 30383 - Sport Psychology: Performance Enhancement Techniques

 (3)Prerequisites: PSYC 10213, or 10514, or 10524. A comprehensive introduction to the theories and methods of applied sport psychology or performance enhancement. Applies contemporary theories from social psychology, learning, consciousness studies, and applied psychology to the problems of improving performance in any contest. Develops the conceptual basis for the psychological techniques used by sport psychologists, examines empirical evidence for effectiveness of these methods, and elaborates the significance of sports as a metaphor for other life situations where performance is important.

## PSYC 30393 - Evolutionary Psychology (3)

Prerequisites: PSYC 30503. This class will teach students the fundamental principles of evolution and show how these principle can be used to provide new insights into human social behavior. Examples of topics to be covered are emotions, motivation, sexual attraction, parenting, aggression, and status-seeking. This course has a written component.

## PSYC 30403 - The Human Senses (3)

Prerequisite: PSYC 30503. A survey of the structure and function of sensory systems, with particular emphasis on vision and hearing.

## PSYC 30414 - Experimental Psychology: Learning (4)

Three lectures and one laboratory per week. Prerequisite: PSYC 30503. Basic methods and concepts employed in the study of learning.

## PSYC 30423 - Experimental Psychology: Perception (3)

Two lectures and one laboratory period per week. Prerequisite: PSYC 30503. Basic experimental techniques employed in the study of detection, discrimination and recognition.

PSYC 30433 - Experimental Psychology: Motivation (3)
Prerequisite: PSYC 30503. Basic concepts, theories, and techniques employed in the study of motivation.
PSYC 30443 - Psychology of Personality (3)

Prerequisite: PSYC 10213, or 10514, or 10524. The factual and theoretical status of the development, structure, and dynamic functioning of the adult personality.

## PSYC 30453 - Memory and Cognition (3)

Prerequisite: PSYC 30503. An overview of major issues and topics in modern cognitive psychology with particular emphasis on interpreting basic research in memory and cognitive processes. Credit cannot be earned for both PSYC 30453 and PSYC 30523.

PSYC 30463 - Introductory Neuroscience (3)
Prerequisite: PSYC 10213, or 10514, or 10524 or approval of instructor. Study of the nervous system, action systems, and sensory systems to provide background for examining the physiological bases of discrimination, motivation, emotions, and learning. (Crosslisted as BIOL/PSYC 30463.)

## PSYC 30473 - Comparative Psychology (3)

Prerequisites: PSYC 30503. Provides knowledge of animal behavior as a field of research based on mechanistic and evolutionary approaches. Provides a basic vocabulary and a conceptual framework which enables the student to appreciate the importance and scope of animal behavior as an interdisciplinary field and to identify areas of interest for further study.
PSYC 30483 - Human Neuropsychology (3)
Prerequisites: PSYC 10213, or 10514, or 10524, or approval of instructor.
Presents an approach to the study of human brain function by examining the behavioral syndromes resulting from neurological disease and brain damage. Topics will include an overview of the nervous system; neuropsychological assessment; cortical dysfunction; language disorders; developmental neuropsychology; and recovery of function following brain trauma.

## PSYC 30503 - Behavioral Research (3)

Prerequisite: PSYC 10213, or 10514, or 10524, plus MATH 10043. Basic elements of behavioral research-planning, execution, analysis, and interpretation. Includes selection of research problems, measurement of behavioral constructs, development of instruments, and experimental and non-experimental designs as well as the basic statistical methods and concepts needed in behavioral research.

## PSYC 30513 - Fundamentals of Learning (3)

Prerequisite: PSYC 30503. This course is concerned with the discipline of learning psychology and its application to the study of behavior in human and non-human animals. We will not, however, be directly concerned with methods and issues in Educational or Applied branches of Psychology. IN this course, learning is the informal process by which we learn to adapt our behaviour through experience. Students will become familiar with concepts and theory related to how this type of learning is achieved. This course will include empirical research on topics such as reflexes, orienting mechanisms, associative conditioning (Pavlovian and instrumental), memory processes, stimulus control, and choice behavior.

## PSYC 30523 - Experimental Psychology: Cognition (3)

Prerequisites: PSYC 30503. This class will meet for two hours of lecture and two hours of laboratory per week. Topics for this course include gaining an appreciation for experimental cognitive psychology - the study of how knowledge is acquired, represented, and maintained. Major findings and current thinking about a broad range of topics in experimental cognitive psychology will be discussed in the areas of attention, memory, language, decision-making, and reasoning among others. Credit cannot be given for both PSYC 30523 and PSYC 30453.

## PSYC 30533 - Animal Cognition (3)

Prerequisites: PSYC 30414 or 30433 or 30453 or 30473 or 30513 . This course will evaluate current issues of animal cognition, including memory, tool use, numerical sense, theory of mind, navigation, and language. This course aims to provide an appreciation of the interplay between theory and empirical research. This course will begin with a discussion of empirical research on reflexes, orienting mechanisms, and associative conditioning (Pavlovian and instrumental) to provide a framework for applying knowledge of basic learning processes to claims of higher-order cognition.

## PSYC 30563 - Positive Psychology (3)

Prerequisites: Junior standing or instructor approval. The course is an introduction to research findings, theory, and application of Positive Psychology in a cross-cultural environment. From a positive psychology perspective, students will identify and employ individual character strengths, analyze decision -making processes that allow individuals and communities from different cultures to thrive, and evaluate the impact of service learning.

PSYC 30603 - Historical Foundations of Modern Psychology (3)

Prerequisites: PSYC 10213, or 10514, or 10524, and 9 hours of psychology or permission of the instructor. The roots of modern psychology and the development of the schools of psychology will be discussed. The historical developments in science and philosophy that were the determinants of the founding of psychology will be analyzed.

## PSYC 30623 - Families and Child Adjustment (3)

Prerequisites: PSYC 30503. This course is concerned with the discipline of developmental psychopathology and its application to the study of the normal and abnormal development of children in families. Students will be introduced to the field of developmental psychopathology and become familiar with important concepts and theories within that field. This course will discuss empirical research on topics such as marital conflict, parental depression, parenting styles, resiliency, and treatments and interventions.

## PSYC 30633 - Social and Emotional Development (3)

Prerequisite: PSYC 30503. This course provides an in-depth analysis of the development of social relationships, behaviors, and emotions. Students will be introduced to topics such as temperament, attachment, emotion regulation, peer relationships, morality, aggression, and parenting.

## PSYC 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## PSYC 30993 - Psychology of Sex, Violence, and Aggression (3)

Teaches students how to think critically about psychological research on sex, violence, and aggression. The course goal is to educate intelligent consumers of media information and misinformation, teaching them to separate scientifically valid from invalid claims that such factors as genetics, biochemistry, socialization practices, sex differences, ambient temperature, alcohol, television, movies, and video games affect interpersonal violence and aggression.

## PSYC 40003 - Senior Honors Research Paper (3)

Prerequisite: PSYC 30003, senior standing, and membership in the Honors Program. A supervised research experience and a thesis that is usually based on the subject matter studied in 30003 . This course is offered only as a tutorial. Arrangements for this course must be made with an instructor the semester prior to enrollment. It is recommended that enrollment occur the fall semester of the senior year.

## PSYC 40233 - Advanced Leadership Skills (3)

Prerequisite: PSYC 20333. This advanced course in leadership emphasizes psychological perspectives on influencing others". Topics will include the psychology of interpersonal communication, conflict resolution, and models of leadership. Psychological approaches to the measurement of leadership effectiveness in these areas will be used to critically evaluate various contemporary models found in popular culture."

## PSYC 40260 - Basic Internship (1-3)

Prerequisite: Fifteen semester hours in Psychology. This applied course extends learning beyond the classroom and provides development opportunities in leadership, diversity, counseling, etc. Students must obtain a volunteer or internship position (assistance is available through the instructor). Earned credit hours are based on the number of hours worked (up to 3 credit hours for 120 clock hours of work), attending class 1 hour per week, and completion of all assignments such as weekly journals and presentation handouts.

## PSYC 40290 - Advanced Internship in Psychology (1-3)

Prerequisite: PSYC 40260. This experiential course provides advanced opportunities through volunteer or internship positions that may be paid or unpaid positions. Service environments provide experiential learning opportunities related to leadership, counseling, human resources or other arenas. Students obtain their own positions (assistance is provided by the instructor) and earned credit hours are based on the actual number of clock hours worked (e.g., 3 credit hours requires 150 clock hours of work), attending class 1 hour per week, and completion of all assignments.

## PSYC 40313 - Research in Neuroscience (3)

Prerequisites: 15 semester hours in Psychology, plus written permission of the professor and the psychology department. Projects in neuroscience research carried out under the direction of a faculty member. Because ongoing research projects differ from one semester to the next, students gain additional research skills each time they take the course. The course may be repeated twice (taken a maximum of three semesters in all.)

PSYC 40323 - Research in Psychology of Learning (3)
Prerequisites: 15 semester hours in Psychology, plus written permission of the professor and the psychology department. Projects in psychology of learning research carried out under the direction of a faculty member. Because ongoing research projects differ from one semester to the next, students gain additional research skills each time they take the course. The course maybe repeated twice (taken a maximum of three semesters in all.)

## PSYC 40333 - Research in Social Psychology (3)

Prerequisites: 15 semester hours in Psychology, plus written permission of the professor and the psychology department. Projects in psychology of learning research carried out under the direction of a faculty member. Because ongoing research projects differ from one semester to the next, students gain additional research skills each time they take the course. The course maybe repeated twice (taken a maximum of three semesters in all.)

PSYC 40343 - Development/Cognitive Research (3)
Prerequisites: 15 semester hours in Psychology, plus written permission of the professor and the psychology department. Projects in psychology of development/cognitive research carried out under the direction of a faculty member. Because ongoing research projects differ from one semester to the next, students gain additional research skills each time they take the course. The course may be repeated twice (taken a maximum of three semesters in all.)

## PSYC 40403 - Psychology of Counseling (3)

Prerequisite: PSYC 10213, or 10514, or 10524, or approval of instructor Counseling in institutional, educational, and community settings; roles and functions of counselors; the relations of the counselor in different settings with clients and organizations.

PSYC 40413 - Cognitive Development (3)
Prerequisite: PSYC 30323 or 30503 or 30453, or approval of instructor. Major periods of cognitive development including infancy, early childhood, middle childhood, and adolescence; development of cognitive skills such as reasoning, problem solving, memory, language, and perception; acquisition of applied cognitive skills such as arithmetic, reading, writing, and physics.

## PSYC 40423 - The Tao of Strategy (3)

Prerequisites: Junior standing. A search for the deep structure of strategic action that bridges Eastern philosophy and Western science; this seminar is designed to teach strategic thinking and the arts of leadership to student from a wide variety of disciplines. This course can be applied towards the Psychology Department's minor in the Psychology of Leadership.

PSYC 40433 - Advanced Developmental Psychology (3)
Prerequisite: PSYC 30503. Data and research methods related to the development of the human organism from its prenatal origins through old age.

PSYC 40443 - Child Development in a Cultural Context (3)
Prerequisite: PSYC 10213, or 10514 or 10524. This course will study child and adolescent development from a cross-cultural perspective. Topics include cross-cultural differences in historical conceptualizations of children, current government policies aimed at children and families, classroom learning, parenting (including the role of fathers) and differences in infants' temperaments.

## PSYC 40453 - Behavior Disorders of Childhood (3)

Prerequisites: PSYC 30503. A survey of the manifestation, etiology, and treatment of children's developmental and behavioral disorders. Also includes an examination of historical trends and cultural differences in the conceptualization of abnormal child behavior, an overview of research methods in developmental psychopathology and clinical child psychology, and a review of issues in the classification of disordered behavior. An emphasis will be placed on critical thinking, interpretation of empirical findings, and the identification of empirically validated interventions.

## PSYC 40463 - Applied Behavior Analysis (3)

Prerequisite: PSYC 30503. In introduction to the principles and practices of applied behavior analysis. Emphasis is on applications in work with children with and without developmental disorders in home, school, and clinical settings.

PSYC 40473 - Psychology of Women and Men (3)
Prerequisite: junior or senior standing. This course is designed to be an overview of theory and research on contemporary American concepts of femininity and masculinity, the implications of these definitions for the average woman or man and some alternative interpretations of the meaning of one's sex role identity.

PSYC 40483 - Seminar in the Biological Mechanisms of Behavior (3)

Prerequisite: PSYC 30463 or its equivalent, or approval of instructor. A topic seminar with an emphasis on developing an understanding of the interaction of the biological, genetic, psychological, and social factors that underlie the development of behavior.

PSYC 40493 - Introduction to Psychological Measurement (3) Prerequisite: PSYC 30503. Characteristics of tests and measurement scales; survey of individual and group tests in psychology, education, and clinical settings.

## PSYC 40503 - Psychological Disorders and Creativity (3)

Prerequisites: PSYC 10213 or 10514 or 10524. This course will examine mental illness from a cross-cultural and creative perspective. Topics include cross-cultural differences in historical conceptualizations of mental illness, current government policies aimed at mental illness, examination of treatment and use of art (e.g., painting:Vincent Van Gogh, writing: Virginia Woolf) as a means of creativity in mental illness.

PSYC 40533 - Experimental Psychology: Social (3)
Two lectures and one laboratory period per week. Prerequisite: PSYC 30353 or its equivalent, or approval of instructor. Concepts and methods of research on attitudes, communication and persuasion, group structure, and group processes.

## PSYC 40950 - Contemporary Topics in Psychology (1-3)

Prerequisite: PSYC 10213, or 10514, or 10524, or approval of instructor. Topics of current interest in psychology or society. This class carries 1-6 hours, but is usually offered for 3 hours credit.

PSYC 40970 - Independent Studies (1-6)
Prerequisites: Twelve semester hours in Psychology and departmental approval. Supervised research or study in specialized areas not covered in regular course offerings. (1-6 semester hours)

PSYC 40993 - Senior Seminar in Psychology (3)
Prerequisites: PSYC 30503 and junior or senior standing in psychology. This course teaches students how to think critically about experimental psychology research topics, research methods and ethics, career pathways, and post-graduate opportunities in psychology. It is excellent preparation for graduate school in all areas of psychology and related disciplines.

PSYC 50213 - Interactive Data Analysis (3)
Prerequisite: PSYC 30503. Introduction to SPSS in application to research in the behavioral sciences, including use of SPSS functions for data analysis. Attention is also given to the use of univariate and multivariate methods of exploratory data analysis.

## PSYC 50401 - Neurobiology of Aging (1)

Prerequisites: permission of instructor. The current literature associated with the neurobiology of aging, modern research techniques and recent developments in neuroscience and aging research are discussed. This is a participation course in which advanced undergraduate and graduate students will present manuscripts, explain research hypotheses and methodologies and explain results. Open discussion of these papers will include faculty from Biology and Psychology. Topics presented will differ by semester. The course may be repeated three times (taken a maximum of four semesters in all.) (Crosslisted as BIOL/PSYC 50401.)

## PSYC 50403 - Advanced Neuroscience (3)

Prerequisite: Senior or Graduate standing and PSYC 30463 or permission of instructor. An in depth analysis of the neural and endocrine components of normal and abnormal behavior with emphasis on classic studies in the field.

## PSYC 50411 - Theoretical Foundations of Statistical Inference (1)

Prerequisite: Graduate standing in Psychology; Ph.D. students must take concurrently with PSYC 50423. Supplements PSYC 50423. Provides an indepth view of the models and theories underlying analysis of variance, correlation and regression analysis, and the nonparametric techniques.

PSYC 50413 - History and Systems of Psychology (3)
Prerequisite: Senior or graduate standing in psychology, or permission of instructor. The scientific and philosophic antecedents of contemporary psychology in relation to their current influence on the field.

PSYC 50423 - Graduate Statistics (3)
Prerequisite: Senior or Graduate standing or permission of instructor. The conceptual basis of statistical inference. Topics include: analysis of variance models, correlation and regression analysis, and nonparametric techniques.

PSYC 50433 - VuInerable Child I: Theory (3)
The Vulnerable Child is a two-part series of multidisciplinary courses which investigate the challenges faced by families and professionals who work with children who have emotional, behavioral, and/or physiological challenges.

The Vulnerable Child I: Theory will focus on the theory and research which is the basis of these challenges. If our Hope Connection summer camp for adopted children is taking place, both Vulnerable Child courses are required before students can work in it. (Crosslisted as CHDV/PSYC 50433.)

PSYC 50443 - Vulnerable Child II: Practice (3)
Prerequisites: PSYC/CHDV 50433. The Vulnerable Child is a two-part series of multidisciplinary courses which investigate the challenges faced by families and professionals who work with children who have emotional, behavioral, and /or physiological challenges. The Vulnerable Child II: Practice will focus on the training students need to evaluate and apply intervention strategies for these families and children based on the theory and research learned in the first course. Both Vulnerable Child I II are required for students wishing to apply for Independent Studies' hours to work in The Hope connection summer camp for at-risk adopted children. (Crosslisted as CHDV/PSYC 50443.)

## PSYC 50463 - Functional Neuroanatomy (3)

Prerequisite: Graduate or senior standing or permission of instructor. The fundamentals of functional neuroanatomy and neurophysiology with an emphasis on experimental and theoretical analysis of the basic brain behavior relationships. (Crosslisted as BIOL/PSYC 50463.)

PSYC 50472 - Laboratory in Physiological Psychology and Neuroscience (2)

Prerequisite: PSYC 30463 or its equivalent or PSYC 50653 or its equivalent, or concurrent registration in either PSYC 50436 or PSYC 30463. One lecture and one laboratory per week. Emphasis will be on the laboratory techniques employed in physiological psychology and neuroscience in analyzing the neural and hormonal correlates of behavior.

PSYC 50473 - Neurodevelopmental Disorders (3)
Prerequisite: PSYC 30503 or permission of instructor. This course will examine the etiology, neurobiology, diagnosis, and treatment of developmental and learning disabilities. We will also examine the impact of a developmental disability on the family and discuss cultural interpretations of disability. Topics will include (but are not limited to) ADHD, Autism Spectrum Disorders, Down syndrome, Communication disorders, Learning disorders, Fetal alcohol syndrome, Fragile X syndrome, PKU, and Williams syndrome.

## PSYC 50482 - Laboratory in Physiological Psychology and Neuroscience

 (2)Prerequisite: PSYC 30463 or its equivalent or PSYC 50653 or its equivalent, or concurrent registration in either PSYC 50436 or PSYC 30463. One lecture and one laboratory per week. Emphasis will be on the laboratory techniques employed in physiological psychology and neuroscience in analyzing the neural and hormonal correlates of behavior.

PSYC 50493 - Advanced Personality (3)
Prerequisite: Senior or graduate standing in psychology and PSYC 40443, or permission of instructor. Current topics from the empirical and theoretical literature on personality.
PSYC 50503 - Curricular Practical Training Internship (3)
Prerequisites: 2.75 GPA in major, completion of either at least 20 credit hours in the department OR graduate status, and approval of department chair. Practical experience in the field of Psychology-related research that may involve work both at TCU and/or outside of TCU (but inside the state of Texas), including field work, internships, part-time jobs, and unpaid volunteer positions, all of which are to be centered around providing realworld training that would enhance the possibility of obtaining a career in a psychology-related research area. Must include a minimum of 260 work hours. This course may only be taken pass/no credit.

## PSYC 50513 - Psychopharmacology (3)

Prerequisite: PSYC 10213, or 10514, or 10524, or permission of instructor. Theory and principles of behavioral and biochemical methods of assaying drug action, with primary emphasis on the study of the effects of neuropharmacological agents or endogenous systems.

## PSYC 50523 - Experimental Design (3)

Prerequisite: PSYC 50423 or permission of instructor. The planning and design of behavioral research including the specification of research problems, development of appropriate designs, the use of appropriate analytic techniques and the interpretation of results. Primary attention is given to analysis of variance models as analytic techniques, but multivariate techniques such as regression and discriminant function models are also considered.

PSYC 50533 - Case Studies in Child Development (3)

This course is designed to present an integrated and comprehensive overview of numerous issues in child development as well as treatments/solutions for those issues. This diverse array of developmental problems will be presented in a series of case-studies by professors from several departments as well as by community professionals who specialize in children's issues. This course is a requirement for the Child Development Minor as well as an elective course in Psychology. (Crosslisted as CHDV/PSYC 50533.)

## PSYC 50563 - Developmental Psychology (3)

Prerequisite: Senior or graduate standing in psychology, or permission of instructor. Data and research methods related to the development of the human organism from its prenatal origins through old age.

## PSYC 50583 - Cognition (3)

Prerequisite: Senior or graduate standing in psychology, or permission of instructor. Current topics in the area of cognition including thinking, language, memory, decision making, and problem solving.

## PSYC 50603 - Contemporary Learning Theory (3)

Prerequisite: Senior or graduate standing in psychology, or permission of instructor. Selected theoretical principles important for understanding complex behavior, and their recent extensions and application to human social behavior, autonomic and psychosomatic function, etc.
PSYC 51000 - Seminar on Ethics and Science (1-3)
Prerequisite: Senior or graduate standing in psychology or permission of instructor. The course will look at the range of ethical decisions that are required of scientists. We will focus on identifying ethical dilemma throughout the history of scientific discovery. Case studies will include both moral exemplars and instances of scientific misconduct. These case studies will cut across scientific disciplines and include examples from biology, medical research, biotechnology, and psychology.

## RAMA - Ranch Management

## RAMA 20103 - Challenges of Global Food Production (3)

This course will explore the Triple Bottom Line" of food production and distribution in an effort to measure organizational and societal successes based upon the economic, ecological, and social/cultural equation. The course will examine global food production, including the history of, the populations affected, as well as methodologies employed. The course will give overview of the current situation in global food production, distribution, and related challenges."

## RAMA 30102 - Ranch Operations and Development (2)

Methods of livestock identification, dehorning, castration, and controlling parasites; the planning and construction of fences, corrals, and buildings to facilitate the handling of livestock.

## RAMA 30403 - Soil and Water Conservation (3)

Soil formation and development; soil characteristics which affect productivity; soil erosion by wind and water; soil, water, and wildlife conservation and management practices; Soil and Water Conservation District and U.S.D.A. agency assistance; preparation of coordinated conservation plan.

RAMA 30703-Animal Nutrition and Feeding (3)
Digestion and use of feeds for maintenance and production, selection of feeds for maintenance and production, selection of feeds based on composition and cost, ration formulation, feed processing and handling, dry lot feeding programs, supplemental feeding on pasture, possible limiting factors in feeding efficiency.

## RAMA 40101 - Management Plan Capstone Course (1)

Prerequisites: Must successfully complete the entire fall semester of Ranch Management coursework with a semester GPA or 2.0 or greater, which includes RAMA 30102, 30403, 40103, 40303, 50503 and 50603. co-requisite courses - must remain in good standing with the Ranch Management program and be enrolled in the complete spring semester of Ranch Management coursework. These courses include RAMA 30703, 40112, 40313, 40903, 50213, and 50803. The capstone for the TCU Ranch Management Program requires students to apply knowledge and principles explored through all of their other coursework and learning activities. Students will design a complete ranch business management plan on an existing ranch land resource and inventory will be used to design and develop a business management plan for two separate enterprises: (1) cow/calf operation, and (2) a stock operation. The plan should incorporate principles that are sound on both an ecological basis and economical basis, while conserving and improving the ranch land resource.

## RAMA 40103 - Beef Cattle Production (3)

Economics of beef production enterprises; selection by records and visual appraisal for economically important traits including reproduction, gainability, and carcass value; inheritance; systems of breeding; production programs; management practices

## RAMA 40112 - Sheep and Goat Production (2)

Sheep breeds and crosses; selection for mutton and wool production; Angora goat selection; breeding; supplemental feeding; marketing of wool and mohair

## RAMA 40303 - Animal Health Management (3)

Anatomy and physiology of cattle, indications of health and disease, development of immunity, specific infectious and noninfectious diseases of cattle, control of internal and external parasites, toxicology, basic veterinary skills and equipment

## RAMA 40313 - Animal Health and Reproduction (3)

Reproduction in cattle including organs and functions, natural and artificial breeding management, calving management, examination of cows for pregnancy, evaluation of bulls for soundness and fertility, selection of horses for soundness, treatment for sickness and injury, horse breeding.

RAMA 40323 - Animal Health and Reproduction (3)
Reproduction in cattle including organs and functions, natural and artificial breeding management, calving management, examination of cows for pregnancy, evaluation of bulls for soundness and fertility, selection of horses for soundness, treatment for sickness and injury, horse breeding.

RAMA 40903 - Forage Production and Use (3)
Characteristics and management of introduced pasture plants; combinations for extended grazing, seedbed preparation and planting; weed control, fertilization, irrigation, grazing management and harvest for hay, silage and seed.

RAMA 40970 - Special Topics in Ranch Management (1.00-6.00)
RAMA 50213 - Ranch Business Management (3)
Business law as applied to the livestock producer, business organization, estate planning, labor relations, application of management principles to ranching.

RAMA 50503 - Range Management (3)
Principles of plant growth and reproduction; economic characteristics and field identification of range plants; ecology of range plants and animals; management of rangeland for all its uses including setting and adjusting stocking rates, distribution of grazing, grazing methods and supporting practices; preparation of ranch management plan.

RAMA 50603 - Ranch Records and Finance (3)
Basic records needed for management and income tax reports - records of income and expense, inventories, net worth statements, budgets, production records; term problem in which all records for a year's operation are recorded and financial statements are prepared; sources of credit for ranch operations

## RAMA 50803 - Marketing of Livestock and Meats (3)

Relation of production to marketing, trends in marketing and consumption, meat processing and distribution, U.S.D.A. activities, market outlets and procedures, futures, seasonal and cyclical influences on prices, selection of time and place to market, handling and transportation of livestock to improve weighing conditions and minimize losses, merchandising purebred livestock.

## RELI - Religion

RELI 10023 - Understanding Religion: Communities (3)
This course introduces students to the vital role of religion in human experience by considering historical, comparative and methodological issues in the study of religion with reference to rituals, institutions, texts, figures, and beliefs in major world religions.

## RELI 10033 - Understanding Religion: Texts and Ideas (3)

This course introduces students to the vital role of religion in human experience by exploring literary, historical, cultural dimensions of religion texts, patterns of belief, and related ritual and ethical practices

RELI 10043 - Understanding Religion: Society and Culture (3)
This course introduces students to the vital role of religion in human experience. Through case studies, readings, lectures, and multimedia
demonstrations, students will learn about the various relations between religion, culture, and society.

RELI 10433 - Freshman Seminar in Religion (3)
Topics may vary each time it is offered.
RELI 10533 - Freshman Seminar in Religion
Topics may vary each time it is offered.
RELI 20123 - New Testament Literature and Life (3)
An introduction to the writings in the New Testament with special attention to the content of the individual books, together with an understanding of the beginnings of the Christian faith seen through the study of the Gospels and the initial development of the Christian movement.

## RELI 20443 - Faith and Ethical Leadership (3)

What's religion got to do with making moral decisions? In this introduction to religious ethics, students learn how to deepen their capacity to make moral choices by thinking about the interrelationship of modes of decisionmaking, social analyses and faith commitments. Then, using case studies, students explore how Muslims, Christians and Jews can provide moral leadership in civic discourse regarding ethical issues from pre-marital sex to economic justice.

RELI 20503 - Africa and the African Diaspora: History, Religion, and Culture (3)
This class examines the origins and impact of African civilization, focusing on the worlds of traditional religions, Islam and Christianity in Africa; colonialism, anti-colonial struggles, independence, and post-colonialism; African studies in Western Scholarship; and issues affecting modern Africa.

RELI 20513 - Africa and the African Diaspora: History, Religion, and Culture (3)
Building on RELI 20503, this class examines West African religious traditions, the 'involuntary diaspora' to the New World, as well as 'creole' religions and culture within the Caribbean. It concludes with an account of the rise of the African Independent Churches; the place of women in North African Islam; the presence of Rastafari in Ghana, and the continuing clash of traditional African and Western cultures.

## RELI 20523 - Sophomore Seminar: Finding the Founders: Lives of

 Confucius, the Buddha, and Jesus (3)Prerequisite: Religion major or permission of instructor. Must have completed introductory Religion course. This course considers the founders of three important religious traditions, both in their own right and as examples of what happens during the creation of a religious tradition. After considering the question what is religion?" we turn to reports of the lives of Confucius, the Buddha, and Jesus Christ. We will inquire into how their cultural context shapes them, and how our cultural upbringing shapes the way we look at them."

## RELI 20533 - Sophomore Seminar: Life After Death, Comparative

 Perspectives (3)Prerequisites: Religion major or permission of the instructor. Must have completed an introductory Religion course. This course will explore the varied ways in which different religions in various historical and cultural contexts address mortality and the question of life after death. By focusing on social constructions of death and post-mortem destiny in different religious traditions, students will encounter a range of beliefs, rituals and sacred narratives.

## RELI 20573 - Defining the Nation: China and India in Crisis (3)

This course examines two key events from the religious and cultural histories of China and India: the sixteenth-century Confucian debate over the legitimate successor to the Ming Dynasty's Wanli Emperor, and the division, or Partition, of the Indian subcontinent in 1947 into India and Pakistan. Both events represented a crisis in governance in which debate of the nation's future was informed by religious teachings. To investigate these two events, the course will use games from Reacting to the Past" (RTTP), an interdisciplinary and highly engaging method of inquiry that requires students to study a variety of sources, debate, write, and work as a part of a group pursuing a set of shared goals."

RELI 20643 - Sophomore Seminar: Thinking About Christian Faith (3) Prerequisites: Religion major or permission of instructor. Must have completed an introductory Religion course. An introduction to theological reading, thinking, and writing through an exploration of major doctrines in Christian theology. Nineteenth- and twentieth-century developments, such as the rise of historical thinking and its impact on Christology, the rise of scientific thinking and its impact on the doctrine of creation, and the rise of postmodern thinking and its impact on Christian views of other religions will
be emphasized. Class procedure will be seminar discussion of assigned readings.
RELI 20703 - Leadership in Ministry (3)
Prerequisite: Religion major or minor, or departmental permission. Introduces the role of the minister and outlines his/her responsibilities. Special emphasis on preaching, religious education (including youth work) and pastoral care.

## RELI 20803 - Sophomore Seminar: Myth and Ritual on Film

Prerequisite: Religion major or permission of instructor. Must have completed introductory Religion course. Through course readings and screenings, students will see how films are created in ways strikingly similar to the ways religious rituals and myths are created. Films screened include The Matrix, The Wizard of Oz, Apocalypse Now, and Before the Rain.

RELI 20903 - Sophomore Seminar: Religion and Literature (3)
Prerequisite: Religion major or permission of instructor. Must have completed introductory Religion course. This course explores the present and potential role of novels, religious theory and literary criticism in understanding religion's nature and function. The seminar's focus draws from one of the following three topics: World Faiths, World Fictions, Pilgrimage, and Nonwestern Christianity."'"

RELI 20990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## RELI 30003 - Honors Seminar in Religion (3)

Creative dialogue between religion and other disciplines of learning, or aspects of culture.

## RELI 30113 - Jesus and the Gospels (3)

A careful look at early Christian gospels, including Thomas, and at how scholars construct a historical Jesus from them.

RELI 30123 - Paul and the Early Church (3)
The developing origins of Christianity, with particular emphasis on Paul and his influence.

## RELI 30133 - Religion and the Search for Meaning in the Old Testament

 (3)Study of the biblical books of Psalms, Proverbs, Ecclesiastes and Job within their own socio-historic contexts as a basis for investigating some of the fundamental questions of human religious experience, including the function of worship, the relationship of reason and faith, the problem of evil, and the bases of ethical behavior.

RELI 30143 - Unlocking the Mysteries of the Dead Sea Scrolls (3) Prerequisites: RELI 10033, or permission of the instructor. The course explores the rich and diverse world of the ancient Jewish texts discovered in the caves near Khirbet Qumran. Known also as the Dead Sea scrolls, these texts shed light on almost every aspect of what came to be know as the Second Temple period. Yet, they proved to be particularly important for understanding the complex religious and social matrix out of which emerged nascent Christianity and Rabbinic Judaism. The course takes a closer look at this matrix by means of reading a variety of texts from Qumran.

## RELI 30153 - How to Read the Bible: Story and Politics (3)

Prerequisite: RELI 10023, 10033, 10043, or permission of instructor. Explores distinctive characteristics of biblical narrative and investigates why readers produce different interpretations of biblical stories. It asks how social structures and value systems, ancient and modern, affect texts and interpreters.

## RELI 30163 - The Bible at the Movies

Prerequisite: RELI 10023, 10033, 10043, or permission of instructor. Examines movies based on biblical stories to see how the Bible may be interpreted in words and visual images. Investigates how the Bible's authority is used to promote particular religious, moral, social, and political values in popular culture.

## RELI 30173 - Greco-Roman Religions

A survey of the diverse religious landscape of the Greco-Roman world from the end of the Roman Republic through the third century CE, including the official Roman state religion, Dionysiac/Orphic cult, Isis cult, Mithras cult, Greco-Roman Magic, Hellenistic Judaism and early Christianity.

RELI 30183 - Revelation and Rhetoric: Biblical Prophets and Prophecy (3) Prerequisites: RELI 10023 or 10033 or 10043, or permission of instructor. In this course, we will study Biblical prophets and prophetic texts, with attention to their historical and literary contexts, as well as their religious and social functions. We will also consider the rhetorical and poetic dimensions of biblical prophecy, in order to reflect on both the positive and negative impact of religiously charged communication.

## RELI 30303 - Christian Ethics (3)

An introduction (beginning with the Bible) to major perspectives, with particular focus on developments since the Reformation. The student will argue a contemporary issue from a historical perspective.

RELI 30323 - Christian Tradition: Emergence to the Renaissance (3) A study of developments in Christian thought, practice, and institutions from the beginnings of the church through the 15th century.

## RELI 30333 - Christian Tradition: Reformation to Modernity (3)

A study of developments in Western Christianity from the 16th century Reformation to the 20th century, with attention to issues of theology, institutions, and practices. Does not include religion in America.

RELI 30343 - Black Religion in United States (3)
Explores the relationship between race" and religion, and surveys AfricanAmerican religious history in the United States, from the religious commitments of enslaved Africans to contemporary American black people's faiths."

## RELI 30353 - The History of Evangelicalism in the US (3)

This course explores the history, development, and characteristics of evangelicalism in the United States. It will proceed both chronologically and topically, focusing more heavily on the post World War II period and contemporary American culture. It will consider a diverse range of personalities, communities, and subjects ranging from Billy Graham and presidential politics to True Love Waits" and evangelical romance novels."

## RELI 30413 - Contemporary Catholicism (3)

Roman Catholicism in the modern period with particular attention given to the Second Vatican Council and its intellectual and institutional implications. There will be some emphasis on American Catholicism.

## RELI 30433 - Christianity and Contemporary Social Issues

Critical study of the relationship of Christianity to the formation of social values, to participation in national and international ethical discourse, and to participation in popular culture in America

## RELI 30453 - Sects and Cults in American Religion (3)

The categories sect" and "cult" in religion studies, with illustrations from existing groups, both within and outside the Christian tradition, e.g. Hasidic Judaism, Jehovah's Witnesses, Christian Science, Baha'l, the Amish, and Mormonism."

RELI 30463 - Being Latina/o and Religious in the U.S. (3)
This course will investigate the variety of religious life found among U.S. Latina/os, looking beyond misconceptions, generalizations and stereotypes.

## RELI 30473 - Womanist Religious Thought (3)

This course helps students think about religion by centering women's experiences and critical ideas about theology and ethics. Students will be introduced to Womanist religious thought and race-class-gender analytical approaches to examining religious life and society.
RELI 30483 - Digital Religion: God, the Soul and Morality after the Digital Revolution (3)
This course is an advanced exploration of how digital technology is affecting the moral and religious sensibilities of contemporary culture, with a particular focus on how this technology is changing assumptions about God, the soul and morality.

## RELI 30493 - Latina/o Religion, Law and Identity (3)

This course examines the role of religion and law in the formation of identity by exploring the notion that identity, including race, is a social construct by examining how various immigrant groups from around the world were and are shaped by religion and the American legal process. In particular, we will consider Latinos/as in the U.S. as an example of how law and religion shape a cultural group's identity as well as how law and religion impact cultural and global self-understanding.

## RELI 30513 - Hindu Religious Perspectives (3)

An exploration of the diverse strands of the Hindu religious tradition (ritual, philosophical, devotional) from the Vedic period to the modern day.

Examines the development of Confucianism, Daoism, and Buddhism. The course will explore the religious worldviews of these East Asian traditions in historical and cultural context, as well as issues relating to the comparative study of religions.

## RELI 30533 - Buddhism: Thought and Practice (3)

The development of Buddhism in India, Southeast Asia, Tibet, China, Japan, and North America. Material will range from the Buddha's life to contemporary forms of Buddhism in America.

## RELI 30543 - Islam (3)

The Islamic religious tradition from 7th century Arabia to current resurgence, including social, theological, and mystical dimensions. Topics include Muslim views of Allah, revelation the Qur'an, and the Prophet Muhammad. Islam's encounter with modernity" will also be addressed."

RELI 30553 - African Religions (3)
Explores the worldviews, beliefs and practices of African Traditional Religions. Also examines the impact of Christianity and Islam on African Traditional Religions since the colonial period.

## RELI 30563 -Judaism (3)

The course is an introduction to many of the historical forms and manifestations of Judaism. The goal of this course is to examine Judaism conceptually, considering topics such as literature, politics, art, history and ritual, and to provide the student with a conceptual basis that will facilitate the comparison of Judaism with other world religions.

## RELI 30583 - Religion, Money, and Value(s) (3)

The world's religions espouse ethical values that inform their understanding of issues such as the value of human life, labor, and products. These religions have also had complicated and uneasy relationships with money and commerce, especially the ethics of trading and the accumulation of wealth. This course will explore the issues of money, wealth, and value through the lens of five religious traditions: Christianity,Hinduism, Buddhism, Islam, and Jainism.

## RELI 30633 - Philosophy of Religion (3)

Prerequisite: PHIL 10003 or any religion course. This course is centrally concerned with issues relating to the rationality and justification of religious convictions. There is also an interest in the coherence of religious concepts. Various philosophical models for understanding and evaluating religious convictions and practices are examined and applied.

## RELI 30643 - God in Modern Thought (3)

Prerequisite: 3 semester hours of Religion or Philosophy. An exploration of ideas of God as they have developed in Western theology and philosophy since the 17th century. The relation between these ideas and current models for thinking about God will be stressed.

## RELI 30673 - Anthropology and Religion (3)

Prerequisites: ANTH 20623, RELI 10023 or RELI 10043 or consent of the instructor. Anthropological findings in the comparative study of religion and culture across a broad range of societies. Studies of sacred experience, myth, ritual, magic, witchcraft, religious language, gender and religion, healing, and relationships between social and religious change.

## RELI 30683 - Sociology of Religion (3)

Prerequisite: SOCl 20213, or SOCl 20223 or permission of instructor. An introduction to understanding the role of religion in society and to sociological methods for the study of religion. The course will introduce theories and research pertaining to types of religious experience, conversion and commitment, denominationalism, secularization and fundamentalism. Class, gender, race and ethnicity will also be addressed as they influence religion in society. (Offered as RELI or SOCI credit.)

## RELI 30703 - Liberating God: Liberation and Postcolonial Theologies

 An investigation and analysis of discourses within Liberation and Postcolonial Theologies. An examination of the historical and sociological development of these new theological understandings of God, and their relation to the communities where they came from.
## RELI 30713 - Women and Womanhood in Western Religion

An exploration of the ways Christianity, Judaism, and Islam have helped to shape Western attitudes toward women. The lives of representative women and their influence will be examined in some detail; readings from religious thinkers on the nature of woman will be studied.

## RELI 30723 - Religion and Science (3)

Prerequisites: 3 hours of Religion and any 6 hours from among Biology, Chemistry, Environmental Science, Geology, Physics, and Psychology. An exploration of the ways of knowing utilized in religion (particularly the

Judeo-Christian heritage) and in science, and how these ways of knowing relate.

## RELI 30733 - Mysticism (3)

Prerequisite: RELI 10023, 10033, 10043, or permission of instructor. An examination of concepts of mysticism and mystical experience. Examples will be drawn from Christian, Hindu, and Buddhist sources.

## RELI 30743 - Religion, Art and Visual Culture (3)

This course examines interactions between religious practices and the visual arts in cross-cultural settings. Looking at visual art media such as architecture, painting, film, landscape, gardens, and calligraphy, the course will situate these media in specific religious traditions and practices including Hinduism, Buddhism, Judaism, Christianity, and Islam.

## RELI 30753 - The Many Faces of Krishna (3)

This course considers the many images of the god Krishna in the literary and religious imagination of the Indian people. After introducing some background of Hindu thought and practice, we shall look at how Krishna appears in different versions and interpretations of the great Indian epic, the Mahabharata, including the famous portion call the Bhagavad Gita. We then examine how Krishna appears in later devotional literature and poetry in the classical Sanskrit tradition, and finally Krishna in popular and regional understandings up to the present day. Credit cannot be granted for both RELI 30773 and RELI 30753.

RELI 30763 - Archaeology of the Biblical World: Syria-Palestine and TransJ ordan, 1550-332 BCE (3)
Prerequisites: Either one RELI or one ANTH course, or permission of instructor. This course studies the cultures of Syria-Palestine and TransJ ordan from approximately 1550-332 BCE by identifying and interpreting the relevant archaeological data and anthropological findings. It will explore various aspects of these ancient cultures, including the region's economic, political, environmental, and social relations, as well as its religious expressions and ethnic identities. Additionally, students will consider the significance of archaeological material and anthropological models for reconstructing and interpreting these cultures and for understanding the Hebrew Bible as a cultural and historical document.

## RELI 30773 - India: Texts and Traditions

(ENGL 30773) A consideration of selected classic works of religious and literary imagination in Indian culture. Versions and interpretations of the Hindu epics Mahabharata and Ramayana will be examined in translation.

## RELI 30783 - Religion and Environmental Ethics (3)

Explores the ethical challenge of increased competition for world resources. Examines how changing religious understandings of stewardship, fairness and rights shape moral choice in issues like distribution of goods, care of nature and population shifts.

## RELI 30803 - Religion and News Media (3)

Prerequisites: RELI 10023, or 10033, or 10043, or permission of the instructor. This course will explore the role of religion, religious ethics and values in society and news media. Students will study methods of covering religion, investigate the importance of religion in the news media, and raise questions about the content of religious news stories.

## RELI 30813 - Black Religion and Black Literature (3)

This course explores the religious themes found within black literature for the purpose of developing new interdisciplinary methods and validating the use of black literary analysis for the study of black religion. The course introduces interdisciplinary methods and approaches to religious inquiry about the nature and meaning of God, religious experiences, community, and culture. Particular attention will be given to the black woman's literary tradition.

## RELI 30823 - Jesus in Fiction and Film (3)

Over the past fifty years many creative writers and movie makers have attempted portraits of Jesus and Christ-figures in fiction and film. This course will identify the christological themes in these portraits and examine their importance for the development of contemporary Christian theology.

## RELI 30833 - Theology and Literature (3)

This course investigates selected Christian thinkers and doctrinal themes as revealed in various classic and contemporary novels.
RELI 30843 - Latina Feminist Religious Thought (3)
In this course we will investigate and analyze discourses put forward by Latinas within the religious/theological field and how they fit the larger picture of Latina Feminisms in the United States.
RELI 30853 - Women in American Religion (3)

Explores the experiences of women in American religion with attention to the interplay between women's religious identities and their roles in the work force, families, and racial, ethnic and/or minority groups. Readings will be drawn from historical, sociological and theological works.
RELI 30863 - Religion and Violence (3)
Case studies of religiously inspired violence against those considered other" or outside specific religious groups, examined through the lens of classic and contemporary religious theory. Special attention to the Middle East and Asia."

RELI 30873 - Islam in America (3)
Explores the growth and spread of Islam in America. Introduces students to different Islamic groups and how they relate to each other. Discusses Muslims' responses to different challenges and criticism of Islam and Muslims by the media. Explains the roles of African Americans and women in Islamic institutions in America.

## RELI 30893 - Caribbean Religions

Beginning with an historical account of the origins and development of religions in the Caribbean, this course views the Neo-African traditions of Vodoun, Shamanism, Santeria, Rastafarianism, and Obeah through the prism of contemporary Caribbean literature.

## RELI 30970 - Directed Study: Religion (1.00-6.00)

Directed Study in Religion.
RELI 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## RELI 35990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## RELI 38990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.
RELI 40003 - Senior Honors Research Paper (3)
To be written under the tutorial leadership of members of the faculty.
RELI 40130 - Issues in Biblical Interpretation (3)
Prerequisite: RELI 10033 or permission of instructor. Examination of issues that arise from the interpretation of biblical texts. The particular issues studied will be chosen from areas of current interest or from methodological considerations (such as contemporary hermeneutics, biblical theology and ethics, or critical methodologies). (3-6 semester hours)
RELI 40143 - Love and Sex in the Biblical World (3)
Prerequisite: At least six hours in Religion, or permission of instructor. Critical analysis of gender relationships in biblical literature, society, and religion, with attention to the relevance of biblical values to today's society.
RELI 40213 - Religion, Art and Postmodernism: The Death of God and the End of Art (3)
Prerequisites: RELI 10023, or 10033 or 10043. This course looks at religion and art as two significant modes of meaning making within the context of the postmodern challenge to systems of ultimate value. Readings will include material from Nietzsche, Hegel, Arthur Danto, and Mark C. Taylor.

## RELI 40313 - The History of Religion in America (3)

A survey of the major events and developments in religion in the United States, taking into account the development of institutions and thought patterns in terms of their interaction with the American context.

## RELI 40603 - Senior Seminar (3)

Prerequisite: Senior standing and 12 hours in Religion. Capstone seminar exploring selected issues, themes, or methods in the academic study of religion.

RELI 40613 - Constructive Global Ethics (3)
A critical study of ethical inquiry in a pluralistic world by focusing on proposals for a global ethic, scholarship on interreligious dialogue and research in comparative religious ethics. Students write proposals for promoting moral consensus on an international issue.

## RELI 40700 - Religion in Geographical Context (1.00-6.00)

A seminar dealing with a significant topic such as religion in art, church history, or contemporary issues, conducted in appropriate locations in this country or abroad. Specific topic will be defined as course is scheduled. Admission to course through application by announced deadline. (1-6 semester hours)

RELI 40713 - Women, Race and Earth: Environmental Justice (3) Prerequisite: 3 semester hours of Religion, or permission of the instructor. This course looks at the theological significance of gender, and race in environmental ethics and helps students understand the historical descriptions of the role of nature in Scripture and Christian history, theological formulations from an ecological perspective, ethical grounding for the Christian practice of eco-justice and earthkeeping.

## RELI 40733 - Church and State Relations in America (3)

The relationships between religious institutions and civil authority in America. While providing a historic context for the study, the course is primarily issue-oriented, dealing with such topics as prayer and Bible reading in public schools, state aid to parochial schools, conscientious objection to military service, Sunday closing laws, and taxation of churches.

## RELI 40900 - Projects in Religion (1.00-20.00)

Assigned special problems in religion. (1-3 semester hours)
RELI 50130 - Seminar in Biblical Studies (1.00-6.00)
Prerequisite: approval of instructor. A particular topic in Biblical Studies will be selected for detailed study. (3-6 semester hours)
RELI 50970 - Directed Study in Religion (1.00-20.00)
1-6 semester hours

## SABD - Study Abroad

SABD $\mathbf{3 0 1 2 0}$ - Study Abroad-TCU in programs (12)
Student is studying abroad this semester with a TCU In ??" program."
SABD 32120 - Study Abroad-Partner Program (12)
Student is studying abroad this semester with a Partner Program.

## SCIE - Interdisciplinary

## SCIE 20103 - Technology Entrepreneurship

Prerequisite: Sophomore standing. This study abroad course is for students who are driven with an entrepreneurial spirit and have a passion for technological innovation. This course consists of lecture, invited speakers, case studies, and field trips.

## SCIE 20303 - Whiskey: Science and History

Two hours of lecture and two hours of laboratory. Whiskey embodies multiple sciences and engineering. Whiskey has played a significant role in history including that of the United States. The course conveys elementary science concepts from the disciplines of chemistry, plant biology, genetics, neuroscience and engineering along with the historical underpinnings of these concepts as well as the impact that whiskey has had on US history since the colonial era up to and including multinational corporations. Laboratory experiments are linked intimately to lecture content.

## SCIE 20970 - Topics in Science

Topics of current interest. May be repeated for credit when the topic changes. ( $1-3$ credit hours.)

SCIE 30103 - History of Science and Technology in Western Civilization Prerequisites: ENGL 20803 or 20833. This study abroad course examines the rise of both science and technology in western civilization and how they have shaped history, with particular focus on developments in England. Includes visits to sites in London, Greenwich, Cambridge, and Oxford.

## SOCI-Sociology

## SOCI 20213 - Introductory Sociology (3)

Differing patterns of human relationships; application of sociological concepts to the understanding of human behavior.

## SOCI 20223 - Social Problems (3)

This course presents information about a range of social problems (poverty, racism, sexual discrimination, crime, etc.) with emphasis on the relationship between the individual and the larger context within which the problems exist. Additionally, fundamental societal institutions and theoretical issues will be explored.

## SOCI 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## SOCI 30003 - Honors Seminar in Sociological Ideas (3)

Open to honor students with 6 semester hours of sociology and/or permission of the students' adviser and the instructor. A sociological analysis of the interplay of ideological and social factors in the development and decline of social systems and of present trends in world ideologies and societies, with some possible implications for the future.

## SOCI 30213 - Applied Sociology (3)

Prerequisite: SOCI 20213. This course introduces students to the field of applied sociology and prepares students for internships and career placement. Students develop a better understanding of how sociological concepts, theory, methods, and finds are used in practice, especially in settings related to one's own career interest.

## SOCI 30223 - Contemporary Topics in Sociology (3)

The study of selected topics of current interest and importance in sociology. These topics will vary in accordance with the interests of student and faculty. May be repeated for credit with different course content.

SOCI 30233 - Sustainability: Environmental, Social \& Economic Issues (3) The purpose of this course is to introduce students to the concept of sustainability from a multidisciplinary perspective. Sustainability includes a focus on the environment, social justice issues, and economic development that provides the basic needs for sustaining an acceptable quality of life. A focus on the global implications will be stressed and students will explore the connections between sustainability and citizenship and social values.

## SOCI 30243 - Violence in Society (3)

Prerequisites: SOCl 20213 or 20223, or permission of instructor. A survey of the major forms of violence in contemporary society. Examining the extent and distribution of violence and the sociological, anthropological and psychological theories devised to account for violence.

## SOCI 30253 - Environmental Sociology (3)

This course examines the connection between the environment and society, from the local to the global level. Environmental problems, and their potential solutions, can be extremely controversial points of discussion: are humans doomed or will we overcome these problems? In the course, we will look at debates related to energy resources, population growth, green consumerism, climate change, environmental justice, and other issues. Students will engage in an experiential learning project where they attempt a personal change in their behavior in an effort to improve the environment.

## SOCI 30303 - Marriage and the Family (3)

Macro and micro social factors that shape American families, theoretical and empirical analysis of family dynamics and family policy.

SOCI 30313 - Criminology (3)
Prerequisite: An examination of sociological and criminological theories of crime, criminality, and crime control. (Offered as CRJU or SOCl credit.)

## SOCI 30323 - Cultural Criminology (3)

This course offers an overview of the field of cultural criminology, from its theoretical and historical foundations to its current developments. The course explores the various intersections of culture, crime, and crime control, including criminal subcultures, crime and consumer culture, crime as pleasure and performance, and crime and crime control as public display. (Offered as CRJU or SOCI credit.)

## SOCI 30343 - American Minority Groups (3)

Prerequisite: SOCl 20213 or 20223, or permission of instructor. Theories of the dynamics of prejudice, discrimination, and racism at the individual and societal/institutional level are examined. Suggestions on the reduction of individual, group, and institutional racism are analyzed. The status of various racial and ethnic groups are discussed. Contemporary racial issues are critically evaluated.

## SOCl 30383 - Research Methods in Sociology (3)

Prerequisite: MATH 10043. An introduction to sociological research procedures, with emphasis on the collection, analysis and interpretation of both quantitative and qualitative data.

## SOCI 30393 - Sociology of Corrections (3)

An examination of correctional agencies and programs, including the social structure of prisons and its impact on the offender, deterrent and treatment effects of correctional practices, probation and parole, and an examination of various experiments in institutional and community based corrections. (Offered as CRJU or SOCI credit.)

## SOCI 30403 - Perspectives on Human-Animal Relationships (3)

This course examines topics and perspectives on human-animal relationships (HARE) from multiple disciplines within the humanities, social sciences, and natural sciences. We will explore the complex relationships between humans and other animals, past and present, including the socially constructed meanings of animals that shape animal/human interactions and relations within institutions and social, cultural, geographic and interactional contexts. We will consider many types of relationships between human and nonhuman animals, both beneficial and detrimental, as well as the trends that are impacting the future of animal/human relations on the planet.

## SOCI $\mathbf{3 0 4 2 3}$ - Media, Self and Society (3)

A critical examination of various media, especially print, film and television, from a sociological point of view. An introduction to various theories of mass media and to current research on the effects of mass media on the human self in particular and society as a whole. The media as an agent of socialization, social control, and social discourse. Examination of videotapes of news, entertainment, sports, advertising and special events, interspersed with lectures and discussions.

## SOCI 30443 - Social Movements and Protest (3)

This course explores various historical and contemporary social movements and protest movements. In each of these explorations key social and cultural dynamics are emphasized, including mass communication and persuasion, strategies and tactics for acquiring power, the emergence of collective goals, and the politics of social change.

## SOCI 30463 - Popular Culture (3)

This course examines how groups of people create alternative and novel forms of cultural expressions (popular culture), and how such expressions eventually are filtered through media, either oral, electronic or print. It also considers how the meaning of popular cultural expressions both influence and are influenced by broader and institutionalized societal arrangements.

## SOCI 30483 - Death and Dying: Sociological Viewpoints (3)

An examination of the process of death from a social psychological perspective. Topics will include the dying process as an interactional event, how survivors cope with loss, the life chances of people to live an extended life before dying, and how death serves as a symbol and metaphor for lived experience. The course will also focus on death as it has an impact on survivors and how survivors learn from the experience of another's death.

## SOCI 30523 - Self and Society Through Film (3)

An examination of social psychological theories of the social self and how social selves are represented in various American films from the 1940s to the present. The course will combine lectures on concepts and processes associated with the presentation of the social self in everyday life with passages from films that provide detail about concepts and processes. Film displays will include processes of impression management and characterizations of social types - ranging from violent/impulsive to rational/strategic selves. Further, lectures and film passages will address the various portrayals of human relationships that involve self-display and selfdisclosure.

## SOCI 30543 - Unveiled: The Sociology of Weddings (3)

This course will introduce students to the role of the wedding not only as a ceremonial rite of passage, but also as a multi-billion dollar industry in American society. Beginning with a historical overview of the role of the wedding in society, the course will address issues ranging from the emotion work of wedding work, bride power, the role of the wedding industry in a culture of divorce and the impact of the illegal diamond trade on war torn nations in Africa. A global comparison of wedding rituals will be included in the analysis, as well as a cross ritual/industry comparison of the funeral industry.

SOCI 30563 - Deviance and Social Control (3)
Prerequisites: SOCI 20213 or 20223 or permission of instructor. Theoretical and empirical literature on deviance and social control, showing how
deviation arises from social interaction. Specific attention to forms of deviance including substance abuse, sexual deviance and violent behavior.

SOCI 30573 - Corporate and Governmental Deviance (3)
An examination of corporate and governmental deviance addressed from a sociological perspective. Emphasis is placed on the nature, extent, and costs of corporate and governmental deviance, with special attention on the social, structural, and organizational forces which give rise to such deviance. For example, we will examine the Ford Pinto case, Cold War Human Radiation Experiments, political corruption, Enron, and many other recent and historical cases.

## SOCI 30583 - Technology, Social Media and Society (3)

This course introduces students to the impact of technology and social media in everyday life on dimensions of society such as the individual, groups, social processes, social institutions, and social structures. Particular emphasis is on understanding the impact of social media in areas such as politics, economics, revolutions, work, family, and everyday social interactions.

## SOCI 30643 - Sociology of Aging (3)

The sociological and social psychological examination of the impact of aging on the individuals and on society. Focus is on defining demography of aging, the problems, public perceptions and stereotypes, concepts and theoretical perspectives on aging, age norms and constraints, adjustment patterns and changing lifestyles in old age, retirement, death and dying, exploitation, and politics of aging. Societal issues that confront older Americans are discussed. The course is primarily concerned with aging in the United States.

## SOCI 30653 - Sociology of Food (3)

Prerequisites: SOCI 20213. This course deals with the social context in which individuals experience food, with particular emphasis on how food influences, and is influenced by society. From the rituals of dinner and Americans' obsession with diet food, to global food production regimes, the role of food in patterns of social life, social institutions, social inequality and social change will be explored.

## SOCI 30673 - Beatniks, Hippies and Outlaws, 1950-77 (3)

This class explores three iconic social types that emerged most visibly in the post WWII era. Drawing upon classic sociological concepts and ideas including the stranger in society, alienation, anomie, the small social group, rebellion, deviance, and social status - the course depicts the melodramatic changes in discourse, appearance, and emotional touch during the decades of the 1950's, 1960's, and 1970's.

## SOCI 30683 - Sociology of Religion (3)

Prerequisite: SOCI 20213, or SOCI 20223 or permission of instructor. An introduction to understanding the role of religion in society and to sociological methods for the study of religion. The course will introduce theories and research pertaining to types of religious experience, conversion and commitment, denominationalism, secularization and fundamentalism. Class, gender, race and ethnicity will also be addressed as they influence religion in society. (Offered as RELI or SOCl credit.)

## SOCI 30743 - Gender and Society (3)

Prerequisites: SOCI 20213 or 20233 or any course approved for the minor/emphasis in Women's Studies. Critical examination of new ideas, data and theories about the roles of men and women in contemporary society. Focus is on a sociological analysis of gender stratification in our society.

## SOCI 30773 - Sex, Society, and Ethics (3)

This course introduces students to the myriad ways in which sexual desire and sexual activity are structured by social relations and to the ways that sexuality, sexual practices, and sexual identities vary in time and space. We will also consider how those social relations and sexual identities influence ethical judgment regarding various sexual practices and attitudes. Social science and philosophical theories of sexuality will be considered and crosscultural and historical accounts of sexual practices will be reviewed.

## SOCI 30783 - Sociology of the Body (3)

This course will examine the body, not through the lens of the physical or biological sciences, but as the product of complex social arrangements and processes. We will study the body as the container and expression of the self, as the object of social control, and as the repository of shifting race, gender, and sexual categories.

## SOCI 30803 - Victimology (3)

An examination of the major aspects of victimology. Topics include the historical role of victims, the nature of victimization in modern America, the victimization experience, legal aspects of victimization, victimization and the
political process, solutions to victimization, and the future of victims' rights and victimology. (Offered as CRJU or SOCl credit.)

## SOCI 30833 - Sociological Theory (3)

Prerequisite: SOCl 20213 or permission of instructor. An exploration of the foundations of sociological theory through the works of the classical theorists, e.g. Marx, Durkheim, and Weber, assessing the impact of their work on current sociological thinking and practice and on society itself. Attention will be paid to the intellectual heritage of the thinkers, their historical context and their biographical selves.

SOCI 30903 - Law and Society (3)
An examination of the relationship between legal institutions and social processes. Topics include the nature of law, historical evolution of legal systems, creation and organization of law in modern societies, social functions of law, and limits of law as an instrument of social control. (Offered as CRJU or SOCl credit.)

## SOCI 30913 - Social Psychology of Crime (3)

Prerequisite: CRJU 20413, SOCI 20213 or PSYC 10213 or equivalent. An examination of the social psychological theories and research relevant for understanding criminal behavior. Topics include societal and victim responses to crime.

SOCI 30923 - Leadership London: Social and Cultural Contexts of Leadership (3)
This is a seminar-style, site-based course taught in London as part of Leadership London, a TCU summer study abroad program. The city of London will provide the backdrop for studying social and cultural influences on leadership. Case studies are used to critically examine the nature and practice of leadership and explore the ways that social and cultural contexts shape leader-follower relationships. Course is designed to illuminate diverse perspectives on leadership and provide a knowledge base for evaluating and making informed judgments about leadership.

## SOCI 30943 - J apan: Heritage, Culture, and Globalization (3)

An overview of Japanese history and major cultural traditions. Japanese society will be looked at from its origins through the Tokugawa period and onto modern Japan. Religious traditions and cultural perspectives will be highlighted. Additionally, the place of modern Japan in the global community will be examined.

## SOCI 30953 - Japan: Crime, Criminal J ustice and Social Problems (3)

 An overview of the functioning of the J apanese policing, court, and correctional systems. In addition, both Japanese street crime and organized crime will be examined with special emphasis on the organization and history of the J apanese Yakuza. Further, the course will examine the realities of a myriad of social problems in J apanese society both as individual issues and as causes/effects of criminality. These topics include but are not limited to issues of poverty, urbanization, drug use and family structure stresses.SOCI 30963 - Japan: Environment, Technology, and Sustainability (3) An overview of Japan's perspectives on and efforts toward sustainability in relation to the environment and economic/technological growth. Issues of mass transportation, energy production, green architecture, and farming/fishing will be addressed. In addition the place of sustainability as a philosophical dovetail to J apanese religious and cultural traditions will be highlighted.

## SOCI 30973 - Scandinavia: Sociology and Sustainability (3)

This study abroad course provides a sociological perspective of Sweden, Denmark, and Norway along with a specific emphasis on sustainable practices within the cities of Stockholm, Copenhagen, and Oslo. The course includes 4 days of online preparation, and 2 weeks of travel and lectures within Scandinavia.

## SOCI 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## SOCI 31990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

SOCI 32990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## SOCI 36553 - Sociology of Mental Illness (3)

The course keys on the consequences of being labeled mentally ill (or of being stigmatized), the societal response to mental illness, and the experience of managing particular conditions, especially depression, identity disorders, anxiety, and post-traumatic stress disorder (PTSD). The course also focuses on the sociohistorical and socially constructed concepts and contexts associated with defining mental illness and becoming mentally ill. The course relies on a lecture-discussion format, making use of several concepts that have become linked to mental illness in general and the specific aforementioned conditions.

## SOCI 36743 - Conformity and Rebellion (3)

This course examines, from a social psychological perspective, the complex and dialectical relationship between meeting expectations (conformity) and defying expectations (rebellion) in regard to decisive activity. A social psychological perspective emphasizes the decisions people make in provocative settings, or contexts that involve moments of truth." In this vein, conformity appears in opposition to rebellion. However, conformity can, and often does, imply some form of rebellion just as rebellion implies some form of conformity. Both conformity and rebellion can become problematic, or linked to existential decisions to either act against habit, judgement, and moral standpoints. Rebellion can be seen as an unwanted occurrence that threatens our preferred styles of life, requiring resolution through conformity; conformity can become seen as an impediment to a free society which, in order to salvage a sense of free choice, requires some form of rebellion. Examination of the complex relationship between conformity and rebellion can sharpen our focus when considering, specifically, in what kind of society we wish to live."

## SOCI 40003 - Senior Honors Research Paper (3)

Offered fall only. A supervised research experience culminating in the writing of a research paper typically based on the subject matter studied in SOCI 30003: Honors Seminar in Sociological Ideas. The course is offered on a directed study basis and this must be arranged prior to the semester enrolled.

## SOCI 40303 - Animals, Culture and Society (3)

An exploration of the social and cultural aspects of the relationship between humans and other animal species, with particular focus on (1) examining the place, meaning and treatment of animals across historical periods, cultures, and social contexts, (2) understanding a range of debates and controversies regarding the ways animals are used by humans, and (3) exploring how humans construct social meanings and identities for themselves and others through animals.
SOCI 40373 - Social Psychology: Sociological Approaches (3)
Contribution of sociologists to theory and research in social psychology, including theory of conformity, reference groups, and symbolic interaction.

## SOCI 40383 - Topics in Applied Social Research (3)

Prerequisite: SOCI 20213 or consent of the instructor. Courses taught under this designation focus on research design, perspectives and/or methods useful for conducting applied social research. Topics may vary from semester to semester in accordance with the changing interests of students and instructors. (May be repeated up to 6 hours under different topic offerings.)

## SOCI 40443 - Media Images of Drug and Alcohol Abuse (3)

A critical examination of how the media responds to and helps create images of a particular social problem drug abuse. An introduction to theories and research pertaining to drug abuse, to policies dealing with drug abuse and abusers, and to distinctions between justifications for the legality of some drugs and the illegality of others. Examination of various media representations (through photographs, slides, videotapes) of drugs, drug taking, drug abusing, and drug celebrating, interspersed with lectures and discussions.

## SOCI 40463 - Juvenile Delinquency (3)

An examination of the causes, treatment, and prevention of delinquency, with particular focus on the relationships between juveniles, clinics, and the court, and the philosophical, historical, and traditional foundations of juvenile law. (Offered as CRJU or SOCI credit.)

## SOCI 40523 - Health, Illness and Medicine (3)

Prerequisite: SOCl 20213 , or 20223, or permission of instructor. Critique of the changing structure and functioning of the institution of medicine in America and the continuing inter- and intra-institutional contention for authority. Focus on current issues, problems, and trends such as litigation, governmental financing and regulation, corporate entry into medical care, sexism in medicine, and alternative medicines and practitioners.

## SOCI 40610 - Directed Study in Sociology (1.00-20.00) <br> Prerequisite: Permission of instructor. (1-3 semester hours)

SOCI 40623 - Sociology Internship in Public and Non-Profit Agencies (3) Prerequisites: 2.75 GPA in the Sociology major, completion of 12 credit hours of SOCl courses and approval of instructor. Practical experience in the field of Sociology-related research that may involve work both at TCU and/or outside of TCU (but inside the state of Texas), including field work, internships, part-time jobs, and unpaid volunteer positions, all of which are to be centered around providing real-world training that would enhance the possibility of obtaining a career in sociology-related research area. Student is expected to complete from 90-100 on-site internship hours. This course can be taken once to apply for the Sociology major.

## SOCI 40803 - Social Inequality (3)

Prerequisite: SOCI 20213, 20223, or permission of instructor. Examination of the current status of inequality in contemporary American society in terms of the distribution of power, prestige, and wealth. Critical assessments of economic, status, racial sexual, and political inequality. Focus on such dimensions as the impact of inequality on personal life chances, crime, and social mobility, the feasibility of equality in our society, the programs and policies to reduce inequality and their political and societal ramifications.

## SOCI 50610 - Directed Study in Sociology (1.00-9.00)

Prerequisite: permission of instructor, and graduate standing. Supervised reading, research and completion of a substantial paper. May be taken for credit ranging from 1-6 semester hours and may be taken more than once.

## SOWO - Social Work

## SOWO 10533 - Freshman Seminar in Social Work (3)

Topics may vary.

## SOWO 10833 - Introduction to Social Work (3)

Introduces students to the social work profession including its historical development and process of professionalization. Discusses the knowledge, value, and skill components of social work practice, the variety of practice settings, and the types of client populations served.

## SOWO 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## SOWO 30003 - Honors Tutorial in Social Work (3)

Prerequisites: SOWO 10833 or permission of instructor, and enrollment in the Honors College. An examination of an issue affecting the social work profession or a field or method of social work practice determined in consultation with an instructor. This course is offered on a directed study basis and this must be arranged prior to the semester enrolled.

## SOWO 30513 - Social Work and Civil Rights (3)

Prerequisites: SOWO 10833 or permission of instructor. Discusses the history of civil rights movements in the US and the role of social workers in those movements during the past 150 years. Students analyze the societal context in which social movements occur and how social movements are congruent with social work values.

## SOWO 30523 - Addictions (3)

Prerequisites: SOWO 10833 or permission of instructor. Definitions and various forms of addiction; biological, psychological, social and family changes resulting from addiction; and intervention strategies. Emphasis is on how social workers use this information to address the problems of addiction through social work intervention with clients.

## SOWO 30533 - Social Work in the Criminal Justice System (3)

Prerequisites: SOWO 10833 or permission of instructor. An examination of theories and methods of professional intervention with emphasis on those professionals with clients in the criminal justice system. Focus is on the development of skills that can be applied to individuals, families, and groups
in both community-based and institutional settings. This course is primarily for Criminal Justice and Social Work majors and minors. (May be offered as CRJU or SOWO credit.)

## SOWO $\mathbf{3 0 5 4 3}$ - Family Health Nursing (3)

Provides an introduction to family systems theory, family dynamics and their application to practice in nursing and allied health disciplines. Emphasis is on family assessment. Family diversity, families with a chronically ill or disabled member and informal caregiving are examined. Students will critically evaluate family health practices, including hospice, home-based care, and families in crisis. (Offered for NURS or SOWO credit.)

## SOWO 30553 - Social Work with Adolescents (3)

Prerequisite: SOWO 10833 or permission of instructor. The problems and stresses of biological, psychological and social changes affecting adolescents are discussed. Emphasis is on how social workers use this information to address the problems of adolescent clients through intervention.

SOWO 30563 - Social Work and the Media (3)
Prerequisite: SOWO 10833 or permission of instructor. Introduces students to issues in American society, the social welfare system and the profession of social work as seen through film and other media forms.

## SOWO 30573 - Child Welfare (3)

Prerequisite: SOWO 10833. The social welfare system as it affects children in American society. The historical development of the system, the existing structure and the processes through which present policies have been established. Child welfare agencies and programs, principles and policies on which children's services are based, social and legislative issues relevant to children and children's programs, and specific techniques for working with children are included.

SOWO 30580 - International Community Service (Mexico) (3.00-9.00)
Provides the opportunity for students to study the language, culture and social service delivery system of Mexico. (This course is only offered as $\mathrm{P} / \mathrm{NC}$.)

## SOWO 30583 - Social Work and Diversity (3)

Prerequisites: SOWO 10833, or permission of instructor. This course helps students distinguish between myth and reality about cultural, ethnic, gender, sexual orientation, age and ability differences by thinking critically about diversity. Applications to American and global societies are made and experiential content is stressed.
SOWO 30593 - Rights and Responsibilities of Citizens in the Global World (3)
Corequisites: NTDT 30993. Students will study and compare complex issues that affect social and economic justice in Spain and the US, with a focus on civic responsibility for addressing global problems. Students will gain an understanding of global problems such as poverty, homelessness, hunger, and health care, and how each country responds to them through policy and service delivery. Students will participate in service learning activities to see firsthand how services are delivered to vulnerable populations in both countries. The course is open to all majors and is taken concurrently with NTDT 30993. Fluency in Spanish is NOT required.

## SOWO 30803 - Professional Communication in Social Work (3)

Prerequisites: SOWO 10833 or concurrent enrollment in SOWO 10833; social work majors or social work minors with permission of the instructor. Developing effective communication as a professional social worker is the goal of this course. Emphasis is on written and oral communication necessary in professional practice. The course requires written exercises submitted for review and rewritten to reflect ongoing professional development. Students practice oral communication skills in role plays.

## SOWO 30833 - Macro Social Work Practice (3)

Prerequisites: SOWO 10833 or permission of instructor. That practice aspect of social work concerned with the organization, planning and administration of social work services (as distinguished from provision of services directly to clients), and with the analysis and evaluation of policy and practice within the profession.

## SOWO 30843 - Human Behavior and Social Environment I (3)

Prerequisite: SOWO 10833 or permission of instructor. Theories of human development and functioning within societal and family contexts. The life cycle of the individual from conception to adulthood. Theories of diversity and problem behavior. Effects of ethnicity, gender, ability, sexual orientation, lifestyle, socioeconomic status, age marginality and oppression on human development and social functioning.

## SOWO 30853 - Human Behavior and Social Environment II (3)

Prerequisite: SOWO 10833 or permission of instructor. Theories of human development and functioning within societal and family contexts. The life
cycle of the individual from adulthood to old age. Theories of diversity and problem behavior. Effects of ethnicity, gender, ability, sexual orientation, lifestyle, socioeconomic status, age, marginality and oppression on human development and social functioning.

## SOWO 30863 - Social Welfare Policy (3)

Prerequisites: SOWO 10833 or permission of instructor. The historical development of social welfare policies in the U.S. Major legislative enactments that established the existing welfare structure. Social, economic, and political factors influencing the development of policy. Analysis of social welfare issues currently facing the U.S.

## SOWO 30883 - Micro Social Work Practice (3)

Prerequisites: SOWO 10833, 30803, 30863, or permission of instructor. Knowledge, skills and value base used in the generalist practice of social work. Ecological approach using concepts, principles, and system perspectives applicable to a range of problem-solving situations requiring social work intervention. Individual intervention methods are presented with case material and role playing exercises.

## SOWO 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## SOWO 40003 - Senior Honors Research Project (3)

Offered fall only. A supervised research experience culminating in the writing of a research paper typically based on the subject matter studied in SOWO 30003. The course is offered on a directed study basis and this must be arranged prior to the semester enrolled.

## SOWO 40413 - Animal Assisted Therapy in Social Work (3)

Prerequisites: SOWO 10833. Discusses the use of animal assistance as a thrapeutic intervention in working with clients in a variety of settings. The theory and practice of animal assistance and the research findings on the effectiveness of animal assistance are included. Class includes lecture, visits to therapeutic sites, and guest speakers.

## SOWO 40423 - Ethics in Social Work Practice (3)

Prerequisites: SOWO 10833 or permission of instructor. This course helps students become more aware of the ethical base of social work practice and strengthen their commitment to ethical behavior in impending practice and collegial relationships.

## SOWO 40433 - Intimate Partner Violence \& Social Work (3)

This course provides an overview of contemporary issues in domestic violence in a variety of settings, designed to empower future social work practitioners with the conceptual frameworks and knowledge base necessary for effective intervention. The focus of the course will be on models of service delivery to address the impact of intimate partner violence across the lifespan including children exposed to IPY, dating violence, and older women.

## SOWO 40453 - Social Work Practice with Diverse Populations (3)

Prerequisite: SOWO 10833, or permission of instructor. Study of social work practice theory, methods, and skills for working with diverse and oppressed populations. Concepts and principles related to culturally competent practice in a range of situations will be covered. Case materials and role playing exercises are included.

## SOWO 40463 - Social Work with Groups and Families (3)

Prerequisite: SOWO 10883 or permission of instructor. A study of the methods, skills, and value base used in the practice of social work. Concepts and principles applicable to a range of situations requiring social work intervention to deepen understanding of the intervention process with groups and families. Case material and role playing exercises is included.

## SOWO 40510 - Directed Study in Social Work (1.00-20.00)

Designed for students who undertake readings or projects in social work in consultation with an instructor.

## SOWO 40513 - Approaches to Healthy Aging (3)

Prerequisites: SOWO 10833 or permission of instructor. Provides students the opportunity to explore interdisciplinary approaches to working with older adults, their families, and the larger community. Involves a required service learning component in which students will develop skills, attitudes, and knowledge that will assist them in learning to value and promote healthy aging and quality of life with older adults.

SOWO 40520 - Contemporary Topics in Social Work (3)
Topics of current interest in social work. Possibilities include Crisis Intervention, Suicide, Discrimination, Play Therapy, Intervention Techniques, AIDS, and Social Work with Special Client Populations.

SOWO 40523 - Law and Social Work (3)
Prerequisites: SOWO 10833 or permission of instructor. Aspects of law relevant to social work practice: family relationships, legal offenders, the mentally ill, consumer protection, what constitutes negligence and malpractice by the social worker, law and ethics of confidentiality, collaboration with the legal profession and related issues.

SOWO 40543 - Social Work with Older Adults (3)
Prerequisites: SOWO 10833 or permission of instructor. Provides an opportunity to explore practice with older adults and their families. Explores direct practice roles, selected practice settings, and social policy issues.

## SOWO 40563 - Death and Dying (3)

Prerequisites: SOWO 10833 or permission of instructor. This course will give students an opportunity to explore and understand their perceptions and beliefs of death and dying and how individual cultural differences influence that experience and will prepare them for working with clients on grief and loss.

## SOWO 40813 - Research Methods in Social Work (3)

Prerequisites: MATH 10043 and SOWO 10833, or permission of instructor. Examines research methods to help students understand how social workers conduct research and how they use and evaluate research findings. Applications to practice are made and focus is on evaluating practice and assessing the effectiveness of programs. Students are taught to conduct research and to be consumers of research.

## SOWO 40886 - Field Education I (6)

Prerequisites: SOWO 30833, 30883 and 2.25 TCU GPA; 2.5 GPA in social work; faculty approval; concurrent enrollment in SOWO 40813. Supervised field learning within a social work agency, providing the student an opportunity to learn the structure, function, and policies of social work agencies and apply his or her social work knowledge to the development of skills in human service delivery. The student will spend 16 hours per week for 15 weeks in an assigned agency - for a total of 240 hours. Students also attend a weekly university-based seminar that helps students integrate classroom and field learning. There are additional fees associated with this course.

## SOWO 40896 - Field Education II (6)

Prerequisites: SOWO 40886 with a grade of C or better; 2.25 TCU GPA; 2.5 GPA in social work; faculty approval. A continuation of SOWO 40886: Field Education I which helps to extend and deepen, under professional guidance, the development of practice skills with clients. The student will spend 16 hours per week for 15 weeks in an assigned agency for a total of 240 hours. Students also attend a weekly university-based seminar that helps students integrate classroom and field learning. There are additional fees associated with this course.

## SPAN - Spanish

## SPAN 10103-Spanish for Beginners 1 (3)

A beginning course intended for students with no previous knowledge of the language. The skills of comprehension, speaking, reading, and writing are taught at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in Spanish-speaking countries. (No credit given to native or heritage speakers.)

## SPAN 10113 - Intensive Spanish for Beginners 1 (3)

A beginning course taught at an accelerated rate for eight weeks intended for students with no previous knowledge of the language. The skills of comprehension, speaking, reading, and writing are taught at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in Spanish-speaking countries. A student cannot receive credit for both SPAN 10113 and SPAN 10103. (No credit given to native or heritage speakers.)

SPAN 10203 - Spanish for Beginners 2 (3)
Prerequisite: SPAN 10103 or SPAN 10113 or equivalent. A beginning course intended for students with minimal formal study and very limited knowledge of Spanish grammar and culture. The skills of comprehension, speaking, reading, and writing continue at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in Spanish-speaking countries. Equivalent to SPAN 10213. (No credit given to native or heritage speakers.)

Prerequisites: SPAN 10103 or 10113 or equivalent. Continuation of SPAN 10103 or 10113 taught at an accelerated rate for eight weeks intended for students with minimal formal study and very limited knowledge of Spanish grammar and culture. The skills of comprehension, speaking, reading, and writing continue to be taught at the elementary level, with an emphasis on oral proficiency in everyday situations encountered in Spanish-speaking countries. A student cannot receive credit for both SPAN 10213 and 10203. (No credit given to native or heritage speakers.)

SPAN 19000 - Special Topics in Hispanic Language and Cultures (1.003.00)

Prerequisites: SPAN 10103 or 10113 or equivalent. Occasional course on a selected topic related to the Spanish language or the culture of Spanishspeaking countries. Different course titles may be repeated for credit.

SPAN 19003-Special Topics in Hispanic Language and Cultures Prerequisites: SPAN 10103 or 10113 or equivalent. Occasional course on a selected topic related to the Spanish language or the culture of Spanishspeaking countries. Different course titles may be repeated for credit.

SPAN 20103 - Intermediate Spanish 1 (3)
Prerequisite: SPAN 10203 or SPAN 10213 or equivalent. Further development of the integration of comprehension, speaking, reading, and writing skills on an intermediate level. (No credit given to native speakers; heritage speakers may receive credit with permission of the department.)

SPAN 20113 - Intensive Intermediate Spanish 1 (3)
Prerequisites: SPAN 10203 or 10213 or equivalent. Course is taught at an accelerated rate for eight weeks following the study of beginning Spanish with focus on the integration of comprehension, speaking, reading, and writing skills on an intermediate level. A student cannot receive credit for both SPAN 20113 and 20103. (No credit given to native speakers; heritage speakers may receive credit with permission of the department.)

## SPAN 20203 - Intermediate Spanish 2 (3)

Prerequisite: SPAN 20103 or SPAN 20113 or equivalent. Continuation of SPAN 20103 or 20113 with focus on the integration of comprehension, speaking, reading, and writing skills on an intermediate level. (No credit given to native speakers; heritage speakers may receive credit with permission of the department.)

SPAN 20213 - Intensive Intermediate Spanish 2 (3)
Prerequisites: SPAN 20103 or 20113 or equivalent. Course is taught at an accelerated rate for eight weeks and is a continuation of SPAN 20103 or SPAN 20113 with an integration of comprehension, speaking, reading, and writing skills on an intermediate level. A student cannot receive credit for both SPAN 20203 and SPAN 20213. (No credit given to native speakers; heritage speakers may receive credit with permission of the department.)

## SPAN 20403 - The Hispanic City (3)

This course will study an important city in the Spanish-speaking world, such as Buenos Aires or Madrid, from a variety of perspectives, ranging from history to geography to literature to architecture. Especially recommended for students who plan on careers in the global community, for which they will need to understand the roles and dynamics of urban life in Hispanic cultures. Taught in English.

## SPAN 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

SPAN 29000 - Special Topics in Hispanic Languages and Cultures (1.003.00)

Prerequisites: SPAN 10213 or 10203 or equivalent. Occasional course on a selected topic related to the Spanish language or the culture of Spanishspeaking countries. Different course titles may be repeated for credit.

## SPAN 29003 - Special Topics in Hispanic Languages and Cultures

 Prerequisites: SPAN 10213 or 10203 or equivalent. Occasional course on a selected topic related to the Spanish language or the culture of Spanishspeaking countries. Different course titles may be repeated for credit.SPAN 30003 - Junior Honors Thesis (3)
A preparatory course in which a student selects a topic and carries out exploratory research under faculty guidance. The finalized project is completed in SPAN 43103.

SPAN 30013 - Summer Study Abroad - Language (3)

Prerequisites: SPAN 20203 or 20213 or 31403, or by permission. A Spanish language course in a TCU Spanish faculty-led summer abroad program. Designed to increase communicative and cross-cultural skills significantly for personal and professional applications. May be repeated for credit at a different site. Students in this course must also enroll in 30023 - Summer Study Abroad: Culture.

## SPAN 30023 - Summer Study Abroad - Culture (3)

Prerequisites: SPAN 20203 or 20213 or 31403 , or by permission. A course on the culture of the host country in a TCU Spanish faculty-led summer abroad program. Designed to increase communicative and cross-cultural skills significantly for personal and professional applications. May be repeated for credit at a different site. Students in this course must also enroll in SPAN 30013 - Summer Study Abroad: Language.

SPAN 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## SPAN 31103 - Oral Communication in Spanish (3)

Prerequisite: SPAN 20203 or 20213 orequivalent. Development of oral proficiency skills through intensive practice in a wide variety of common situations and topics. (No credit given to native speakers; heritage speakers may receive credit with permission of the department.)

## SPAN 31203 - Writing in Spanish (3)

Prerequisites: SPAN 20203 or 20213 or equivalent. Development of writing skills in Spanish through intensive practice toward consolidation of independence and confidence with writing ability. Includes directed compositions, editing techniques, and a review of challenging grammatical concepts. Native speakers will not receive credit for this course, unless special permission is granted by department chair.

## SPAN 31303 - Spanish Linguistics (3)

Prerequisites: SPAN 20203 or 20213. The purpose of this course is to provide basic knowledge of various fields within Spanish linguistics. Students will be exposed to linguistic structures such as phonology (pronunciation), morphology (word formation), syntax (sentence formation), semantics (meaning) and other linguistic subfields, including sociolinguistics, psycholinguistics, and dialectology.
SPAN 31403 - Advanced Spanish Grammar (3)
Prerequisites: SPAN 20203 or 20213 or equivalent. Theory and practice of more advanced Spanish grammatical structures. Guided and creative exercises and compositions. Native speakers will not receive credit for this course, unless special permission is granted by department chair.

## SPAN 31503 - Spanish for Health Professions I (3)

Prerequisites: SPAN 20203 or 20213 or equivalent. Course provides the student with basic oral, written and reading skills for Spanish for healthcare purposes, as well as an understanding of cultural differences. Students will learn to communicate with patients, focusing on the critical areas of acquiring basic patient information, understanding symptoms, dispensing medical advice, and discussing treatment and medication. Taught fall semester only.
SPAN 31603 - Spanish for Business Professions I (3)
Prerequisites: SPAN 20203 or 20213 or equivalent. This course provides the student with necessary oral, written and reading skills in Spanish for business purposes and with cultural understanding of how business is conducted within the geographic and cultural context of the Spanish-speaking world. Taught fall semester only.

## SPAN 31703 - Spanish for Heritage Speakers (3)

A comprehensive Spanish course for heritage students with proficiency in spoken Spanish but whose formal education has been in English. The course covers all basic language skills, with emphasis on reading and writing taught through literary and cultural readings, compositions, and exams.

SPAN 31803 - Service-Learning in the Latino Community (3) Prerequisites: SPAN 31103 (30303) or SPAN 31203 (30503) or SPAN 31403 (30203) or the equivalent. Course emphasizes increasing fluency in comprehension, speaking, reading, and writing skills as well as understanding of cultural issues while performing service in a Spanishspeaking atmosphere in the community. Students are required to spend several hours providing service for a community partner to improve their language skills and appreciation for the Latino community.

SPAN 31903 - The Practice of Spanish Translation (3)
Prerequisites: SPAN 31203. Course explores the theory, methods, and practice of translation. Students will be exposed to the complexities of translation. Texts are drawn from multiple fields, such as advertising, journalism, business, travel, health, and politics.

## SPAN 31990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## SPAN 32003 - Culture of Spain (3)

Prerequisite: SPAN 31203 or equivalent. Students gain an understanding and appreciation of the development of Spain as a nation from historical, political, geographical, and cultural perspectives. Taught fall semester only.

## SPAN 32103 - Culture of Latin America (3)

Prerequisites: SPAN (31203. A study of the development and cultural achievements of Latin America's major civilization, from pre-Hispanic times to the present. Taught spring semester only.

## SPAN 32203 - Popular Cultures of Spanish-speaking Countries (3)

Prerequisites: SPAN 31203. Latin American and Spanish cultures as manifested in performance, music, dance, soap operas, and film. Discussion of the politics of everyday practices associated with these expressions, within sociopolitical processes of which they are a part.

## SPAN 32303 - Cinema of Spain (3)

Prerequisites: SPAN 31203. Analysis of contemporary issues as expressed through selected films from Spain. Taught spring semester only.

## SPAN 32403 - Cinema of Latin America (3)

Prerequisites: SPAN 31203. Analysis of contemporary issues as expressed through selected films from Latin American countries. Taught only in the fall semester.

SPAN 32503 - Panorama of Spanish Literature 1 (Pre-1800) (3)
Prerequisites: SPAN 31203. An overview of Spanish literature from the Middle Ages to the end of the 18th century. (Fall; alternates with SPAN 32703.)

SPAN 32603 - Panorama of Spanish Literature 2 (Post-1800) (3) Prerequisites: SPAN 31203. An overview of Spanish literature from the beginning of the 19th century to the present. (Spring; alternates with SPAN 32803.)

SPAN 32703 - Panorama of Latin American Literature 1 (Pre-1820) (3) Prerequisites: SPAN 31203. An overview of Latin American writings from the pre-Hispanic period until the eve of the Independence movements in the 1820s. Includes literary works in poetry and non-fiction, such as the chronicles of conquest. (Fall; alternates with SPAN 32503.)

SPAN 32803 - Panorama of Latin American Literature 2 (Post 1820) (3)
Prerequisites: SPAN 31203. An overview of Latin American writings from the Independence era to the present. Includes works from a variety of genres, such as novels, short stories, poetry, and essays. (Spring; alternates with SPAN 32603.)

## SPAN 32990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## SPAN 34990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## SPAN $\mathbf{3 6 6 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a
student's official transcript have been included in the student's grade point average.

SPAN $\mathbf{3 6 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

SPAN 37990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## SPAN $\mathbf{3 8 9 9 0}$ - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

SPAN 39000 - Special Topics in Hispanic Literature and Culture (1.003.00)

Prerequisites: SPAN 31203 or equivalent. Occasional course on a selected topic related to the literature, history, and culture of Spanish-speaking countries. Different course titles may be repeated for credit.

SPAN 39003 - Special Topics in Hispanic Literature and Culture Prerequisites: SPAN 31203. Occasional course on a selected topic related to the literature, history, and culture of Spanish-speaking countries. Different course titles may be repeated for credit.

SPAN $\mathbf{3 9 9 9 0}$ - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

SPAN 40970 - Directed Research in Spanish (1.00-6.00)
Prerequisite: permission of department chair. Opportunity for independent study, culminating in a substantial written research project.

## SPAN 41003 - The Practice of Spanish Translation

Prerequisites: SPAN 31203. Course explores the theory, methods, and practice of translation. Students will be exposed to the complexities of translation. Texts are drawn from multiple fields, such as advertising, journalism, business, travel, health, and politics.

## SPAN 41103 - Golden Age Spanish Literature (3)

Prerequisites: SPAN 31103, 31203, 31403 and two of 32503-32803 series. A study of the literary culture and representative works of prose, poetry, and drama of major writers in Spain in the sixteenth and seventeenth centuries.

SPAN 41203 - Cervantes (3)
Prerequisites: SPAN 31103, 31203, 31403 and two of 32503-32803 series. A study of the works of Miguel de Cervantes, with special attention to the Quijote and the Novelas ejemplares within the context of the Renaissance.
SPAN 41303 - Modern Spanish Literature (3)
Prerequisites: SPAN 31103, 31203, 31403 and two of 32503-32803 series. A study of the literary culture and of outstanding writers from the Generation of 1898 to the present. Course may focus on a specific genre, group of authors, or themes associated with Spanish society since the early twentieth century.

## SPAN 41403 - Latin American Poetry and Theatre (3)

Prerequisites: SPAN 31103, 31203, 31403 and two of 32503-32803 series. The study of poetry and theatre in Latin America in the post-1900 era. Includes works by well-known authors, but also works written by less known ones, particularly women, indigenous, and Afro-Hispanic authors.
SPAN 41503 - Latin American Short Story (3)
Prerequisites: SPAN 31103, 31203, 31403 and two of 32503-32803 series.
Exploration of major fictional trends in the contemporary short story in Latin

America. Development of writing and analytical skills based on the study of the works of authors.

## SPAN 41603 - Latin American Novel (3)

Prerequisites: SPAN 31103, 31203, 31403 and two of 32503-32803 series. A study of the literary culture and representative contemporary novels of the twentieth and twenty-first centuries from Latin America.

## SPAN 41703 - Mexican Indigenous Literatures (3)

Prerequisites: SPAN 31103, 31203, 31403 and two of 32503-32803 series. A study of Mexico's multicultural reality as reflected in the prose, poetry, and drama of writers from major cultural groups: Mayans, Nahuas, Zapotecs, among others.

SPAN 41803 - Afro-Hispanic Literature (3)
Prerequisites: SPAN $31103,31203,31403$ and two of $32503-32803$ series. A study of literary works by Spanish-speaking writers of African descent from the Caribbean and other parts of Latin America. Course also explores Hispanic literary productions in the West African nation of Equatorial Guinea.

## SPAN 41903 - Hispanic Women Writers (3)

Prerequisites: SPAN 31103, 31203, 31403 and two of 32503-32803 series. An overview of literary works written by women in the Spanish-speaking world, beginning in the 16th century, with an emphasis on the post-1900 era. The course places women's literary imaginings within the context of their situation in society.

## SPAN 42003 - Hispanic Literature in USA (3)

Prerequisites: SPAN 31103, 31203, 31403 and two of $32503-32803$ series. An exploration of literary expressions of the Hispanic cultural community in the United States, especially the Chicano, Cuban-American, and Puerto Rican. Emphasis is laid on issues involving gender, identity, religion, and cultural conflict. Readings, discussions, and examinations are in Spanish.

SPAN 42103 - Luso-Brazilian and Hispanic Literatures (3)
Prerequisites: SPAN 31103, 31203, 31403 and two of 32503-32803 series. A comparative study of the literature of the Spanish and Portuguese-speaking worlds. Emphasis could be on Europe, Latin America, Africa, or any combination of Spanish and Portuguese-speaking peoples.

## SPAN 42203 - Borderland Cultures (3)

Prerequisites: SPAN $31103,31203,31403$ and two of $32503-32803$ series. A survey of varied cultural productions related to the borderlands--especially U.S.-Mexico-- including short stories, poems, film, documentaries, music, and performance. Through this course, students will gain general knowledge on cultural representations on the specified geopolitical frontiers and their relation to the spatial context of the border as a territory with particular social, political, economic, and cultural practices.

## SPAN 42503 - Spanish for the Health Professions 2 (3)

Prerequisite: SPAN 31503. This course builds on knowledge acquired in the introductory course on Spanish for the Health professions. Course provides the student with advanced oral, written and reading skills in Spanish for healthcare purposes, as well as an understanding of cultural differences. Students will develop lexical knowledge related to the medical field and discuss current medical events. Experiential/service-learning in local hospitals is part of the course whereby students will begin to apply the information learned in the course to enhance their communication with patients.

## SPAN 42603 - Spanish for Business Professions 2 (3)

Prerequisites: SPAN 31603. This course builds on knowledge acquired $n$ the introductory course on Spanish for Business Professions. Course provides the student with advanced oral, written, and reading skills in Spanish for business purposes, as well as an understanding of cultural differences. Course enhances lexical knowledge related to the business field and current business events. Opportunities are provided for experiential learning in the local Latino community.

## SPAN 43103 - Senior Honors Thesis (3)

Prerequisites: SPAN 31103, 31203, 31403 and two of 32503-32803 series. Independent projects in literature or linguistics or cultural studies resulting in a Senior Honors Thesis.

## SPAN 43203 - Senior Seminar (3)

Prerequisites: At least one 40000 -level literature course in Spanish. The Spanish capstone course, bringing together the student's study of language, culture, and literature. In-depth study of a pre-announced topic that varies each semester. Required for Spanish majors, this course must be taken in residence at TCU during the senior year. May be repeated for credit under different topics.

## SPAN 43303 - Hispanic Topics in English Translation (3)

Occasional course on a selected topic related to the history, literature, and culture of Spanish-speaking countries. Taught in English. Course cannot be taken to fulfill the requirements of the Spanish major and minor.

SPAN 49000 - Special Topics in Hispanic Literature and Culture (1.003.00)

Prerequisites: SPAN 31103, 31203, 31403 and two of 32503-32803 series. Occasional course on a selected topic related to the literature, history, and culture of Spanish-speaking countries. Different course titles may be repeated for credit.

## SPAN 49003 - Special Topics in Hispanic Literature and Culture

Prerequisites: SPAN 31103, 31203, 31403 and two of 32503-32803 series. Occasional course on a selected topic related to the literature, history, and culture of Spanish-speaking countries. Different course titles may be repeated for credit.

SPAN 50203 - Graduate Study in Hispanic Topics (3)
Special topics in Hispanic literature, culture, language, or pedagogy. May be repeated for credit, up to 9 credits. Taught in Spanish.

## STCO - Strategic Communication

## STCO 11103 - Writing and Editing (3)

Prerequisites: Open only to Strategic Communication majors. Introduction to basic writing and editing skills for advertising and public relations Includes the study and application of style and story structure.

STCO 13103-Communication in Society (3)
This course is open to non-majors. Study of communication in society through various perspectives. Investigation of media as agents of cultural norms, values, mythologies, influence and change.

## STCO 16103 - Diversity (3)

Prerequisites: Open only to Strategic Communication majors. Study of the historical, economic, legal, political and social implications of the relationship between marginalized groups and the media, primarily in the United States. This class will explore how the media help in constructing notions of social reality.

## STCO 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## STCO 22403 - Interactive Design (3)

An overview of planning, strategy and constuction of interactive platforms such as websites, advergaming, blogs and data presentations for target audiences. Open to non-majors.

## STCO 23113 - Advertising (3)

Prerequisite: Open to strategic communication majors only. An overview of advertising in society with a realistic approach about managing advertising in corporate and agency operations. Examination of local, national and global strategies and messages.

## STCO 23123 - Public Relations (3)

Prerequisites: Open to strategic communication majors only. An overview of public relations as a profession and process that builds mutually beneficial relationships between organizations and publics

## STCO 30003 - Junior Honors in Strategic Communication (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses must be earned before enrolling in an advanced or required course(s). Rigorous exploration of public relations or advertising topics. Generally offered to juniors in the major on an independent study basis. Specific focus and outcomes are determined by the student and the instructor.

## STCO 30653 - Web Apps (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses. Non-majors need permission of instructor. Introduction to the rapidly developing field of web apps. Basics of some of
the most important tools - HTML5, CSS, Javascript, code libraries, and development environments. Creation of apps that meet common needs of media professionals.

## STCO 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## STCO 31423-Strategic Writing (3)

Prerequisites: A grade of C or higher in each of the gateway courses: STCO 11103, STCO 16103, STCO 23113, and STCO 23123; and a combined GPA of 2.5 or higher in these courses. Strategic message creation with an emphasis on best practices for writing and editing in advertising and public relations.

## STCO 32403 - Design (3)

Prerequisites: Grade of C or higher in each of the gateway courses: STCO 11103, STCO 16103, STCO 23113, and STCO 23123; and a combined GPA of 2.5 or higher in these courses. Introduction to page layout software, image editing and basics of design. Creation and critique of designs for advertisements, newsletters and other printed and digital pieces.

## STCO $\mathbf{3 2 5 0 3}$ - Images (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses. The study of principles and techniques in digital photography and video in strategic communication with the goal of producing images for public relations and advertising.

## STCO 32603 - Publications (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses. Non-majors need permission of instructor. Creation and critique of printed and digital publications. Introduction to art direction, design theory, planning, production, printing, digital delivery, brand extension and visual continuity.

## STCO 35413 - Creative Strategy (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses, plus STCO 32403 (Design). Planning, creating and producing materials for advertising and public relations.

## STCO 35503 - Research (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses, plus MATH 10043 or INSC 20153 with a grade of C or higher. Introduces qualitative and quantitative research methods and metrics commonly used in advertising and public relations. The class emphasizes the use of research to shape decisions

## STCO 36403 - Digital Storytelling (3)

Prerequisites: Strategic Communication major. Nonmajors will require permission from instructor. Grade of C or higher in each of the gateway courses: STCO 11103, STCO 16103, STCO 23113, and STCO 23123; and a combined GPA of 2.5 or higher in these courses. Introduction to video editing software, image editing and basics of digital storytelling. Creation and critique of videos for advertisements, stories, and advocacy.

STCO 36433 - Social Change (3)
Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses. The use of advertising, public relations and marketing principles to create social change by influencing people's attitudes and behavior. Commonly used in public health communication, social marketing tackles societal problems needing behavioral change. Introduces the field of transformative consumer research.

STCO 40003 - Senior Honors in Strategic Communication (3)
Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses. A major research study, generally offered to seniors
in the major on an independent study basis, involving a substantial topic or project under the supervision of a three-member faculty committee.

## STCO 40970 - Special Topics (1.00-6.00)

Prerequisites: permission of administrator in School of Strategic Communication. Specific issues requiring independent or small group research and study in strategic communication.

## STCO 41413 - Copywriting (3)

Prerequisites: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses. This elective course presents a practical examination of theories, models, fundamentals, and processes used in the development of effective advertising copy and its important role in strategic communication.

## STCO 41423 - Feature Writing (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses, and STCO 31423 (Strategic Writing). Students learn and practice writing features, opinion pieces and other reports for target audiences. Emphasis on developing style, content and structure for a variety of print and digital formats for target audiences.

## STCO 43113 - Psychology of Advertising (3)

Prerequisite: Grade of $C$ or higher in each of the gateway courses: STCO
11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses This course presents theories and models from psychology, sociology, marketing and communications to examine consumers -- how they react to advertising and promotion and their subsequent consumer behavior.

## STCO 43333 - Roxo Agency (3)

Prerequisites: permission of instructor. For strategic communication majors, must be a junior or senior who has successfully completed four required gateway courses (STCO 11103, 16103, 23113, and 23123) with a C or higher in each, and a combined GPA of 2.5 in these courses, plus six upper-level hours in the major. Related majors are also eligible to apply. Students work 9 hours weekly on client projects and also attend a one-hour weekly class in Roxo, TCU's student agency for advertising and public relations. Students learn agency operations, professional roles, work practices and industry trends.

## STCO 43503 - Gender and Media (3)

Study of media influence on gender roles and how women working in media affect perceptions about gender roles. Course explores changing expectations about women's and men's participation in leadership, communication, organizations and global issues.

## STCO 43803 - New Media (3)

Prerequisites: Grade of C or higher in each of the gateway courses: STCO 11103, STCO 16103, STCO 23113, and STCO 23123; and a combined GPA of 2.5 or higher in these courses, junior standing and majors only; nonmajors need permission of instructor. Introduces the fields of advertising and public relations in new media. Topics covered include digital persuasion techniques, interactive media theory, new media planning and measurement, analytics, social media and interactive design considerations.

## STCO 44433 - Global Branding (3)

Prerequisites: Grade of Cor higher in each of the gateway courses: STCO 11103, STCO 16103, STCO 23113, and STCO 23123; and a combined GPA of 2.5 or higher in these courses. Introduces how global brands are communicated and positioned to target audiences through marketing communications, including advertising, public relations and sales promotions.

## STCO 45413 - Channel Planning (3)

Prerequisites: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles), and STCO 23123 (PR Principles), and a combined GPA of 2.5 or higher in these courses. An analytical approach to media planning, implementing and evaluation brand strategy within a multichannel context (broadcasting, print, digital, non-traditional, social media, mobile marketing, direct marketing or alternative media.)

STCO 46403-Law (3)
Prerequisite: Grade of C or higher in each of the gateway courses: STCO
11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad
Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or
higher in these courses; and junior standing. Legal responsibilities, rights and restrictions in advertising and public relations. Survey of Constitutional guarantees, corporate and commercial speech, privacy, copyright, libel and defamation, plus guidelines and laws related to federal agencies, financial disclosure, deceptive advertising, and other issues. Professional ethics codes and ethical models will also be discussed.

## STCO 46723-Social Responsibility (3)

Prerequisites: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles), and STCO 23123 (PR Principles), and a combined GPA of 2.5 or higher in these courses, and junior standing. Examines the global Corporate Social Responsibility movement and explores its challenges. Students examine how to bridge successful partnerships between corporations and causes, how to improve the quality of life for employees and communities and to measure outcomes. Students will embark on a hands-on project that uses their communication and leadership skills.

## STCO 47403 - Ethics (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses, and junior standing. Examines ethical issues and professional codes used in advertising, public relations and media. Students will look critically at current professional practices to develop an understanding of prominent ethical questions. Legal responsibilities and guidelines will also be discussed.

## STCO 47433 - Global Communication (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses. Examines sources, media delivery systems and the impact of globally conveyed information in different cultural contexts.

## STCO 47523 - Crisis Communication (3)

Prerequisites: Grade of C or higher in each of the gateway courses: STCO 11103(Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles), and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses. Non-majors require permission of instructor. This course covers the way issues of public concerns are detected by news media and strategic communication professionals, how communication of government policies as well as corporate and nonprofit organizations' concerns affect public opinion, and analyzes a variety of crises, using real cases as examples.

## STCO 47533 - Case Studies (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses. Use of the case study method to scrutinize organizational events and problems to discover best practices and solutions, based on theory, principles and models related to public relations and advertising. Course content may focus on advocacy and public affairs cases when the Texas Legislature is in session.

## STCO 48300 - Internship (1.00-3.00)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses; junior standing, and permission of instructor. Practical experience in advertising or public relations or in a workplace setting. Course may be taken multiple times to reach a maximum credit of six hours in segments of one, two or three hours, with a minimum of 75 hours worked for each semester hour credit..

## STCO 48530 - Roxo Internship (1.00-3.00)

Prerequisites: Permission of instructor and completion of STCO 43333 (Roxo Agency) with an A- grade or higher. Variable credit of up to three credit hours. Students continue learning agency operations and work with clients in Roxo, TCU's student agency for advertising and public relations. Internship hours are based on 75 hours of client work for each credit hour earned; students may repeat the course to earn a maximum of six credit hours.

## STCO 48533 - Integrated Communication (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses. Students learn how the various communication functions -- including advertising, public relations, marketing, direct
response, sales promotion and supportive communication -- can be integrated for maximum effectiveness in a variety of settings.

## STCO 48813 - Ad Competition (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses, plus STCO 45413 (Channel Planning), STCO 35503 (Research) and STCO 35413 (Creative Strategy). Campaign participants are selected after an application process. For Marketing majors: senior standing and permission of instructor. Students research, plan, create, execute and evaluate an advertising campaign for a national client, as part of the American Advertising Federation National Student Advertising Competition. Crosslisted as MARK 40713.

## STCO 48823 - PR Competition (3)

Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or higher in these courses, plus STCO 32403 (Design), STCO 31423 (Strategic Writing) and STCO 35503 (Research). Student research, plan, create, execute and evaluate a multimedia campaign for a designated client. Participation in the Public Relations Student Society of America Bateman Case Study Competition.

## STCO 48833 - Campaigns (3)

Prerequisites: Grade of C or higher in each of the gateway courses: STCO 11103, STCO 16103, STCO 23113, and STCO 23123, and a combined GPA of 2.5 or higher in these courses, plus STCO 32403, 31423 and 35503 for public relations concentration or STCO 35413 and STCO 45413 for advertising concentration or STCO 35503, STCO 31423, 35413 and 45413 for integrated concentration. Working in a team to research, plan, create, execute and evaluate a multimedia strategic communication campaign for a designated client. Students will utilize their accumulated knowledge from their major courses.

## STCO 50123 - Foundations (3)

Seminar devoted to the analysis and discussion of significant issues in journalism and strategic communication with a focus on related literature, research areas and professional practice. Offered as STCO/JOUR 50123.

STCO 50133 - Management of Public Relations and Advertising Departments/Firms or Agencies (3)
The course will examine management techniques, tactics, concerns and issues in handling public relations and advertising departments within organizations, corporate and nonprofit, and agencies or firms, from small independent operations to subsidiaries of larger entities.

## STCO 50183 - Management and Leadership (3)

This course will give students a survey of some of the latest management and leadership communication theories and practices, including a new sense of social responsibility. Students will apply theories to solve problems in existing case studies. Crosslisted asJOUR 50183.

## STCO 50333 - Advertising and the Consumer (3)

This course presents theories and models from psychology, sociology, marketing and communications to examine consumers -- how they react to advertising and promotion and their subsequent consumer behavior.

## STCO 50383 - History of Strategic Communication (3)

Seminar designed to explore the history of strategic communication. Issues discussed in this class will improve historical knowledge about the mass media and give a foundation for understanding the professional development of strategic communication.

## STCO 50523 - Information Law and Policy (3)

Prerequisites: Open to graduate students in the Schools of Journalism and Strategic Communication. Undergraduate students must have passed JOUR 40523 or STCO 46403 with a grade of C or higher and must have permission of the instructor. Advanced media law course for students focusing on contemporary challenges faced by journalism and strategic communication professionals. The course emphasizes how the law of mass communication has adapted to new and emerging technologies such as the Internet and social media, with a particular focus on privacy, access to information, and intellectual property. Students will learn and apply normative legal research methods to answer modern questions relevant to professional communicators. Crosslisted as JOUR 50523.

STCO 53483 - Crisis Communication (3)
Prerequisite: Grade of C or higher in each of the gateway courses: STCO 11103 (Writing and Editing), STCO 16103 (Diversity), STCO 23113 (Ad Principles) and STCO 23123 (PR Principles); and a combined GPA of 2.5 or
higher in these courses. Non-majors require permission of the instructor. This course examines the way issues of public concerns are detected by news media and strategic communication professionals as the issues develop, and it examines how the crisis management and communication of government, corporate and nonprofit organizations' concerns affect public perceptions and opinions. The course emphasizes practical application of theories, strategies and tactics of communicating to multiple stakeholders in crisis situations.

## THEA - Theatre

## THEA 10433 - Freshman Seminar in Theatre: Fort Worth Theatre Exploration (3)

Students will explore the varied culture of professional and community theatres in the Fort Worth area.

THEA 10901 - Theatre Production (1)
Practical experience for freshmen and sophomores in all areas of theatre production, related directly to Theatre TCU productions. May be repeated for credit.

THEA 10911 - Theatre Performance (1)
Prerequisite: Permission of the instructor. Practical experience in acting for freshmen and sophomores related directly to roles in Theatre TCU productions. May be repeated for credit.

## THEA 11003 - Survey of Theatre (3)

An introductory course in theatre focusing on production, performance, dramatic literature and history.

## THEA 11013 - Survey of Musical Theatre (3)

An introductory course in musical theatre focusing on production, performance, musical theatre literature and history.

## THEA 11103 - Art of the Theatre (3)

An introductory course for theatre majors and minors exploring the various components of theatre theory and production.

## THEA 11203 - Stagecraft (3)

An introductory course in technical theatre focusing on theory and practice of scenery construction, rigging, and painting. A lab is required for this class.

## THEA 11213 - Theatre Graphics (3)

An introductory course in technical theatre focusing on reading and producing ground plans, elevations, section drawings, light plots, figure drawings, and perspective drawings.

## THEA 11223 - Stage Makeup (3)

Prerequisites: open only to theatre majors and minors. A laboratory course in stage makeup focusing on basic techniques and special effects.
THEA 11233-Practical Costuming (3)
An introductory course in costume construction focusing on sewing, fabrics, painting and dyeing, accessories, and the procedures for theatrical costuming. A lab is required for this class.

## THEA 11243 - Introduction to Theatre Design (3)

An introductory course in design for the theatre, focusing on basic design principles, analysing plays, and creating scenic, costume, and lighting designs.

## THEA 11303 - Acting I: Introduction (3)

An introductory course in acting focusing on basic techniques and solo assignments.

THEA 11501 - Musical Theatre Performance Lab I (1)
Prerequisites: permission of instructor. An introductory course in group singing of Musical Theatre repertoire to acquaint students with technique and literature. This course may be repeated for credit.

## THEA 20990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

THEA 21103 - Script Analysis (3)
The examination and analysis of the structure and content of scripts for interpretation and conceptualization for theatre directors, designers, actors, and technicians.

## THEA 21203 - Stage Management (3)

Prerequisite: THEA 11203. An intermediate course in stage management focusing on theory, preparation and practice.

## THEA 21213 - Drawing for Theatre (3)

An introductory course in drawing skills required for design work in theatre, including figure drawing, realistic drawing, perspective and technical drawing used in scenic, costume, and lighting designs.

THEA 21303 - Acting II: Realism (3)
Prerequisite: THEA 11303. An intermediate course in acting focusing on realism and scene work with other actors.

THEA 21312-Auditioning (2)
A performance course for actors in which they study and practice the process of auditioning for the theatre, using monologues, scenes, cold readings, and songs.
THEA 21323 - Stage Movement (3)
Prerequisite: Open only theatre majors and minors. A laboratory course focusing on analysis and development of physical skills for actors.

THEA 21333 - Voice and Speech (3)
Prerequisite: Open only to theatre majors and minors. A laboratory course focusing on analysis and development of vocal skills for actors.
THEA 21403 - Rendering (3)
Prerequisites: THEA 11213. An intermediate course in creating scenery and costume design drawings.
THEA 21413 - Stage Lighting (3)
An introductory course in stage lighting focusing on design and practice.
THEA 21501 - Musical Theatre Performance Lab II (1)
Prerequisites: Permission of instructor. An intermediate course in group singing of Musical Theatre repertoire to acquaint students with technique and literature. This course may be repeated for credit.
THEA 30901 - Advanced Theatre Production (1)
Practical experience for juniors and seniors in all areas of theatre production, related directly to Theatre TCU productions. May be repeated for credit.

THEA 30911 - Advanced Theatre Performance (1)
Prerequisite: Permission of the instructor. Practical experience in acting for juniors and seniors, related directly to roles in Theatre TCU productions. May be repeated for credit.

THEA 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas
ChristianUniversity has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.
THEA 31003 - Junior Honors Seminar (3)
Prerequisite: permission of instructor. Individual honors projects for junior theatre students who are enrolled in the TCU Honors Program.
THEA 31103 - Theatre History I (3)
History of western theatre from its origins in ancient Greece to the Renaissance.

THEA 31113 - Theatre History II (3)
History of western theatre from the Restoration through the 19th Century.
THEA 31123 - Period Styles (3)
A theatre history course focusing on the cultures (art, music, architecture, religion) of those historical periods which figure prominently in Theatre: classical Greece and Rome, Gothic/Renaissance/Elizabethan, 17th, 18th and 19th Centuries, and early and late 20th Century.
THEA 31133 - Playwriting (3)
Study and practice in the art of writing plays for the theatre, including dramatic structure, dialogue and characterization.

THEA 31203 - Computer Graphics for Theatre (3)
Prerequisite: THEA 11213 or permission of instructor. An advanced technical theatre course focusing on computer technology for design.

THEA 31213 - Scene Painting (3)
Prerequisite: THEA 11203 or permission of instructor. An advanced course in technical theatre focusing on painting scenery for the stage.

THEA 31223 - Costume Technology (3)
Prerequisites: THEA 10233. An advanced production course in costume construction and technology techniques including pattern drafting, draping, millinery, and other specialties.

## THEA 31303 - Acting III: Performance Styles (3)

Prerequisite: THEA 21304 or permission of instructor. An advanced course in acting focusing on period performance styles.

## THEA 31313 - Advanced Stage Movement (3)

Prerequisites: THEA 21323 or permission of instructor. An advanced laboratory course focusing on physical skills for actors.

## THEA 31323 - Advanced Voice and Speech (3)

Prerequisite: THEA 21334 or permission of instructor. An advanced laboratory course focusing on vocal skills for actors.

THEA 31333 - Acting Shakespeare (3)
Prerequisites: THEA 20304, Acting II: Realism. An advanced acting styles course focusing exclusively on the performance of Shakespeare. Students will work on sonnets, monologues and scenes.

## THEA 31343 - Directing (3)

Prerequisite: THEA 21304 or permission of instructor. An advanced laboratory course focusing on directing skills including script analysis, conceptualization, and staging resulting in a realized directing project.

## THEA 31403 - Scene Design (3)

Prerequisite: THEA 11213 or permission of instructor. An advanced course in technical theatre focusing on scene design.

## THEA 31413 - Costume Design (3)

Prerequisite: THEA 11213 or permission of instructor. An advanced course in technical theatre focusing on costume design.

## THEA 31423 - Sound Design (3)

Prerequisites: THEA 11203: Stagecraft. A course in designing sound for theatre productions, including the use of sound effects, music, special effects, microphones and mixing sound for the live theatre.
THEA 31433 - Props Design (3)
Prerequisite: THEA 11203: Stagecraft. A course in designing props for theatre productions, including the various methods of acquiring props, such as construction, rental, pulling from stock, modification, buying, and borrowing.

## THEA 31502 - Musical Theatre Dance (2)

A laboratory dance class in musical theatre styles. Specific styles may vary by semester. May be repeated for credit.

## THEA 31503 - Musical Theatre Theory (3)

Prerequisites: permission of instructor. A course in music theory specifically designed for the issues most commonly faced in Musical Theatre.

## THEA 31900 - Theatre Internship (1.00-6.00)

Prerequisite: Permission of instructor. Off-campus theater internships. 1-3 credits. May be repeated for credit.

## THEA 34990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## THEA 40100 - Design/Technical Workshop (1.00-3.00)

Prerequisite: permission of instructor. An individual study course in technical theatre for students with advanced design or technical assignments on Theatre TCU productions. 1-3 credits. May be repeated for credit.
THEA 41002 - Professional Seminar (2)
Prerequisite: permission of instructor. A course for BFA Theatre majors in which they consider and explore what kinds of professional theatre careers or graduate school training they intend to pursue; students prepare themselves for professional careers by developing such items as resumes, portfolios, audition material, and headshots.
THEA 41003 - Senior Honors Seminar (3)
Prerequisites: Permission of instructor. Individual honors projects for senior theatre students who are enrolled in the TCU Honors Program.

THEA 41103-20th Century Theatre (3)

A theatre history course concerning the major movements and dramatic literature of the 20th century, including realism, naturalism, expressionism, and absurdism.

## THEA 41113 - History of Costume (3)

An advanced lecture course covering the major historical periods of Western dress, focusing on the stage.

THEA 41123 - Modern Trends in Theatre (3)
Prerequisite: Permission of instructor. An experiential theatre course, usually taught in London. Students attend theatre productions and meet with theatre professionals as well as visit other cultural sites.
THEA 41133-Musical Theatre History (3)
A theatre history course focusing on Musical Theatre in the 19th and 20th centuries, including the development of the form, major artists who contributed to it, and seminal musical theatre works.

THEA 41143 - Religious Drama (3)
A course in dramatic literature in which students will study more than a dozen plays that examine the religious traditions and the church in western culture.

## THEA 41153 - Social Values Drama (3)

A course in dramatic literature in which students will study more than a dozen plays that examine ethical decision-making in western culture.
THEA 41190 - TCU in London (1.00-3.00)
Prerequisite: Permission of instructor. A directed study in theatre occurring in London. 1-3 credits. May be repeated for credit.

## THEA 41203 - Advanced Stagecraft (3)

Prerequisite: THEA 11203 or permission of instructor. An advanced course in technical theatre focusing on scenic construction and rigging.

## THEA 41213 - Technical Direction (3)

An advanced course in Technical Direction for the theatre, including the responsibilities of coordinating scenery, costumes, lighting, props, sound and special effects. Students will learn techniques of budgeting, purchasing, scheduling, and creating appropriate technical drawings.

THEA 41303 - Acting IV: Non-Realism (3)
Prerequisite: THEA 31303 or permission of instructor. An advanced course in acting focusing on non-realistic styles.

THEA 41313-Stage Combat (3)
Prerequisite: THEA 21323 or permission of instructor. An advanced acting course focusing on performance combat including unarmed combat, quarterstaff, and rapier and dagger sword work.

THEA 41323 - Dialects (3)
Prerequisite: THEA 21304: Acting II: Realism. An advanced acting course focusing on the International Phonetic Alphabet, and the creation of the most commonly used stage dialects, including British, Cockney, Irish, and Brooklyn.
THEA 41413 - Advanced Stage Lighting (3)
Prerequisite: THEA 21413. An advanced course in technical theatre focusing on aesthetics and special effects in stage lighting.

THEA 41503 - Musical Theatre Performance (3)
Prerequisite: THEA 21304. An intermediate acting course focusing on the integration of singing and acting in performance.
THEA 41513 - Advanced Musical Theatre Performance (3)
Prerequisites: THEA 41503 or permission of instructor. An advanced acting course focusing on the integration of singing and acting in performance.

THEA 41900-Individual Study in Theatre (1.00-3.00)
Prerequisite: Permission of instructor. Independent theatre research or performance projects $1-3$ credits. May be repeated for credit.

## THEA 41910-Special Topics in Theatre (1.00-3.00)

Prerequisites: Permission of instructor. A variety of special or one-time topics in Theatre may be covered in this class, and the format may vary including lecture, performance, activity, or research courses. 1-3 semester hours. This course may be repeated for credit.
THEA 41920 - Directed Studies in Acting (1.00-6.00)
Prerequisite: Permission of instructor. A directed study in theatre focusing on projects in acting. 1-6 credits. May be repeated for credit.

THEA 41930 - Directed Studies in Directing (1.00-6.00)

Prerequisite: Permission of instructor. A directed study in theatre focusing on projects in directing. 1-6 credits. May be repeated for credit.

## THEA 41940 - Directed Studies in Scenic Design (1.00-6.00)

Prerequisite: Permission of instructor. A directed study in theatre focusing on projects in scenic design. 1-6 credits. May be repeated for credit.

## THEA 41950 - Directed Studies in Costume Design (1.00-6.00)

Prerequisite: Permission of instructor. A directed study in theatre focusing on projects in costume design. 1-6 credits. May be repeated for credit.
THEA 41960 - Directed Studies in Stage Lighting Design (1.00-6.00) Prerequisite: permission of instructor. A directed study in theatre focusing on projects in lighting design. 1-6 credits. May be repeated for credit.

THEA 41970 - Directed Studies in Theatre Production (1.00-3.00)
Prerequisites: permission of instructor. A directed study in theatre focusing on projects in production including stage management, technical direction, carpentry, costume technology, electrics, and other production topics.

## UNPR - University Programs

## UNPR 10001 - Self Assessment and Career Exploration (1)

This course provides opportunities for premajors to assess abilities, interests, values, and personality; meet with faculty from a variety of potential major and minor fields; learn about the decision-making process and factors related to choosing a major/career; (This course is only offered P/NC.)

## UNPR 10110-Special Problems (1.00-3.00) <br> Special Problems

UNPR 10211 - Introduction to University Life (1)
In this one-hour course, students begin exploring fundamental questions and issues of university life - the purpose(s) of a university, the nature of a liberal arts education, academic and personal integrity, critical thinking, the core mission, vision, and values of TCU, and the meaning and importance of learning that is reflective, lifelong, and life-wide. A primary feature of the course is the creation of a FrogFolio, a dynamic digital platform where students reflect upon, organize, archive, and display their significant learning experiences, both inside and outside the classroom.
UNPR 30002 - Professional Careers: Planning \& Decision-making (2) Prerequisites: Junior status, or permission of instructor. This team-taught course is to acquaint students with decision-making skills related to career development, with emphasis on those who will enter professional sports or the performing arts. It emphasizes financial negotiations; transactions and investments; career development; and life skills and problems.

## UNPR 30201 - Exploring Global Citizenship (1)

This seminar will provide study abroad students with the knowledge, skills and attitudes needed for effective and appropriate engagement with people and issues in the world. The course provides students a framework for exploring the nature of civic differences, the need for global collaboration, and the tools for doing so. The course also prepares students for UNPR 30302, Actions for Global Citizenship, upon their return.

## UNPR $\mathbf{3 0 3 0 2}$ - Initiatives for Global Citizenship (2)

This course is intended as a capstone for students to use the knowledge and skills gained during their study abroad experience as a springboard for global citizenship. The course provides students an opportunity to define their understanding of global citizenship, to explore global issues from multiple perspectives, and to consider how to take the competencies developed abroad and apply them in engagement with global issues.

## UNPR 30970 - Directed Study in University Programs (1.00-6.00)

 Directed Study in University ProgramsUNPR 30990 - International Residential Study (1.00-20.00)
This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## WGST - Women and Gender Studies

WGST 20003 - Introduction to Women and Gender Studies (3)
This course will serve as an interdisciplinary introduction to Women and Gender Studies, focusing on major issues, theories, and selected disciplinary applications, for which the idea of gender will provide the unifying theme.

Lectures, discussions, and assignments will encourage students to recover and understand the lived experiences of women by studying concepts of gender difference. Readings will facilitate discussion and understanding of differences in age, class, sexual diversity, race, and ethnicity.
WGST 30973 - Special Topics in Gender and Women's Studies (3) Prerequisite: permission of instructor. Directed study in gender and women's studies. Topic, method, and theme will vary from semester to semester.

## WGST 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## WGST 40003 - Senior Seminar in Women and Gender Studies (3)

This is the capstone course for the Women and Gender Studies Minor, and includes classic readings in feminist theory and an independent project. The student pursues the independent project with the guidance usually of one of the faculty members associated with the Women's Studies Program. Other faculty members may participate as approved. These projects can include either 1) a practicum with goals, progress and final reports, or 2) a theory and research project to be agreed to by the faculty member and student.

WGST 49003 - Internship in Women and Gender Studies (3)
Internships (usually local in Tarrant County) arranged with the consent of the Director of the Women and Gender Studies Program for declared minors, taken on a strictly Pass/No Credit basis. (3 semester hours).

## WRIT - Writing

## WRIT 10203 - Introduction to Creative Writing (3)

Workshops in which students present their writing (fiction, poetry, drama, creative nonfiction) for class analysis will be complemented by lectures on the genres and readings that exemplify outstanding technique.

## WRIT 20103 - Reading as a Writer (3)

Introduces concepts of close reading and the creative writing workshop. Engages questions of the role of reading in culture, its impact on understanding complex issues, and the connection of reading to composing.

## WRIT 20303 - Writing Games (3)

Students explore the rhetorical dimensions of writing within and about games, considering both how games are a form of writing and writing hybridizes genre conventions. While both games and writing have long been important elements of culture, students in this class will come to a better understanding of how the two are mutually informative. Students will consider how games inform writing, how writing informs games, and how both games and writing compose the world at large.

## WRIT 20313 - Power and Protest (3)

Study of social protest movements and their persuasive strategies. Rhetorical analysis of the forms and functions of dissent, agitation, resistance, and control.
WRIT 20333 -Language, Technology, and Society (3)
An introduction to the ways in which social organizations, technology, and language influence one another.
WRIT 30013 - Distinction Program: Thesis I (3)
Course meets to support students' independent distinction projects in literature and writing.

## WRIT 30203 - Urban Rhetorics (3)

Prerequisites: ENGL 10803 or 10833, and ENGL 20803 or 20833. A rhetorical analysis of cities, parks, memorials, planned communities and civic discourse in and around what gets composed as an urban text. From a rhetorical perspective, this course will explore the historical, social, cultural and racial texts constructed in the urban environment which shape our sense of citizenship and identity in both public and private contexts. Examines current trends and topics in the American urbanscape.

WRIT 30213 - Advanced Composition: Writing Genres (3)
Prerequisites: ENGL 10803 or 10833, ENGL 20803 or 20833. Writing workshop that builds on lower division composition courses by focusing on the analysis and production of texts written for specific rhetorical situations and discourse communities. Emphasis on new writing contexts and contemporary writing genres whether for academic, professional, creative, or personal purposes.

WRIT 30223 - Technical Writing and Information Design (3)
Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A course in practical communication with a concentration on report writing, including oral presentations and use of visual materials. Assignments are tailored to fit students' major fields and professional interests.

## WRIT 30233-Creative Nonfiction Workshop I (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. A creative nonfiction writing class for students with some experience in creative writing. In this course, students will get experience writing memoir, personal essays, autobiography, oral history, and in other nonfiction genres. The course may also include reading of major nonfiction writers from the Renaissance to the present.

## WRIT 30243 - Rhetorical Practices in Culture (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Appropriation of the vocabulary, taxonomies, and strategies of classical and modern rhetoric for the purposes of critical inquiry into contemporary communication and behavior.

## WRIT 30253 - Rhetorical Traditions (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. An introduction to the ideas, issues and individuals that shaped rhetoric and its relationship to literature and poetics, including the relationship between orality and literacy, the impact of cultural and religious views on discourse, and the role of technology in communication.

## WRIT 30263 - Style (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Analysis of the ways in which writers deploy vocabulary and syntax to create a prose voice that is responsive to the demands of audience, purpose, and occasion.

## WRIT 30273 - Argument and Persuasion (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Analysis of the logic by which writers construct arguments; analysis of the various means that writers use to persuade an audience; practice in writing one's own argumentative and persuasive discourse.

## WRIT 30283 - Cyberliteracy (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. This course will investigate issues related to cyberliteracy: what it means to read, write, communicate, and make knowledge in a digital world. In particular, the course will consider how computer technologies challenge traditional notions of literacy, identity, and community.

## WRIT 30293 - Non-Human Rhetoric and Representation (3)

Non-Human Rhetoric and Representation challenges students to reevaluate non-human actors by interrogating a variety of theoretical, literary and filmic texts, including theory, fiction, documentary, and children's literature.

## WRIT 30343 - Fiction Writing Workshop I (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. A fiction writing class for students with some experience in creative writing.

## WRIT 30353 - Poetry Writing Workshop I (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. A poetry writing class for students with some experience in creative writing.

## WRIT 30363 - Digital Creative Writing (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. Explores the composition of creative work using digital technologies - collage, graphic narratives, multimedia poetry/fiction, and creative short animations. Course emphasizes concepts in creative writing, multimedia, and authorship in digital environments. Students design and compose a variety of multimedia products incorporating typography, image, and other modes.

## WRIT 30373 - Drama Writing Workshop I (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. A dramatic writing workshop, focusing on the growth of students' own work in playwriting and/or screenwriting.

## WRIT 30391 - Publication Production (1)

Prerequisites: ENGL 10803 or 10833, and 20803 or 20833. A variable credit course intended for students with an interest in publication and basic web design. Students in the course will work in every stage of the production of a least one of the English department's print or digital publications.
Specifically, students will gain knowledge of and experience in (1) the history and purpose of the publication's genre, (2) the selection, editing, and
proofing of the publication's drafts, (3) the publication's layout and the design, and (4) the distribution and promotion of the completed product. Students will also receive practical training with relevant publishing and design software. This course may be repeated for credit.

## WRIT 30663 - Women's Rhetorics (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Women's Rhetorics will explore the ways in which women use language t persuade in both public and private spheres. The course will use rhetorical theory to study a variety of primary texts by women representing a range of historical periods from Classical times to the present, with special attention to both traditional rhetorical genres (speeches, letters, sermons, editorials) and nontraditional texts (quilts, recipe books, blogs, performance art).

WRIT 30803 - Theories of Cinema (3)
Prerequisites: ENGL 10803 or 10833, and ENGL 20803 or 20833. A study of theories of cinema as text in the humanities, including areas such as analytic approaches to film, rhetorical approaches to film, and/or film criticism. Course includes an integrated lab for viewing required films.

## WRIT 30813 - Books and the History of Print Culture (3)

Prerequisites: ENGL 10803 or 10833, and ENGL 20803 or 20833. This course examines the history of the book from the perspectives of producers and consumers. It includes the social and cultural significance of print culture, analyzing print technology as a mass media capable of shaping human attitudes. As readers move from the printed page to the computer screen, all areas of traditional print culture are changing as well, including the most basic concepts of what it means to be a writer, reader, and publisher. This course may include a lab component.

## WRIT 30990 - International Residential Study (1.00-20.00)

This course represents credit earned through a semester study abroad experience with an institution or program with which Texas Christian University has an official agreement to accept credit. The site and specific content will be identified on the official transcript. Courses appearing on a student's official transcript have been included in the student's grade point average.

## WRIT 38063 - Writing Major Seminar (3)

Prerequisites: Writing majors and minors only; students must have junior or senior standing and must have completed one 30000 -level ENGL or WRIT course. Introduces Writing majors and minors to a sustained, long-format research project over the course of the semester. Students will examine and practice disciplinary conventions in the context of future career possibilities and/or graduate school by also preparing a professional portfolio designed for an external audience.

## WRIT 40013 - Distinction Program: Thesis II (3)

Independent study to complete a distinction project in literature or writing.

## WRIT 40133 - Creative Nonfiction Workshop II (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. A creative nonfiction writing class for students with some experience in creative writing, this a craft/workshop course intended for advanced writers who have a committed interest in creative non-fiction (such as personal essay, literary journalism, travel writing, science writing, memoir, and other non-fiction genres) and are comfortable writing longer works of prose. As a workshop, students will work cooperatively to share and improve each others' work during the semester.

## WRIT 40163 - Multimedia Authoring: Image and Hypertext (3)

Investigates the relationship between new media, culture, and design, with particular emphasis on mulimodal, interactive texts. Course emphasizes concepts in rhetoric, multimedia, and authorship in digital environments. Students design and compose a variety of multimedia products incorporating print, image, and other modes.

## WRIT 40203 - Fiction Writing Workshop II (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. An advanced fictionwriting workshop, focusing on the growth of students' own work. Prior to enrollment, students are also strongly encouraged to take ENGL/WRIT 30343 (Fiction Writing Workshop I.)

## WRIT 40213 - Poetry Writing Workshop II (3)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. An advanced poetrywriting workshop, focusing on the growth of students' own work. Prior to enrollment, students are also strongly encouraged to take ENGL/WRIT 30353 (Poetry Writing Workshop I.)

Prerequisites: ENGL/WRIT 10203 or ENGL/WRIT 20103. An advanced dramatic writing workshop, focusing on the growth of students' own work in playwriting and/or screenwriting. Prior to enrollment, students are strongly encouraged to take another 30000 -level course in creative writing.

## WRIT 40233 - Writing for Publication (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A survey of the possibilities of writing for magazine publication and the construction of essays and articles for specific markets.

## WRIT 40243 - Professional Writing (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. A course in writing, rhetoric, and design appropriate to diverse professions (e.g., law, medicine, engineering, social work). Students analyze, and write for, particular audiences in terms of their genre conventions, content expectations, and language dynamics. .

## WRIT 40253 - Propaganda Analysis and Persuasion (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. The nature of persuasive discourse and social movements involving propaganda explored through illustrations and theories that facilitate their understanding.

## WRIT 40263 - Multimedia Authoring: Animation and Film (3)

Explores the complex relationship between new media, culture, and design, with particular emphasis on cinematic or time-based rhetoric. Course emphasizes concepts in rhetoric, multimedia, and authorship in digital environments. Students design and compose a variety of multimedia products incorporating print, image, and other modes.

## WRIT 40273 - Writing Internship (3)

Prerequisites: 60 credit hours; major GPA of 3.0 or Cum GPA of 2.8 minimum; approval of the department. Students place themselves with agencies in publishing or related fields for workplace experience. Duties, varied to fit the needs and opportunities associated with the participating agencies, generally include writing, editing, and production of published documents. Course may be repeated once for credit.

## WRIT 40283 - Editing and Publishing (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Introduces students to the practice of editing manuscripts intended for publication. Topics include the editorial process (both academic and commercial), the ethics of editing, and the role of the editor in publishing. Students will engage in extensive editing practice of journal and book manuscripts.

## WRIT 40333 - Language, Rhetoric and Culture (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Explores the role of language in human communication and culture, with attention to the implications of language ideologies to various forms of communicative interaction. Review and critique of theories of language and communication as a social and political phenomena.

## WRIT 40363 - Multimedia Authoring: Mobile Apps and eBooks (3)

Explores the complex relationship between new media, culture, and design, with particular emphasis on the production of mobile applications and eBooks publications. Course emphasizes concepts in rhetoric, multimedia, and authorship in digital environments. Students design and compose a variety of multimedia products incorporating print, image, and other modes.

## WRIT 40373 - The Rhetoric of Revolution (3)

Prerequisites: ENGL 10803, ENGL 20803, and at least one 10000- or 20000level ENGL/WRIT course. Analysis of the nature of revolutionary discourse with attention to the logic, arguments, and persuasive appeals of written works and rhetorical performances.

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[^0]:    - Baptist Student Ministry

[^1]:    Texas Christian University is an affiliate of The Washington Center, a nonprofit independent educational institution that provides comprehensive learning opportunities in the nation's capital for students from more than 300 colleges and universities. The program includes placement, supervision, evaluation, seminars, housing, counseling, special events and other support services.
    The TCU Washington Internship Program is open to juniors and seniors in any major field. Minimum requirements include a 3.0 GPA. The selection process is competitive, and students must return to campus for at least one semester following the internship experience. The call for applications goes out one year preceding the fall internship. Applications may be picked up in the political science office. All students accepted must take POSC 40910, Washington Internship Seminar, during the spring semester before the

[^2]:    The College of Communication offers both the Bachelor of Arts and the Bachelor of Science degrees.
    Students pursuing a Bachelor of Arts degree must complete a minimum of 124 semester hours, 42 of which must be advanced ( 30000 level or above) from TCU, with a major and a minor selected from the approved list of majors and minors. The number of hours required for the major and minor can be found in the appropriate section of this catalog. In addition, students must complete the TCU Core Curriculum.
    All students pursuing the Bachelor of Arts degree in the Bob Schieffer College of Communication must demonstrate competency in a foreign language equivalent to completion of one of the following:

[^3]:    Students wishing to major in film, television and digital media are must complete the following requirements for graduation:

[^4]:    The Bachelor of Science with a major in strategic communication requires 124 hours with 39 hours in strategic communication. All strategic communication majors must complete the four gateway courses with a C (2.0) or higher and have a combined 2.5 GPA before enrolling in advanced, required courses for the major. Strategic communication majors also must complete STCO 32403, STCO 35503, STCO 46403 and STCO 48813 or (STCO 48823 or STCO 48833). No course applied to the student's major or associated requirement may be taken on a pass/no-credit basis. All skills courses must be taken sequentially. To complete the 39 STCO hours, students must also fulfill the requirements in one of three 15 -hour

[^5]:    Select the remaining 9 hours from courses that carry the MES attribute.
    Emphasis students may count MES-approved courses towards their major/minor and the emphasis. They may also concentrate their MES electives in a single department.
    Emphasis students in programs requiring a minor must complete a minor in another disciplinary field.

[^6]:    Students seeking Texas teaching certification with an elementary specialization or secondary teaching field in French must take the Texas Oral Proficiency Test (TOPT). This test must be taken in addition to the ExCET exams required. Candidates who attain the TOPT's passing standard of advanced oral proficiency or higher will be recommended for certification. Candidates who do not meet the TOPT's passing criteria, but who have met all other coursework and certification requirements, may be recommended for a general elementary certificate or a single secondary teaching field.
    Candidates seeking teacher certification and preparing for the EXCET and TOPT exams are strongly encouraged to take advantage of the Resident Study Abroad Program (FREN 30173). They are also advised to include Advanced French Conversation (FREN 30043) and French Culture and Civilization (FREN 30153 and FREN 30163) in their course of study

    Students seeking certification for teaching French at the secondary school level should be advised by the departmental secondary certification adviser.

[^7]:    A Coordinated Program in Dietetics is an academic program in a U.S. regionally accredited college or university that culminates in a minimum of a baccalaureate degree. The Coordinated Program in Dietetics (CP) at TCU offers the unique opportunity to acquire both the required didactic instruction (lecture and laboratory courses) and 1,200 clock hours of supervised practice necessary to meet the Core Knowledge and Competencies for the Registered Dietitian as mandated in the Accreditation Standards of the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (formerly the Commission on Accreditation for Dietetics Education of the American Dietetic Association). Graduates receive verification/establish eligibility to write the registration examination for dietitians and apply for active membership in the Academy of Nutrition and Dietetics.
    The mission of the Coordinated Program in Dietetics (CP) is to support the missions of the University, college and department by providing a quality academic curriculum with a concentration in nutrition education that prepares students to be scientifically competent, accountable and ethically responsible citizens who are prepared to be productive, self-educating

[^8]:    ANTH 40433 - Transnational Processes: Globalization, Migrations, and Borders (3)
    Prerequisite:Junior standing or permission of instructor. This course explores ongoing processes that link economic systems, multinationals, supranational institutions, armed conflict, poverty, and prosperity in different parts of the world, combining macro and local, native perspectives. Students learn theoretical frameworks and their application to develop ethics that may orient future endeavors in graduate training and professional life.

