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## The University of TexasPAN AMERICAN



## 2007-2009 UNDERGRADUATE CATALOG



## The University of Texas-Pan American 2007-2009 UNDERGRADUATE CATALOG

The University of Texas-Pan American is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools ( 1866 Southern Lane, Decatur, GA 30033, telephone 404/679-4501) to award bachelor's, master's and doctoral degrees. In addition, these programs are separately accredited or approved by the:

Accreditation Council for Occupational Therapy Education (ACOTE)American Occupational Therapy Association

The Association to Advance Collegiate Schools of Business (vSB International)
American Chemical Society
Commission on Accreditation for Dietetics Education (CADE)
American Speech-Language-Hearing Association (ASHA)
Commission for Collegiate Nursing Education;
Board of Nurse Examiners for the State of Texas
The Council on Rehabilitation Education (CORE)
The Council on Social Work Education (CSWE)
Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET)

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
National Association of Schools of Theatre (NAST)
State Board for Educator Certification (SBEC)
Texas Education Agency (TEA)
Accreditation Review Commission on Education for the Physician Assistant (ARC-PA)
The University of Texas-Pan American is a member of the
American Association of Colleges for Teacher Education American Association of State Colleges and Universities

American Council on Education
Association for Continuing Higher Education
Conference of Southern Graduate Schools
Council for Advancement and Support of Education
Council of Graduate Schools
Hispanic Association of Colleges and Universities
This catalog was prepared based on the best information available at the time. The University of Texas-Pan American reserves the right to change any information, including statement of fees, course offerings, and admission and graduation deadlines and requirements without notice or obligation, in keeping with the policies of The University of Texas System Board of Regents and in conformance with the laws of the state of Texas.

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Office of the Registrar at 956/381-2206 or Voice/TDD 956/381-2215.


The University of Texas-Pan American operates subject to the Rules and Regulations of the Board of Regents of The University of Texas System.

This catalog is a general information publication. It is not intended to nor does it contain all regulations that relate to students. The provisions of this catalog do not constitute a contract, expressed or implied, between any applicant, student or faculty member of The University of Texas-Pan American or The University of Texas System.

The University of Texas-Pan American reserves the right to withdraw courses at any time, to change fees or tuition, calendar, curriculum, degree requirements, graduation procedures and any other requirements affecting students. Changes will become effective whenever officially implemented by proper authorities and will apply to both prospective students and those already enrolled.

## $\star$ NON-DISCRIMINATION Policy Statement

The University of Texas-Pan American declares and reaffirms a policy of administering all of its educational programs and related supporting services and benefits in a manner that does not discriminate because of a student's or prospective student's race, color, religion, sex, national origin, age, veteran status, disability or other characteristics that lawfully cannot be the basis for provision of such services. These programs, services and benefits include, but are not limited to, admission, class assignments, scholarships and other financial and employment assistance, counseling, physical education and recreational services, and the membership practices of registered student organizations.

Pursuant to this policy statement, The University
of Texas-Pan American will undertake a continuing program of compliance with all federal, state and local laws relating to equal educational opportunity and affirmative action, specifically those addressing the obligations of the institution under Title VI of the Civil Rights Act of 1964 as amended, Title IX of the Educational Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990.

To the extent provided by applicable law, no person shall be excluded from participation in, denied the benefits of, or be subject to discrimination under any program or activity sponsored or conducted by The University of Texas System or any of its component institutions on the basis of race, color, national origin, religion, sex, age, veteran status or disability.

Inquiries or complaints may be directed to the immediate supervisor or to the compliance officer in Room 5.101, Student Services Building, telephone 956/381-2121; the chair of the department; or the dean of students in Room 104, University Center, telephone 956/381-2260. Inquiries concerning ADA should be directed to the coordinator of services for persons with disabilities in Room 100, Emilia Schunior Ramírez Hall, telephone 956/316-7005.

Individuals who believe they have been discriminated against in violation of any of the nondiscrimination policies may, after an initial interview with the appropriate compliance officer named above, initiate grievance proceedings in accordance with the provisions and procedures stipulated under "Student Complaint Procedures" and "Grievance Policy for Complaints Concerning Discrimination on the Basis of Disability" found in the University's Handbook of Operating Procedures.

Individuals are protected from coercion, intimidation, interference or discrimination for filing a complaint or assisting in an investigation.

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## $\boldsymbol{d}$ cuindar 2007-2009

Dates and deadlines for applications for student loans, scholarships or other financial aid are set in Student Financial Services and are listed in the Financial Assistance section of this catalog.

For ACT, TSI, GRE, GMAT and other test information, contact the University Testing Center at 956/292-7584, ext. 7585, or e-mail: testing@utpa.edu.

Registration for any given semester begins in the preceding semester. For example, registration for the fall semester for currently enrolled students and for new students who meet the early application deadline will begin in the spring.

NOTE: For financial aid purposes, the miniterm will be processed as part of summer I, and all summer I deadlines apply.

## FALL 2007

March 26, 2007, Monday (tentative)
ASSIST registration (Web) begins by appointment for fall 2007.

April 20, 2007, Friday
Deadline to file Application for Degree Form with the Office of the Registrar for December 2007 graduation.

August 24, 2007, Friday
Housing move-in begins at 9 a.m.
Cafeteria is open for lunch and dinner.
August 27, 2007, Monday
First day of classes.
September 3, 2007, Monday
Labor Day holiday, no classes, campus closed.
Cafeteria is open.
September 12, 2007, Wednesday
Twelfth class day, census date.
September 14, 2007, Friday
Deadline to file Application for Degree Form with the Office of the Registrar for May 2008 graduation.

September 25, 2007, Tuesday
Last day to drop a course or to withdraw from the

University with a grade of "DR" or "W" recorded; last day to change to non-credit.

October 22, 2007, Monday (tentative)
ASSIST registration (Web) begins by appointment
for spring, miniterm, summer I and summer II 2008.
November 21, 2007, Wednesday
Last day to drop courses or withdraw through the
Office of the Registrar.
Residence Halls close at 6 p.m.
Cafeteria is open for breakfast and lunch only.
November 22-23, 2007, inclusive Thanksgiving holiday, no classes. Cafeteria is closed Thursday through Saturday.

November 25, 2007, Sunday
Residence Halls reopen at noon.
Cafeteria is open for dinner only.
December 5, 2007, Wednesday
Deadline to file Application for Degree Form with
the Office of the Registrar for July 2007 graduation.
December 6-7, 2007, inclusive
Dead days; Limited departmental final
examinations.
December 8-13, 2007, inclusive Fall semester final examinations.


December 13, 2007, Thursday
Residence Halls close at 6 p.m.
Cafeteria is open for breakfast and lunch only.
December 14, 2007 Friday
Fall final grades to be entered by faculty no later than 3 p.m.

December 15, 2007, Saturday
Commencement exercises.

## $\star$ Spring $2008 \star$

September 14, 2007, Friday
Deadline to file Application for Degree Form with the Office of the Registrar for May 2008 graduation.

October 22, 2007, Monday (tentative)
ASSIST registration (Web) begins by appointment for spring, miniterm, summer I and summer II 2008.

November 1, 2007, Thursday
Admission application and document deadline for international students.

January 3, 2008, Thursday
Admission application and document deadline for late registration. Applications received after this deadline will be processed for the next semester.

## January 12, 2008, Saturday

Housing move-in begins at noon.
Cafeteria is open for dinner only.
January 14, 2008, Monday
First day of classes.
January 21, 2008, Monday
Martin Luther King Day holiday, no classes, campus closed.

January 25, 2008, Friday
Deadline to file Application for Degree Form with the Office of the Registrar for August 2008 graduation.

January 30, 2008, Wednesday
Twelfth class day, census date.
February 12, 2008, Tuesday
Last day to drop a course or to withdraw from the University with a grade of "DR" or "W" recorded; last day to change to non-credit.

March 14, 2008, Friday
Residence Halls close for Spring Break at 6 p.m.

Cafeteria is open for breakfast and lunch only.
March 15-22, 2008, inclusive
Cafeteria is closed.
March 17-22, 2008, inclusive
Spring Break, no classes.
March 23, 2008, Sunday
Residence Halls reopen at noon.
Cafeteria is open for dinner only.
March 21-22, 2008, inclusive
Easter holiday, no classes.
April 7, 2008, Monday (tentative)
ASSIST registration (Web) begins by appointment for fall 2008.

April 11, 2008, Friday
Last day to drop courses or withdraw through the Office of the Registrar.

April 18, 2008, Thursday
Deadline to file Application for Degree Form with the Office of the Registrar for December 2008 graduation.

May 1-2, 2008, inclusive
Dead days; Limited departmental final examinations.

May 5-8, 2008, inclusive
Second semester final examinations.
May 8, 2008, Thursday
Residence Halls close at 6 p.m.
Cafeteria is open for breakfast and lunch only.
May 9, 2008, Friday
Final grades to be entered by faculty no later
than 3 p.m.
May 10, 2008, Saturday
Commencement exercises.

## $\star$ MINITERM $2008 \star$

May 11, 2008, Sunday
Housing move-in begins at 9 a.m.
May 12, 2008, Monday
First day of classes.
May 13, 2008, Tuesday
Second class day, census date.

May 26, 2008, Monday
Memorial Day holiday, no classes, campus closed.
May 29, 2008, Thursday
Last class day for miniterm.
May 30, 2008, Friday
Miniterm final examinations.
Residence Halls close at 6 p.m.
June 2, 2008, Monday
Miniterm final grades to be entered by faculty no later than 3 p.m.

August 16, 2008, Saturday
Commencement exercises.

## $\star$ SUMMER I $2008 \star$

December 5, 2007, Wednesday
Deadline to file Application for Degree Form with the Office of the Registrar for July 2008 graduation.

April 7, 2008, Monday (tentative)
ASSIST registration (Web) begins by appointment for fall 2008.

June 1, 2008, Sunday
Housing move-in begins at 9 a.m.


June 2, 2008, Monday
First day of classes for summer I classes.
June 5, 2008, Thursday
Fourth class day, census date.
June 11, 2008, Wednesday
Last day to drop a course or to withdraw from the
University with a grade of "DR" or "W" recorded; last day to change to non-credit.

June 27, 2008, Friday
Last day to officially drop courses or withdraw through the Office of the Registrar.

July 4, 2008, Friday
Fourth of July holiday, no classes, campus closed.
July 7, 2008, Monday
Last day of classes.
July 8, 2008, Tuesday
Summer I final examinations.
Residence Halls close at 6 p.m.
Cafeteria open for breakfast and lunch only.
July 9, 2008, Wednesday
Summer I final grades to be entered by faculty no later than 3 p.m.

August 16, 2008, Saturday
Commencement exercises.

## $\star$ SUMmer II $2008 \star$

January 25, 2008, Friday
Deadline to file Application for Degree Form with the Office of the Registrar for August 2008 graduation.

April 7, 2008, Monday
ASSIST registration (Web) begins by appointment for fall 2008.

July 9, 2008, Wednesday
Housing move-in begins at 9 a.m.
July 10, 2008, Thursday
First day of classes.
July 15, 2008, Tuesday
Fourth class day, census date.
July 21, 2008, Monday
Last day to drop a course or to withdraw from the University with a grade of "DR" or "W" recorded; last day to change to non-credit.

August 1, 2008, Friday
Last day to officially drop or withdraw through the Office of the Registrar.

August 13, 2008, Wednesday
Last day of classes.
August 14, 2008, Thursday
Summer II final examinations.
Residence Halls close at 6 p.m.
Cafeteria open for breakfast and lunch only.
August 15, 2008, Friday
Final grades to be entered by faculty no later than 3 p.m.

August 16, 2008, Saturday
Commencement exercises.

## $\star$ Fall $2008 \star$

February 1, 2008, Friday
Admission application and document deadline for ASSIST registration by Web. All students applying after this deadline will register late.

April 7, 2008, Monday (tentative)
ASSIST registration (Web) begins by appointment for fall 2008.

April 18, 2008, Friday
Deadline to file Application for Degree Form with the Office of the Registrar for December 2008 graduation.

## August 22, 2008, Friday

Housing move-in begins at 9 a.m.
August 25, 2008, Monday
First day of classes.
September 1, 2008, Monday
Labor Day holiday, no classes, campus closed.
September 10, 2008, Wednesday
Twelfth class day, census date.
September 15, 2008, Monday
Deadline to file Application for Degree Form with the Office of the Registrar for May 2009 graduation.

September 23, 2008, Tuesday
Last day to drop a course or to withdraw from the
University with a grade of "DR" or "W" recorded; last day to change to non-credit.
October 20, 2008, Monday (tentative)
ASSIST registration (Web) begins by appointment for
spring 2009, miniterm, summer I and summer II 2009.
November 26th, Wednesday
Last day to drop or withdraw through the Office of the Registrar.

Residence Halls close for Thanksgiving Holiday at
6 p.m.
November 27-28, 2008, inclusive
Thanksgiving holiday, no classes.
November 30, 2008, Sunday
Residence Halls reopen at noon.
December 4-5, 2008, inclusive
Dead days; Limited departmental final examinations.
December 5, 2008, Friday
Deadline to file Application for Degree Form with the
Office of the Registrar for August 2009 graduation.
December 8-11, 2008, inclusive
Fall semester final examinations.
December 11, 2008, Thursday
Residence Halls close at 6 p.m.
December 12, 2008, Friday
Final grades to be entered by faculty no later than 3 p.m.

December 13, 2008, Saturday
Commencement exercises.

## $\star$ Spring $2009 \star$

February 1, 2008, Friday Admission application and document deadline for ASSIST registration by Web. All students applying after this deadline will register late.

September 15, 2008, Monday
Deadline to file Application for Degree Form with the Office of the Registrar for May 2009 graduation.

October 20, 2008, Monday (tentative)
ASSIST registration (Web) begins by appointment for spring 2009, miniterm, summer I and summer II 2009.

January 10, 2009, Saturday Housing move-in begins at noon.

January 12, 2009, Monday
First day of classes.
January 19, 2009, Monday
Martin Luther King Day holiday, no classes, campus
closed.

January 23, 2009, Friday
Deadline to file Application for Degree Form with the Office of the Registrar for August 2009 graduation.

January 28, 2009, Wednesday
Twelfth class day, census date.
February 3, 2009, Tuesday
Last day to drop a course or to withdraw from the
University with a grade of "DR" or "W" recorded; last day to change to non-credit.

## March 6, 2009, Friday

Residence Halls close for Spring Break at 6 p.m.
March 9-13, 2009, inclusive
Spring Break, no classes.
March 15, 2009, Sunday
Residence Halls reopen at 12 noon.
April 6, 2009, Monday (tentative)
ASSIST registration (Web) begins by appointment for fall 2009.

April 10-11, 2009, inclusive
Easter holiday, no classes.
April 17, 2009, Friday
Last day to drop courses or withdraw through the Office of the Registrar.

Deadline to file Application for Degree Form with the Office of the Registrar for December 2009 graduation.

April 30-May 1, inclusive
Dead days.; Limited departmental final
examinations.
May 4-7, 2009, inclusive
Spring semester final examinations.
May 7, 2009, Thursday
Residence Halls close at 6 p.m.
May 8, 2009, Friday
Final grades to be entered by faculty no later than 3 p.m.

May 9, 2009, Saturday
Commencement exercises.

## MINITERM $2009 \star$

May 10, 2009, Sunday
Housing move-in begins at 9 a.m.
May 11, 2009, Monday
First day of classes.
May 12, 2009, Tuesday
Second class day, census date.
May 25, 2009, Monday Memorial Day holiday, no classes, campus closed.

May 27, 2009, Wednesday Last day of classes.

May 28, 2009, Thursday
Study day for exams. No classes.
May 29, 2009, Friday
Miniterm final examinations.
Residence Halls close at 6 p.m.
June 1, 2009, Monday
Miniterm final grades to be entered by faculty no later than 3 p.m.

August 15, 2009, Saturday
Commencement exercises.

## $\star$ SUMMER I $2009 \star$

December 5, 2008, Friday
Deadline to file Application for Degree Form with the Office of the Registrar for July 2009 graduation.

May 31, 2009, Sunday
Housing move-in begins at 9 a.m.
April 6, 2009, Monday (tentative)
ASSIST registration (Web) begins by appointment for fall 2009.

June 1, 2009, Monday
First day of classes .
June 4, 2009, Thursday
Fourth class day, census date.
June 10, 2009, Wednesday
Last day to drop a course or to withdraw from the University with a grade of "DR" or "W" recorded; last day to change to non-credit.

June 26, 2009, Friday
Last day to officially drop courses or withdraw
through the Office of the Registrar.

July 3, 2009, Friday
Last day of classes.
July 4, 2009, Saturday
Fourth of July holiday, no classes, campus closed.
July 7, 2009, Tuesday
Summer I final examinations.
SSI only. Residence Halls close at 6 p.m.
July 8, 2009, Wednesday
Final grades to be entered by faculty no later
than 3 p.m.
August 15, 2009, Saturday
Commencement exercises.

## Summer II 2009

January 23, 2009, Friday
Deadline to file Application for Degree Form with the Office of the Registrar for August 2009 graduation.

July 7, 2009, Tuesday
Housing move-in at 9 a.m.
July 8, 2009, Wednesday
First day of classes begin.
July 13, 2009, Monday
Fourth class day, census date.
July 20, 2009, Monday
Last day to drop a course or to withdraw from the University with a grade of "DR" or "W" recorded; last day to change to non-credit.

August 7, 2009, Friday
Last day to officially drop or withdraw through the Office of the Registrar.

August 11, 2009, Tuesday
Last day of class.
August 12, 2009 Wednesday
Summer II final examinations.
Residence Halls close at 6 p.m.
August 14, 2009, Friday
Final grades to be entered by faculty no later than 3 p.m.

August 15, 2009, Saturday
Commencement exercises.

## The University of TeXAs PAN AMERICAN averview

The University of Texas-Pan American is a comprehensive, public coeducational institution located in Edinburg, Texas, close to the Mexican border and the Gulf of Mexico.

## $\star$ Institutional Vision

The University of Texas-Pan American is the premier learner-centered research institution in the state of Texas. We actively engage businesses, communities, cultural organizations, educational organizations, health providers and industry to find solutions to civic, economic, environmental and social challenges through inquiry and innovation.

## $\star$ Mission Statement

The University of Texas-Pan American serves the higher education needs of a rapidly growing, international, multicultural population in the South Texas Region. The University preserves, transmits and creates knowledge to serve the cultural, civic and economic advancement of the region and the state. The University provides students advanced instruction in academic programs offered through innovative delivery systems that lead to professional certification, and baccalaureate, master's and doctoral degrees. Through teaching, research, creative activity and public service, UTPA prepares students for lifelong learning and leadership roles in the state, nation and world community.

## $\star$ UNIVERSITY HISTORY

The school first opened in 1927 as Edinburg College, a two-year community college governed by the Edinburg School District.

In 1933, the institution was approved by the State Department of Education, designated a "First Class Junior College" by the Association of Texas Colleges, became a member of the Association of Colleges and Secondary Schools of Southern States and was renamed Edinburg Junior College. In 1947, Edinburg Junior

College began offering classes at night and at off-campus locations in neighboring towns. The following year, the name was changed again, this time to Edinburg Regional College, as the school was separated from the Edinburg School District and began receiving partial state support.

On Dec. 20, 1951, the voters of Hidalgo County approved the establishment of a four-year college, Pan American College, to serve the needs of the region. Between 1952 and 1965, the former Edinburg Regional College served as the junior division of the new college, and a senior division was established to furnish upperlevel work and award degrees.

The name Pan American College was selected because it reflected the institution's desire to bridge the cultures of North and South America and to reflect the cultural and ethnic diversity of the institution.

Pan American College became part of the Texas System of Colleges and Universities on Sept. 1, 1963. A two-year transition period was provided during which the school passed from partial state support to full state assistance, control and ownership. In 1965, the college officially became the 22nd state-supported senior institution in Texas.

In the late 1960s, Pan American College responded to increasing requests to provide graduate-level work, and by 1970, the school had received approval to offer graduate instruction in the arts, education and science. To reflect the increased range of studies available, the name of the school was changed to Pan American University on Sept. 1, 1971.

Pan American University began to offer courses in Brownsville in 1973 to better serve the citizens of Cameron County and the Lower Rio Grande Valley. A few years later, the Pan American University Board of Regents created Pan American University at Brownsville, which is now a separate university.

The greatest change in recent years was the University's merger on Sept. 1, 1989, with The University of Texas System, renaming the school The University of Texas-Pan American. The historic event culminated two years of study, hearings, discussion and negotiations involving regents, legislators, faculty, students, alumni and the community. With the addition of Pan American University, The University of Texas System gained a window on eastern Mexico and a strong presence in one of the fastest-growing regions of the state. To its advantage, Pan American gained the participation and support of the System and its components in expanding the number of academic opportunities it offers its students.

In 1994, the Texas Higher Education Coordinating Board approved UT Pan American's first doctoral degree, a Ph.D. program in business administration with an emphasis in international business, effectively marking the beginning of a new era in the development of the
institution. In 1998, the Coordinating Board approved a second doctoral program, an Ed.D. in educational leadership. UTPA also now offers a Pharm.D. in pharmacy in cooperation with The University of Texas at Austin.

UT Pan American has continued to broaden its curriculum, adding baccalaureate, master's and doctoral degree programs. Today, it is the 10th largest of the state's 35 senior institutions.

## $\star$ The Students

UT Pan American has one of the largest enrollments of Hispanic students among four-year colleges and universities in the United States. About 86 percent of the undergraduate students are Mexican-American, reflecting the demographic characteristics of the immediate region, the Rio Grande Valley.

In May 2007, The Hispanic Outlook in Higher Education reported that UTPA is second in the nation in the number of bachelors degrees awarded to Hispanics and first in the state of Texas.

Enrollment in fall 2006 was 17,337. The Texas Higher Education Coordinating Board predicts the University will have a fall enrollment of 19,032 students by the year 2010.

## * Degrees and Programs

UT Pan American's six academic colleges - Arts and Humanities, Business Administration, Education, Health Sciences and Human Services, Science and Engineering and Social and Behavioral Sciences - offer a wide range of degree options encompassing a comprehensive series of academic concentrations and selected areas of professional study.

## Bachelor's Degrees

- College of Arts and Humanities Art (BA, BFA)
Communication (BA)
Communication Studies (BA)
Journalism (BA)
Theatre ( $B A$ )
English (BA)
French (BA)
History (BA)
Inter-American Studies
(Latin-American Studies) (BA)
Social Studies Composite 8-12 (BA)
Mexican-American Heritage (BA)

Music (BA)
Philosophy (BA)
Spanish (BA)

- College of Business Administration

Accounting (BBA)
Computer Information Systems (BBA)
Economics (BA, BBA)
Finance (BBA)
International Business (BBA)
Management (BBA)
Marketing (BBA)

- College of Education

Dance (BA)
Health (BS)
Kinesiology (BS)
Interdisciplinary Studies (BIS)

- College of Health Sciences and Human Services

Clinical Laboratory Sciences (BS)
Communication Disorders (BS)
Dietetics (BS)
Nursing (BSN)
Physician Assistant Studies (BSPAS)
Rehabilitative Services (BS)
Rehabilitative Services - Addiction Studies (BS)
Rehabilitative Services - Deaf Studies (BS)
Social Work (BSW)

- College of Science and Engineering

Biology (BS)
Chemistry (BS)
Computer Science (BS)
Computer Engineering (BSCE)
Electrical Engineering (BSEE)
Interdisciplinary Studies (BIS)
Life Science 4-8
Mathematics 4-8
Manufacturing Engineering (BSMF)
Mathematics (BS)
Mechanical Engineering (BSME)
Physics (BS)

- College of Social and Behavioral Sciences

Anthropology (BA)
Criminal Justice (BSCJ)
Political Science (BA)
Psychology (BA, BS)
Sociology (BA)

- Interdisciplinary Bachelor's Degrees

Applied Arts and Sciences - General (BAAS)*
Applied Arts and Sciences - Liberal Arts (BAAS)*

Applied Arts and Sciences -
Business Technology (BAAS)*
General Studies (BGS)*
*See the College of Social and Behavioral Sciences for information and advising.

## Graduate Degrees

Master's Degrees

- College of Arts and Humanities

Art (MFA)
Communication (MA)
Creative Writing (MA)
English (MA) (MFA)
English as a Second Language (MAESL)
History (MA)
Music (MM)
Spanish (MA)
Theatre (MA)
Master of Arts in Interdisciplinary Studies (MAIS)
Concentrations in
English
History
Music
Spanish

- College of Business Administration

Business Administration (MBA)
Accountancy (MAA)
Accounting (MSA)

- College of Education

Bilingual Education (MEd)
Early Childhood Education (MEd)
Educational Administration (MEd)
Educational Diagnostician (MEd)
Elementary Education (MEd)
Gifted Education (MEd)
Guidance and Counseling (MEd)
Kinesiology (Physical Education) (MS)
Reading (MEd)
School Psychology (MA)
Secondary Education (MEd)
Special Education (MEd)
Supervision (MEd)

- College of Health Sciences and Human Services

Adult Health Nursing (MSN)
Communication Sciences and Disorders (MS)
Family Nurse Practitioner (MSN)
Occupational Therapy (MSOT)
Rehabilitation Counseling (MS)
Social Work (MSSW)

- College of Science and Engineering

Biology (MS)
Chemistry (MS)
Computer Science (MS)
Information Technology (MSIT)
Engineering (MSE)
Electrical
Management
Manufacturing
Mechanical
Interdisciplinary Studies (MSIS)
Concentration in Physics Education
Mathematical Science (MS)
Mathematics Teaching (MS)

- College of Social and Behavioral Sciences

Criminal Justice (MSCJ)
Clinical Psychology (MA)
Experimental Psychology (MA)
Public Administration (MPA)
Sociology (MS)
Master of Arts in Interdisciplinary Studies (MAIS)
Concentration in Anthropology

- Interdisciplinary Master's Degrees

Master of Arts in Interdisciplinary Studies (MAIS)
Concentrations in
Anthropology
English
History
Music
Spanish

- Doctoral Degrees
- College of Business Administration Business Administration with an emphasis in International Business (Ph.D.)
- College of Education

Educational Leadership (Ed.D.)

- College of Health Sciences and Human Services Pharmacy (Pharm.D.) in cooperation with The University of Texas at Austin

For more information on graduate programs, consult the Graduate Catalog.

Additional degree programs were being developed and approved at the time of publication. Contact the Office of the Registrar for information about these new opportunities.

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# The University of Texas PAN AMERICAN 



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## $\star$ GENERAL INFORMATION

The University of Texas-Pan American is an equal opportunity educational institution. Under this philosophy, students are admitted to the University without regard to race, creed, color, sex, ethnic origin, religion, age, veteran status or disability.

Admission is only for the semester requested. Students who apply but do not attend must submit an updated application for admission to enroll for a later semester. Students not enrolled for the previous regular semester must apply for readmission.

Students are admitted to The University of TexasPan American through the Office of Admissions and New Student Services, which is responsible for administering admission policies. Students who wish to attend the University must meet all admission requirements by the published deadline date for the semester for which they are applying. Failure to have applications with supporting documents on file by these dates will result in restrictive admission or denial of admission at that time. Request documents to be sent to:

> The University of Texas-Pan American Admissions and New Student Services Student Services Building, First Floor 1201 W. University Drive Edinburg, TX $78539-2999$
> Telephone: 956/381-2999 or 956/381-2203 Voice/Telecommunications Device for the Deaf: 956/381-2215 Web: www.utpa.edu/admissions
> E-mail: admissions@utpa.edu

Required high school and/or college transcripts must be requested from each individual institution attended. These official must be sent by the institution directly to Admissions and New Student Services at the above address. Information regarding how test scores may be requested may be obtained from the University Testing Center, UTPA Annex, 2412 S. Closner, telephone 956/292-7585, e-mail testing@utpa.edu.

## ApplyTexas Application

In accordance with Sections 51.762 and 51.763 of the Texas Education Code, students have the opportunity to apply to any public institution in the state of Texas through a common application process. Please check with Admissions and New Student Services for full details.

## $\underset{\sim}{*}$ AUTOMATED STUDENT <br> Information SERVICES

Telephone Voice Response: Students may check the progress of their applications or access other information by calling the Advanced Services for Student Information Supported by Technology (ASSIST) at 956/381-3040 on a touch-tone phone. ASSIST offers recorded information on admission, grades, registration and transcripts and information specific to each student through a series of voice prompts.

Kiosk Stations: Standard forms, general information, a campus directory and student record information, including application status, can be accessed from any of the kiosk stations located on the UT Pan American campus.

Web for Students: The services available by kiosk and telephone voice response are also available via the World Wide Web at http://assist.utpa.edu or cp.utpa.edu (Campus Pipeline).

## $\underset{\sim}{*}$ APPLICATION DEADLINES

There are two admission application deadlines for each semester and summer session at the University. The

first deadline is usually the first workday in February for both summer sessions and the fall semester or the first work day in September for the spring semester.

The second application deadline, usually about two weeks before the beginning of the semester, is for late registration. Specific deadline dates for each semester are listed in the Schedule of Classes and in the University Calendar in this catalog.

## ~ Academic Fresh Start

Undergraduate Programs: An applicant for admission who is a Texas resident may seek to enter this institution pursuant to the "Academic Fresh Start" statute, Texas Education Code, Section 51.931. If the applicant informs Admissions and New Student Services in writing of the election, the institution for admissions purposes will not consider academic course credits or grades earned by the applicant 10 or more years prior to the starting date of the semester in which the applicant seeks to enroll. An applicant who makes the election to apply under this statute may not receive any course credit for courses taken 10 or more years prior to enrollment.

## $\star$ UNDERGRADUATE ADMISSION

ADMISSION DOCUMENTS REQUIRED

Applicants seeking admission are required to submit the following documents by the published deadline date to be considered for admission. Applications received after the published deadline date will automatically be processed for the next available semester.

1. Application for Admission.
2. Official College Transcripts from all colleges and universities attended. Transcripts must be sent directly from the institution(s) attended and may not be hand carried. Students who are currently enrolled at another institution should request a transcript to be sent with the coursework completed to date, followed by a final transcript to be sent upon completion of the current semester. Only coursework or degrees earned at an institution accredited by a regional accrediting association will be recognized. (For more information on accreditation, see the Glossary on page 386).
3. Texas Success Initiative (TSI) approved test scores or proof of exemption for students who plan to enroll in college-level coursework. Test scores from approved TSI exams or TSI exemption will not be used as a basis for admission, but will be used to determine placement. Refer to page 68 for further information.

Freshmen and transfer students who have less than 30 college-level hours must also submit:
4. ACT or SAT scores.
5. High School Transcript showing the units completed, grades earned, date of graduation and rank in class. Admission may be tentatively granted on the basis of the first semester of the senior year.

In addition to current university requirements for admission, applicants must also have either:

1) successfully completed the curriculum requirements for the recommended or advanced high school program or its equivalent; or
2) satisfied ACT's College Readiness Benchmarks on the ACT assessment applicable to the applicant or earned on the SAT assessment a score of at least 1,500 out of 2,400 or the equivalent
The above requirement may be satisfied if the applicant's official high school transcript or diploma states that the
applicant completed the portion of the recommended or advanced curriculum or its equivalent that was available to the applicant, but was unable to complete the remainder of the curriculum solely because courses necessary to complete the remainder were unavailable to the applicant at the appropriate times in the applicant's high school career as a result of course scheduling, lack of enrollment capacity, or another cause not within the applicant's control.


#### Abstract

In accordance with Texas Education Code, Section 51.803(e), an applicant is entitled to automatic admission if he/she meets the UTPA minimum requirements and is a child of certain public servants who were killed or sustained fatal injury in the line of duty.


Admissions and New Student Services will make every effort to inform applicants of incomplete files. If incomplete applications are received within one month of the application deadline, there will not be sufficient time to notify applicants. Applicants will be issued a UTPA ID number to be used as a student identification number. Students may use the UTPA ID or their Social Security number when requesting information regarding their records.

All documents submitted become the property of UT Pan American. Admission documents submitted will remain on file for one year, if the student does not attend, or five years if the student attends UT Pan American. Documents will not be returned.

## NOTIFICATION OF Admission Decisions

Admission decisions are made throughout the application period and announced as soon as possible. The decision may be to accept, accept conditionally pending completion of high school or current college enrollment, or to deny the application. Applicants who were accepted conditionally are required to submit final transcripts when that institution has transcribed all coursework and final grade calculations. New applicants accepted for admission are required to attend new student orientation prior to enrolling for courses.

Applicants who are not admitted may submit a written appeal to the Admissions Committee. Students should contact Admissions and New Student Services for deadlines to submit admission appeals.

## Suspected Fraudulent Admission Applications

Applicants for admission to The University of TexasPan American should be aware that the information submitted will be relied upon by University officials to determine their status for admission and residency for tuition purposes. Failure to submit a complete and correct application, including all transcripts, is grounds for rejection of application, withdrawal of an offer of acceptance or, after enrollment, any disciplinary action including expulsion. Any applicant, whether a new student or a former student at the University, who has attended another collegiate institution is not at liberty to disregard any part of the collegiate records and apply for admission to UT Pan American on the basis of the high school record or a partial record of his or her college work, but is subject without exception to the regulations given above. Students who have course credit or grades earned 10 or more years ago may elect to be readmitted under the Academic Fresh Start program. See page 18 for more information.

## FRESHMAN ADMISSION

Applicants who have not attended a college or university after graduating from high school, or students transferring less than 30 academic college hours, may seek admission as a freshman. Freshmen will be accepted to The University of Texas-Pan American based on their high school class rank, high school curriculum, scores on the ACT or SAT exam, and GPA of all college work attempted (if applicable - refer to page 24 on Transfer Admission).

1. Top 10 Percent Applicants from Texas High Schools. Applicants who graduate from recognized public or private high schools in Texas with a class rank in the top 10 percent of their high school graduating class will be automatically admitted to The University of Texas-Pan American.*
2. International Baccalaureate Diploma Program Recipients. Applicants who receive an International Baccalaureate Diploma will be automatically admitted to The University of Texas-Pan American.*
*While Top 10 percent or IB admission is automatic, the documents described above must be submitted by the admission deadline in order to take advantage of the automatic admission.
3. Other Applicants. Entering freshmen who achieve the following standards may also be admitted to The University of Texas-Pan American.

Applicants entering: Minimum Admission


Fall 2005-Summer 2007

Fall 2007-Summer 2009

Fall 2009-Summer 2011

Fall 2011 and after

Requirement:

Minimum ACT composite of 15 (SAT of 710 ).

Minimum ACT composite of 16 (SAT of 760 ) and Texas distinguished or recommended diploma or equivalent*.

Minimum ACT composite of 17 (SAT of 810) and Texas distinguished or recommended diploma or equivalent*.

Minimum ACT composite
of 18 (SAT of 850 ) and Texas distinguished or recommended diploma or equivalent*.
"Students graduating from a recognized high school from outside the state of Texas must have completed the following college preparatory coursework in addition to other credits required for graduation:

- 4 years of college preparatory English
- 3 years of mathematics to include Algebra, Geometry, Algebra II and advanced math
- 3 years of science in Biology, Chemistry, or Physics
- $31 / 2$ years of Social Studies to include World History, World Geography, U.S. History Studies since reconstruction and U.S. Government
- 2 years of the same foreign language

The following recommended High School Curriculum will be phased-in as a requirement for regular admission beginning fall 2007:

English Language Arts 4 credits
*English I, II, III, IV

- English I and II for speakers of other languages may be substituted for English I and II only for immigrant students with limited English proficiency.

Mathematics 3 credits
*Algebra I, Algebra II and Geometry Science 3 credits Selected from four specified areas as indicated below.
(No more than one credit may be chosen from each of the four areas.)

- Integrated Physics and Chemistry
- Biology, AP Biology, or IB Biology
- Chemistry, AP Chemistry, orIB Chemistry
- Physics, Principles of Technology I, AP Physics or IB Physics
Students are encouraged to take Biology, Chemistry and Physics.

Social Studies
$31 / 2$ credits
World History Studies (one credit)
World Geography Studies (one credit)

- U.S. History Studies Since Reconstruction
(one credit)
and
- U.S. Government (one-half credit)


## Economics

1/2 credit
With emphasis on the free enterprise system and its benefits (one-half credit).

Physical Education
$11 / 2$ credits
One and one-half credits to include Foundations of Personal Fitness (one-half credit).
(Limit of two credits.) Can substitute:

- Drill team
- Marching band
- Cheerleading
- ROTC
- Athletics
- Dance I-IV
- Approved private program
or
- Certain career and technology education courses

Health Education $\quad 1 / 2$ credit
One half credit
or
Health Science Technology (one credit)
Language other than English
2 credits
Two credits must consist of Level I and Level II in the same language.

Fine Arts
1 Credit
One credit. (Speech may not substitute.)
Speech
$1 / 2$ credit
One-half credit selected from either:

- Communication Applications
- Speech Communication
- Public Speaking
- Debate
or
- Oral Interpretation

Technology Application
1 credit
One credit selected from either:

- Computer Science I orll
- Desktop Publishing
- Digital Graphics/Animation
- Multimedia
- Video Technology
- Web Mastering
- Independent Study in Technology Applications
- Business Image Management and Multimedia
- Telecommunications and Networking, Business Computer Information Systems I or II
- Business Computer Programming
- Computer Applications
- Technology Systems (computer lab-based)
- Communication Graphics (computer lab-based) or
- Computer Multimedia and Animation Technology

Electives $31 / 2$ credits
Choose from Option I, Option II or Option III below.
TOTAL
24 credits

1. Option I: Mathematics, Science Elective.
A. Mathematics (one credit) must be Precalculus.
B. Science (one credit) selected from either:

- Integrated Physics and Chemistry
- Biology, AP Biology, or IB Biology
- Environmental Systems, AP Environmental Science orIB Environmental Systems
- Chemistry, AP Chemistry, or IB Chemistry
- Aquatic Science
- Physics, AP Physics, orIB Physics
- Astronomy
- Geology, Meteorology, and Oceanography
- Scientific Research and Design
- Anatomy and Physiology of Human Systems
- Medical Microbiology
- Pathophysiology or
- Principles of Technology I and Principles of Technology II.
C. Elective (one and one-half credits).

2. Option II: Career and Technology.

Three and one-half credits in a coherent sequence of courses for career and technology preparation.
3. Option III: Academic.

Three and one-half credits in state approved courses in:

- Language arts
- Science
- Social studies
- Mathematics
- Languages other than English
- Fine arts
or
- Technology applications
*Advanced Placement (AP), International
Baccalaureate (IB) or college courses may substitute.


## University Honors Program

The purpose of the University Honors Program is to provide capable and interested students with a means of enriching their college education. Students in the program attend special honors classes at the freshman and sophomore level and complete independent study courses related to their major field of study at the junior and senior level.

Entering freshmen may apply for admission to the program in one of these three ways:

1. Have a composite ACT score of 24 or higher (or SAT equivalent of 1110).
2. Graduate in the top 10 percent of their high school class.
3. Graduate from high school with a grade average of 90 or above in academic courses.
Students who are already attending college may apply if they have earned 12 or more hours of college credit with a GPA of 3.3 or higher. College grades and recommendations from university professors will determine a student's eligibility. A list of courses and other information about the University Honors Program are on page 21 and page 94 of this catalog.

Admission to The University of Texas-Pan American does not grant admission into the University Honors Program. Students must apply directly to the program. Contact the University Honors Program office for an application or additional information.

The University of Texas-Pan American Director, University Honors Program
Social and Behavioral Sciences Building, Room 104 1201 W. University Drive Edinburg, TX 78539-2999 956/381-3461

CONCURRENT ENROLLMENT
Program For High
SCHOOL STUDENTS
UT Pan American sponsors two types of Concurrent

Enrollment Programs - the High School to University Program (On-Campus Attendance or Distance Learning) and the Independent Student Program (OnCampus Attendance). Both programs are designed to give outstanding high school juniors and seniors an opportunity to earn college credit in a University learning environment. Concurrent Enrollment students are graded in the same manner as are other college students and are awarded college credit upon graduation from high school. Students who wish to receive dual credit (high school and college credit) must receive approval from their school districts for high school credit to be awarded.

Students who receive Concurrent Enrollment credit at UT Pan American may be eligible for the University Scholars Scholarship (tuition and fees for four years) upon regular admission to the University. For more information about University Scholars, see page 53 or contact the Scholarship Office at 956/381-2935.

To be admitted to Concurrent Enrollment, students must submit the following documents by the published deadline for the semester for which they are applying:

- Application for Concurrent Enrollment Admission.
- Concurrent Enrollment Course Request Form. (This document may be sent with the application or may be submitted subsequent to official admission to Concurrent Enrollment.)
- High school transcript sent directly from the high school showing completion of the sophomore year.
- American College Testing Program (ACT) scores with a minimum composite of 22 [or equivalent Scholastic Assessment Test (SAT) score of 1030].*
- Scores fulfilling the Texas Success Initiative (TSI) sent directly from the testing agency, if required for the courses taken. Students will not be permitted to register or will be dropped if TSI requirements are not met. See page 68 for more information.
*Submission of ACT/SAT scores is optional for High School to University Program applicants.

Concurrent Enrollment program documents are available for download at http://hs2us.utpa.edu/ce.

All admission documents for Concurrent Enrollment must be submitted to:

The University of Texas-Pan American
High School to University Services
Mailing address: 1201 W. University Dr., Edinburg, TX 78539-2999
Physical address: UTPA Annex, Rm. 101, 2412 S. Closner Phone: 956/292-7570

Fax: 956/292-7581
E-mail: ce@utpa.edu

It is recommended that all documents be sent at one time. All documents submitted become the property of The University of Texas-Pan American.

Students must also meet the prerequisites for the course(s) in which they plan to enroll, if any exist. In order to continue in Concurrent Enrollment, participating students must earn a grade of "C" or higher in each University course taken.

Upon graduation from high school, Concurrent Enrollment students must submit a final high school transcript indicating:

1. The student is a graduate.
2. The student has earned at least 21 accredited high school units.
3. The student's class rank.

Concurrent Enrollment students who wish to continue their studies at UT Pan American after high school graduation will be readmitted as Entering Freshmen and will be invited to attend Freshman Orientation.

## The High School To UNIVERSITY PROGRAM

(On-Campus Attendance or Distance Learning)
Although financial aid is not available for Concurrent Enrollment students, UT Pan American has formed partnerships with school districts participating in the High School to University Program to make a wide range of University courses available at a reduced cost for qualified students. Interested students are encouraged to apply for this program through their high schools or school districts.

Admission Criteria for the High School to University Program:

1. ACT composite of 22 (SAT 1030) or top 10 percent class rank orgo or above average in academic courses*.
2. Recommendations from high school counselor and principal each semester of attendance.
3. Permission of parent or guardian.
4. Meet deadlines for Concurrent Enrollment admission.

## THE INDEPENDENT STUDENT PROGRAM

(On-Campus Attendance)
Outstanding high school students may apply on an individual basis to take University courses. High school
counselors are usually available to assist individual students in preparing their applications for admission to Concurrent Enrollment.

Admission Criteria for the Independent Student Program:

1. ACT composite of 22 (SAT 1030).
2. Top 10 percent class rank or 90 or above average in academic courses*.
3. Recommendations from high school counselor and principal each semester of attendance.
4. Permission of parent or guardian.
5. Meet deadlines for Concurrent Enrollment admission.

* Academic average is based on grades in academic courses such as English, mathematics, foreign languages, natural sciences and social sciences. Non-academic courses such as physical education, music and vocational courses are not considered.


## $\underset{\sim}{i}$ CONCURRENT ENROLLMENT Honors Program

The Concurrent Enrollment Honors Program offers an exceptional educational experience for academically talented high school students. Benefits to program participants include small class sizes, innovative teaching techniques, individualized instruction, research opportunities, academic recognition and a wide variety of extracurricular activities. Honors courses are offered in a wide range of academic disciplines including English, history, political science, humanities, biology, statistics and others. Concurrent Enrollment Honors Program participants who continue their education at The University of Texas-Pan American after high school graduation have an opportunity to graduate from the University within the framework of the Honors Program.

Admission Criteria for the Concurrent Enrollment Honors Program:

In addition to meeting the criteria and submitting all documents required for regular admission to the Concurrent Enrollment Program, students must:

- Complete a Concurrent Enrollment Honors Program application form.
- Have an ACT composite score of at least 22 (or the SAT equivalent, 1030).
- Submit a personal narrative that:

1) Summarizes the important events in the student's life, giving particular attention to special interests and to any honors or awards received.
2) Gives the students reasons for wanting to
participate in the Concurrent Enrollment Honors Program at UTPA.

Concurrent Enrollment Honors Program applicants must meet all regular application deadlines for Concurrent Enrollment. Because of limited seating in honors classes, students are encouraged to apply early.

## $\hat{\sim}$ CONCURRENT ENROLLMENT Summer Housing Programs

Several summer residential programs are available for eligible Concurrent Enrollment students. Individuals selected for these programs receive room and board scholarships and have the added benefit of special informational sessions that cover topics related to applying for college and preparing for success in higher education. Additional benefits may exist depending upon the focus of the program. Call High School to University Services at 956/292-7570 for details.

## READMISSION

Students who last attended UT Pan American are admitted as Returning Students after an absence of at least one regular semester. To be admitted as a Returning Student, an applicant must be in good academic standing or have served his or her period of suspension (students will be readmitted on academic probation). Returning students must also clear any academic or financial "holds" before enrollment will be permitted.

If students seeking readmission were enrolled at other colleges or universities after last attending UTPA, a transfer admissions application must be submitted at www.applytexas.org. Official transcripts must also be provided to Admissions and New Student Services. A cumulative grade point average of 2.0 (on a 4.0 scale) is required on all academic coursework attempted (to include prior UTPA academic work).

It is recommended that students who are returning after an extended absence seek advising, either from an academic advisor, the Advisement Center, or the Academic Advisement and Mentoring Center. Students with 60 or more hours should work with their academic advisor in their major department to make any necessary updates to their degree plan.

Returning students who are not TSI exempt or who have not passed all sections of a TSI approved exam, must seek advising at the Advisement Center.

## TRANSFER ADMISSION

Applicants who last attended an accredited college
or university other than UT Pan American may seek admission as a transfer student by submitting their application at www.applytexas.org. Official transcripts must also be provided to Admissions and New Student Services. A cumulative GPA of 2.0 (on a 4.0 scale) is required on all academic coursework attempted. Students who are currently enrolled at another institution at the time of application will have their admission decision based on work completed at the time of application. Applicants transferring less than 30 hours must also meet Freshman Admission requirements (see page 19).

## - Transfer of Undergraduate Credits

Transfer of regular academic credit or recognition of degrees from another institution to UT Pan American involves at least three considerations:

1. The educational quality of the institution from which the student transfers.
2. The comparability of the nature, content and level of credit earned to that offered by UT Pan American.
3. The appropriateness and applicability of credit earned to the programs offered by UT Pan American, in light of the student's educational goals.
Accreditation speaks primarily to the first of these considerations, serving as the basic indicator that an institution meets certain minimum standards. Accreditation affords reason for confidence in an institution's purposes, in the appropriateness of the resources and plans for carrying out these purposes and in its effectiveness in accomplishing its goals. UT Pan American requires that the institution be accredited by the regional accreditation association responsible for the geographical area in which the institution is located. Institutions that are not accredited may lack that status for reasons unrelated to questions of quality. Such institutions, however, cannot provide a reliable, third-party assurance that they meet or exceed minimum standards.

Comparability of nature, content and level of transfer credit and the appropriateness and applicability of the credit earned to programs offered by UT Pan American are as important in the evaluation process as the accreditation status of the institution at which the transfer credit was awarded. Since accreditation does not address these questions, this information must be obtained from the catalog and other materials from the sending institution.

The University accepts transfer credit and recognizes degrees from both traditional and non-traditional education institutions that are accredited by regional accreditation bodies in the United States. In cases where credits and degrees are awarded by non-traditional
accredited institutions requiring no in-residence coursework, individual evaluation of transcripts must be made to determine credits for transfer. These evaluations will normally be made by the appropriate academic or administrative office.

There may be some differences between the acceptance of credit for admission purposes and the applicability of credit for degree purposes. UT Pan American may accept previous work, place a credit value on it and enter it on the transcript. However, because of its nature and not its inherent quality, it may be determined to have no applicability to a specific degree program to be pursued by the student.

Foreign institutions, in most cases, are chartered and authorized by their national governments, usually through a ministry of education. Although this provides for a standardization within a country, it does not produce useful information about comparability from one country to another. No other nation has a system comparable to the voluntary accreditation used in the United States. Please check with Admissions and New Student Services.

## - Transfer Credit Guidelines

The grading policies of The University of Texas-Pan American will be applied to all coursework transferring from other institutions. Some special circumstances regarding the transfer or non-transfer of credit to UT Pan American are listed as follows:

1. Bible Coursework: Exegetical or doctrinal courses in religion are not transferable. Courses in Bible of a historical or literary nature (but non-doctrinal) are transferable up to a maximum of 12 semester hours of lower-division credit.
2. Incomplete Grades: Incomplete grades are treated as "F" grades for the purpose of grade point average calculation.
3. Life Experience: Normally, no credit will be awarded for "life experience." Exception to this rule may include those cases where the credit has been validated either by another accredited institution of higher education, or by a test administered by an academic department and approved by the Office of the Provost.
4. Remedial Courses: Sub-college courses such as remedial reading, developmental reading, speed reading, remedial science and orientation are not transferable for credit.
5. Terminal Courses: Terminal courses offered at many junior colleges are not offered for the purpose of transfer to senior colleges and usually are clearly labeled in the college catalog as being non-transferable. Examples of terminal courses are auto mechanics, machine shop, electricity, data processing and welding. (There will be limited exceptions to this rule in the case
of the Bachelor of Applied Arts and Sciences degree. For more information, see page 229.)
6. Vocational/Technical Courses: Drill or skill courses such as filing methods and vocational or technical training courses such as shop courses, welding, carpentry, plumbing and masonry are not transferable.
7. Second Undergraduate Degrees: Transfer students entering with a bachelor's degree who seek a second undergraduate degree from UT Pan American must officially request that an evaluation of credits be completed by Admissions and New Student Services. Completion of a baccalaureate degree at another accredited institution will fulfill The University of Texas-Pan American's general education (core curriculum) requirements exclusive of any state specified coursework. Students will be required to complete the Texas state-mandated coursework in U.S. history and political science if this has not already been completed as part of their first degree. Students must also complete any other University and departmental requirements for the second degree as stipulated in the catalog.

- Transfer Curricula and Resolution of Transfer Disputes for Lower Division Courses
The following policy was developed for students transferring to UT Pan American from other Texas public institutions:

1. The transfer of curricula shall be as prescribed by the current issue of the Texas Higher Education Coordinating Board's guide to Transfer Curricula and Transfer of Credit. Current guidelines can be reviewed at the Office of
2. The following procedures shall be followed by public institutions of higher education in the resolution of transfer disputes involving lower division courses:
a. If an institution of higher education does not accept a course credit earned by a student at another Texas public institution of higher education, that institution shall give written notice to the student and the other institution that the transfer of the course credit is denied.
b. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Coordinating Board rules and/or guidelines.
c. If the transfer dispute is not resolved to the satisfaction of the student or the institution at which the credit was earned within 45 days after the date the student received written notice of the denial, the institution that denies the transfer of the course credit shall notify the commissioner of higher education of its denial and the
reason for the denial.
3. The commissioner or the commissioner's designee shall make the final determination about a dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.
4. All Texas public institutions of higher education shall furnish data to the Coordinating Board on reported transfer disputes as the board may require in accordance with its statutory responsibilities under Section 61.078(e) of the Texas Education Code.

## is TEXAS COMMON COURSE NUMBERING SYSTEM

The Texas Common Course Numbering System (TCCNS) has been designed to aid students in the transfer of general academic courses between colleges and universities throughout Texas. Common courses are freshman and sophomore academic credit courses that have been identified as common by institutions that are members of the TCCNS. The system ensures that if the student takes courses that the receiving institution has designated as common, then the courses will be accepted in transfer.

The table on pages 27-30 lists the courses UT Pan

American has identified as common and their TCCNS equivalents. Before using this table, students should be sure that the institution they attend employs the TCCNS. Course availability varies from institution to institution.

Only courses that have direct equivalents are shown. Other courses may transfer by title. Students wishing to transfer a course to UT Pan American that is not listed in this guide should obtain approval from Admissions and New Student Services prior to taking the course.

Admissions and New Student Services at UT Pan American must receive an official transcript directly from the registrar's office of the institution attended before credit can be transferred. (See section on Transfer of Undergraduate Credits on page 24 for complete transfer of course credit regulations.)

## Distance Learning Courses

UTPA offers two types of distance learning education courses in addition to the traditional classroom setting. Interactive video courses are identified by the letter "I" after the section number, and local Web delivery courses are identified by the letter " $L$ " after the section number (i.e. ENG 1301.90 or ENG 1301.90 L ).

For further information, contact the course instructor, visit the Center for Distance Learning Web site at cdl.utpa.edu or call the center at 956/381-2979.


## UT TELECAMPUS COURSES

Some courses listed in this catalog are offered from The University of Texas-Pan American via UT TeleCampus. UT TeleCampus is the centralized support center for online education throughout The University of Texas System. In the Web site you'll find online classrooms, a digital library, free online tutorial services, 24/7 technical support, links to various admissions and registrar offices throughout the UT System and full program descriptions for the online courses and degrees UT TeleCampus facilitates. Designated contacts at each campus are available to assist you as are the student services support staff of UT TeleCampus. With questions call toll-free: 1-888-TEXAS-16 (1-888-839-2716).

NOTE: To see a full listing of courses and host universities for the UT TeleCampus programs, access the Web site at http://www.telecampus.utsystem.edu.

## TeXAS COMMON COURSE NUMBERING SYSTEM 2008-2009

## - TCCNS Courses Offered

| Course Prefix <br> ACCT | Course <br> No. | Title <br> Principles of Accounting II- <br> Managerial |
| :---: | :---: | :--- |
| ACCT | 2402 | Principles of Accounting I-Financial <br> ANTH |
| ANTH | 2302 | Introduction to Archaeology |
|  | 2346 | General Anthropology |
| ARTS | 1301 | Art Appreciation |
| ARTS | 1303 | Art History I |
| ARTS | 1304 | Art History II |
| ARTS | 1311 | Design I (2-Dimensional) |
| ARTS | 1312 | Design II (3-Dimensional) |
| ARTS | 1316 | Drawing I |
| ARTS | 1317 | Drawing II |
| ARTS | 2316 | Painting I |
| ARTS | 2317 | Painting II |
| ARTS | 2326 | Sculpture I |
| ARTS | 2333 | Printmaking I |
| ARTS | 2341 | Art Metals I |
| ARTS | 2346 | Ceramics I |
| ARTS | 2348 | Digital Art I |
| BCIS | 1332 | COBOL Programming I |
| BIOL | 1408 | Biology for Non Science Majors I |
| BIOL | 1409 | Biology for Non Science Majors II |
| BIOL | 2401 | Anatomy and Physiology I |
| BIOL | 2402 | Anatomy and Physiology II |
| BIOL | 2428 | Vertebrate Zoology |
| BUSI | 1301 | Business Principles |
| BUSI | 1307 | Personal Finance |
| CHEM | 1111 | General Chemistry Lab I |
| CHEM | 1112 | General Chemistry Lab II |
| CHEM | 1305 | Introductory Chemistry I |
| CHEM | 1311 | General Chemistry I |
| CHEM | 1312 | General Chemistry II |
| CHEM | 2101 | Analytical Chemistry Lab I |
| CHEM | 2123 | Organic Chemistry Lab I |


| Course Prefix | Course No. | Title |
| :---: | :---: | :---: |
| ACC | 2329 | Fundamentals of Managerial Accounting |
| ACC | 2421 | Introduction to Financial Accounting |
| ANTH | 1342 | Introduction to Archaeology |
| ANTH | 1323 | Introduction to Cultural Anthropology |
| ART | 1301 | Art Appreciation |
| ART | 2351 | Art Survey I |
| ART | 2352 | Art Survey II |
| ART | 1331 | Design I |
| ART | 2332 | Design II |
| ART | 1311 | Drawing I |
| ART | 2312 | Drawing II |
| ART | 2321 | Painting I |
| ART | 2322 | Painting II |
| ART | 2341 | Sculpture I |
| ART | 2361 | Printmaking I |
| ART | 2303 | Jewelry/Metalworking I |
| ART | 2371 | Ceramics I |
| ART | 1332 | Digital Typography |
| CIS | 2310 | COBOL Programming I |
| BIOL | 1401 | General Biology I |
| BIOL | 1402 | General Biology II |
| BIOL | 2403 | Anatomy and Physiology |
| BIOL | 2404 | Anatomy and Physiology |
| BIOL | 2402 | Vertebrate Zoology |
| MANA | 1331 | Introduction to Business |
| FINA | 1381 | Personal Finance |
| CHEM | 1101 | General Chemistry Lab I |
| CHEM | 1102 | General Chemistry Lab II |
| CHEM | 1300 | Introduction Chemistry |
| CHEM | 1301 | General Chemistry |
| CHEM | 1302 | General Chemistry |
| CHEM | 2101 | Analytical Chem Lab |
| CHEM | 2102 | Organic Chemistry Lab I |


| CHEM | 2125 | Organic Chemistry Lab II | CHEM | 2103 | Organic Chemistry Lab II |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CHEM | 2301 | Analytical Chemistry I | CHEM | 2301 | Analytical Chemistry |
| CHEM | 2323 | Organic Chemistry I | CHEM | 2302 | Organic Chemistry I |
| CHEM | 2325 | Organic Chemistry II | CHEM | 2303 | Organic Chemistry II |
| COMM | 1318 | Photography I (Journalism Emphasis) | COMM | 1308 | Photography |
| COMM | 1335 | Survey of Radio/Television | COMM | 1315 | Survey of Radio/TV <br> Broadcast/Cable |
| cosc | 1300 | Introduction to Computing | CSCl | 1300 | Computers and Society |
| cosc | 1330 | Computer Programming | CSCI | 1380 | Computer Science I |
| cosc | 2315 | Data Structures | CSCI | 2333 | Computer Organization and Machine Language |
| cosc | 2318 | PASCAL Programming II | CSCl | 2380 | Computer Science II |

## - TCCNS Courses Offered

Course Prefix Course No. Title

| CRIJ | 1301 | Introduction to Criminal Justice |
| :--- | :--- | :--- |
| CRIJ | 1306 | Court Systems and Practices |


| CRIJ | 1307 | Crime in America |
| :--- | :--- | :--- |
| CRIJ | 1310 | Fundamentals of Criminal Law |
| CRIJ | 1313 | Juvenile Justice System <br> CRIJ |
| Correctional Systems and Practices |  |  |
| CRIJ | 2313 | 2314 | | Criminal Investigation |
| :--- |
| CRIJ |


| DANC | 1152 | Dance Performance II |
| :--- | :--- | :--- |
| DANC | 1241 | Ballet I |


| DANC | 1241 | Ballet I |
| :--- | :--- | :--- |
| DANC | 1245 | Modern Dance I |

DANC 1247 Jazz Dance I
DANC 2303 Dance Appreciation I
DRAM 1310 Introduction to Theatre
DRAM 1351 Acting I
DRAM 1352 Acting II
ECON 1301 Introduction to Economics
ECON 2301 Principles of Macroeconomics
ECON 2302 Principles of Microeconomics
EDUC 1301
ENGL
ENGL
ENGL 2321
ENGL 2326
ENGL 2331

The University of Texas-Pan American
Course Prefix Course No. Title
CRIJ
CRIJ
CRIJ

1301 Introduction to the Crimina
1306 The Courts and Criminal
Procedure
1307 Crime in America
1310 Fundamentals of Criminal Law
1313 Juvenile Justice System
2313 Correctional Systems and Practices
2314 Criminal Investigation
2323 Legal Aspects of Law Enforcement
2328 Police Systems and Practices
2110 Tap Dance I
2112 Dance Performance Beg./Int.
2144 Ballet Tech
2120 Jazz Dance
1160 Performance Dance - Folkloric
1161 Performance Dance -
Dance Ensemble
Ballet I
2236 Ballet I
2230 Jazz Dance
2323 Dance Appreciation
2312 Theatre Appreciation
1305 Acting I
2306 Acting II
1301 Introduction to Economics
2301 Principles of Economics I
2302 Principles of Economics II
1301 Introduction to Teach Profession
1301 Composition
1302 Rhetoric
2305 Readings in English Literature
2303 Readings in American Literature
2307 Readings in World Literature

## Texas Common Course Numbering System

| ENGL | 2341 | Forms of Literature (1 semester course) | ENG | 2300 | Introduction to Literature |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ENGR | 1101 | Introduction to Engineering I | ENGR | 1101 | Introduction to Engineering |
| ENGR | 1204 | Engineering Graphics I | ENGR | 1221 | Engineering Graphics |
| ENGR | 2301 | Engineering Mechanics I-Statics | MECE | 2303 | Statics |
| ENGR | 2302 | Engineering Mechanics II-Dynamics | MECE | 2304 | Dynamics |
| ENGT | 1401 | Circuits I for Engineering Technology | ELEE | 2420 | Electrical Circuits |
| FREN | 1311 | Beginning French I | FREN | 1321 | Beginning French |
| FREN | 1312 | Beginning French II | FREN | 1322 | Beginning French |
| FREN | 2311 | Intermediate French I | FREN | 2321 | Intermediate French |
| FREN | 2312 | Intermediate French II | FREN | 2322 | Intermediate French |
| GEOG | 1300 | Principles of Geography (one semester course)GEOG | 2313 | Principles Physical Geography |  |
| GEOL | 1403 | Physical Geology | GEOL | 1401 | Physical Geology |
| GEOL | 1404 | Historical Geology | GEOL | 1402 | Historical Geology |
| GEOL | 1405 | Environmental Geology | GEOL | 1403 | Environmental Geoscience I |
| GERM | 1311 | Beginning German I | GERM | 1331 | Beginning German |

## Texas Common Course Numbering System 2008-2009

|  | TCCNS | Courses Offered T | The University of Texas-Pan American |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course Prefix | Course No. | Title Cour | Course Prefix | Course No. | Title |
| GERM | 1312 | Beginning German II | GERM | 1332 | Beginning German |
| GERM | 2311 | Intermediate German I |  |  |  |
| GERM | 2312 | Intermediate German II |  |  | U.S. and Texas Government and Politics |
| GOVT | 2301 | American Government I | t.) POLS | 2313 |  |
|  |  | (Combined Fed. and State/Inc. Const.) |  |  |  |
| GOVT | 2302 | American Government II | POLS | 2314 | U.S. and Texas Government \& Politics |
|  |  | (Combined Fed. and State) |  |  |  |
| GOVT | 2304 | Introduction to Political Science | POLS | 1333 | Introduction to Political Science |
| HIST | 1301 | U.S. History I | HIST | 2313 | American Heritage I |
| HIST | 1302 | U.S. History II | HIST | 2314 | American Heritage II |
| HIST | 2311 | Western Civilization I | HIST | 2331 | Civilization Through the Centuries |
| HIST | 2312 | Western Civilization II | HIST | 2332 | Civilization Through the Centuries |
|  |  |  |  |  |  |
| MATH | 1314 | College Algebra | MATH | 1340 | College Algebra |
| MATH | 1316 | Plane Trigonometry | MATH | 1356 | Trigonometry |
| MATH | 1324 | Math for Business and Social Sciences I MATH (Finite Mathematics) |  | 1321 | Business Algebra |
| MATH | 1325 | Math for Business and Social Sciences IIMATH (Business Calculus) |  | 1322 | Business Calculus |
| MATH | 1342 | Elementary Statistical Methods | MATH | 2330 | Survey of Elementary Statistics |
| MATH | 2312 | Precalculus Math | MATH | 1357 | Precalculus Math |
| MATH | 2318 | Linear Algebra | MATH | 2345 | Computational Linear Algebra |
| MATH | 2413 | Calculus I | MATH | 1401 | Calculus I |
| MATH | 2414 | Calculus II | MATH | 1402 | Calculus II |
| MATH | 2415 | Calculus III | MATH | 2401 | Calculus III |
| MUSI | 1157 | Opera Workshop I | MUS | 1109 | Opera Workshop |
| MUSI | 1163 | Improvisation I | MUS | 1111 | Chamber Music |
| MUSI | 1188 | Percussion Class I | MUS | 2122 | Class Percussion |
| MUSI | 1190 | String Class I | MUS | 2125 | Class Strings |
| MUSI | 1306 | Music Appreciation | MUS | 1307 | Music Appreciation |
| MUSI | 1307 | Music Literature (one semester course) | se) MUS | 1307 | Music Appreciation |
| MUSI | 1308 | Music Literature I | MUS | 2301 | Music Literature |
| MUSI | 1309 | Music Literature II | MUS | 2302 | Music Literature |
| MUSI | 1311 | Music Theory I | MUS | 1313 | First-Year Music Theory I |


|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MUSI | 1312 | Music Theory II | MUS | 1314 | First-Year Music Theory II |
| MUSI | 2166 | Woodwind Class III | MUS | 2124 | Class Woodwinds |
| MUSI | 2168 | Brass Class II | MUS | 2123 | Class Brass |
| PHED | 1301 | Introduction to Physical Fitness and Sport KIN | 1351 | Introduction to Kinesiology |  |
| PHED | 1306 | First Aid | HLTH | 1354 | Safety and First Aid |
| PHED | 1346 | Drug Use and Abuse | HLTH | 2371 | Health Problems/Use of Alcohol |
| PHED | 2255 | Water Safety | KIN | 2281 | Water Safety Instruction |
| PHIL | 1301 | Introduction to Philosophy | PHIL | 1310 | Introduction to Philosophy |
| PHIL | 2303 | Introduction to Logic | PHIL | 1320 | Introduction to Logic |
| PHIL | 2306 | Introduction to Ethics | PHIL | 2330 | Ethics |

## Texas Common Course Numbering System 2008-2009

| Course Prefix Course No. PHIL <br> 2307 |  | Title |
| :---: | :---: | :---: |
|  |  | Introduction to Social and |
|  |  | Political Philosophy |
| PHYS | 1101 | College Physics Lab I |
| PHYS | 1102 | College Physics Lab II |
| PHYS | 1301 | College Physics I |
| PHYS | 1302 | College Physics II |
| PHYS | 1401 | College Physics I |
| PHYS | 1402 | College Physics II |
| PHYS | 1411 | Introductory Astronomy I |
| PHYS | 1412 | Introductory Astronomy II |
| PHYS | 1415 | Physical Science I |
| PHYS | 1417 | Physical Science II |
| PSYC | 2301 | General Psychology |
| PSYC | 2307 | Adolescent Psychology I |
| SGNL | 1301 | Beginning American Sign Language I |
| SGNL | 2301 | Intermediate American Sign Language I |
| SOCI | 1301 | Introductory Sociology |
| SOCI | 1306 | Social Problems |
| SOCI | 2301 | Marriage and the Family |
| sOCW | 2361 | Introduction to Social Work |
| SPAN | 1311 | Beginning Spanish I |
| SPAN | 1312 | Beginning Spanish II |
| SPAN | 2311 | Intermediate Spanish I |
| SPAN | 2312 | Intermediate Spanish II |
| SPAN | 2313 | Spanish for Native Speakers I |
| SPAN | 2315 | Spanish for Native Speakers II |
| SPCH | 1311 | Introduction to Speech Commur tion |
| SPCH | 1315 | Public Speaking |
| SPCH | 1318 | Interpersonal Communication |
| SPCH | 1342 | Voice and Diction |
| SPCH | 2341 | Oral Interpretation |

The University of Texas-Pan American

| Course Prefix <br> PHIL | Course No. <br> 2350 | Title <br> Social Philosophy |
| :---: | :---: | :--- |
| PHYS | 2101 | Intermediate Laboratory |
| PHYS | 2102 | Intermediate Laboratory |
| PHYS | 2301 | Intermediate Physics |
| PHYS | 2302 | Intermediate Physics |
| PHYS | 1401 | General Physics |
| PHYS | 1402 | General Physics |
| ASTR | 1401 | General Astronomy |
| ASTR | 1402 | General Astronomy |
| PSCl | 1421 | Physical Science |
| PSCI | 1422 | Physical Science |
| PSY | 1310 | General Psychology |
| PSY | 2336 | Developmental |
|  |  | Psychology: Adolescence |
| COMD | 1310 | Sign Language I |
| COMD | 1320 | Sign Language II |
| SOC | 1313 | Principles of Sociology |
| SOC | 1323 | Current Social Issues |
| SOC | 2333 | Marriage and the Family |
| SOCW | 1313 | Introduction to the |
|  |  | Social Work Profession |
| SPAN | 1301 | Beginning Spanish |
| SPAN | 1302 | Beginning Spanish |
| SPAN | 2307 | Intermediate Spanish for |
| SPAN | 2308 | Native Speakers |
|  | Intermediate Spanish for |  |
| SPAN | 1303 | Native Speakers |
| SPAN | 1304 | Beginning Spanish |
| COMM | 1313 | Bundamentals of Speech |
| COMM | 1303 | Communication |
| COMM | 2315 | Presentational Speaking |
| COMD | 2320 | Interpersonal |
| COMM | 1310 | Vommunication |
|  |  | Oral Interpretation |

## INTERNATIONAL ADMISSION

An applicant is considered an international student if the applicant is not a citizen of the United States or does not hold permanent resident alien status. All required documents must be on file in the Office of Admissions and New Student Services no later than 60 days prior to the beginning of the semester.

International students must not only meet standard admission requirements, but must also submit the following documents:

1. International Student Application for Admission.
2. Test of English as a Foreign Language (TOEFL) scores or other acceptable exam. Students from countries whose native language is not English will be expected to take the TOEFL. TOEFL scores must be sent directly from the Educational Testing Service. UT Pan American will not accept residual TOEFL exams taken at another institution. Students scoring below 500 (173 for computer-based tests) on the TOEFL will be denied admission. Undergraduate students scoring between 500 and 550, but otherwise meeting department requirements, will be required to take prescribed courses in English.
3. Proof of sufficient funds to pay for one year of educational and living expenses. This may be proved through financial documents and bank statements showing specific dollar amounts available.
4. English translation and evaluation of educational records. In addition to the official transcripts required for admission, certified English translation must be included to allow for accurate interpretations. NOTE: See application.
5. Purchase of Mandatory Medical Insurance from the University. Medical insurance is required each semester of attendance with minimum coverage as follows: Major Medical, \$50,000; Medical Evacuation, $\$ 10,000$; and Repatriation of Remains, $\$ 7,500$. Medical insurance will be automatically billed at the beginning of each semester and must be maintained throughout your time at our University unless proof of adequate insurance is provided to the international student advisor by the official census date for the semester (refer to the University calendar for published census dates). Refunds will not be generated for students who obtain or submit proof of insurance after the census date.

PROCEDURE AFTER ADMISSION -

## ISSUANCE OF I-20

Upon completion of the application process, successful applicants will be issued an l-20 by the international student advisor, who is the University's designated official to report the status of international students to the U.S. Citizenship and Immigration Services (USCIS). Students must then present the I-20 to the American Consulate in their home country to obtain a visa.

International students are required to report any change in status immediately to the International Student Advisement Office, located in UC 113 on the first floor of the University Center Building, 956/381-2922, http://www.utpa.edu/dept/isa/.

SEVIS: (Student and Exchange Visitor Information System) is an Internet-based system that allows schools and the Department of Homeland Security (immigration agencies) to exchange data on the visa status and activities of international students. Accurate and current information is transmitted electronically throughout an F-1 and J-1 student's academic year in the United States. U.S. Ports of Entry, U.S. Embassies and consulates also have access to SEVIS. Schools are now required to report immediately to U.S. Immigration and Customs Enforcement any violations of immigration regulations. The Designated School Official is then required to terminate the student's visa status in SEVIS. Students who violate any immigration regulations are subject to arrest, fines, and/or deportation.

Duration: A non-immigrant student may be admitted for "duration of status." This means the student is authorized to stay in the United States for the entire length of time during which the student is enrolled full time in an educational program and any period of authorized practical training plus 60 days. While in the United States, the student must maintain a valid foreign passport unless exempt from passport requirements.

School on Visa: For initial admission, the student must attend the school specified on the visa. If the student has a Form I-20 A-B from more than one school, it is important to have the name of the intended school specified on the visa by presenting a Form I-20 A-B from that school to the visa-issuing consular officer. Failure to attend the specified school will result in the loss of student status and subject the individual to deportation.

Re-entry: A non-immigrant student may be readmitted to the University after a temporary absence of five months or less from the United States, if the student is otherwise admissible. The student may be readmitted by presenting a valid foreign passport, a valid visa and either a new Form I-20 A-B or a page three of the Form I-20 A-B (the I-20 ID Copy) properly endorsed for re-entry if the information on the $1-20$ form is current.

Transfer: A non-immigrant student is permitted
to transfer to a different school provided the transfer procedure is followed. Please contact the International Student Advisement Office for information on transfer procedures.

Extension of Stay: If the student cannot complete the educational program in the time indicated on the $1-20$, the student must apply for extension of stay. An application for extension of stay should be filed with the International Student Advisement Office at least 30 days but no more than 60 days before the expiration of the student's stay. Extensions are granted under limited conditions.

## Special Students

A student holding a bachelor's degree from an accredited institution who does not wish to enter a graduate program may be permitted to register as a "Special Student" in one of the undergraduate colleges and is subject to all rules and regulations of that college.

Special Students seeking professional improvement are only required to have an official transcript showing the awarding of a bachelor's degree (or higher) sent from the awarding institution. Special Students seeking teaching certification or a second bachelor's degree are required to have transcripts sent from all institutions attended. (A request for a second degree evaluation form must be completed at Admissions and New Student Services for students seeking additional bachelor's degrees. For more information, see page 71.)

Special graduate students are those holding a master's degree from an accredited institution who do not wish to enter a graduate program. For more information, consult the Graduate Catalog.

## $\approx$ Graduate Admission

Graduate admission is addressed in detail in the Graduate Catalog.

Any student who would like to enroll in a graduatelevel course (5000-9000 level) must apply and be accepted for graduate study at UT Pan American. Students accepted for graduate study are still eligible to enroll in undergraduate courses.

- Reservation of Work by Undergraduates for Graduate Credit
It is possible for undergraduate students to enroll in graduate courses in their last semester under the following conditions:

1. The undergraduate student must lack no more than 12 hours of work to complete all requirements for his or her first bachelor's degree.
2. These 12 hours (or less) must be completed in the
same semester, or two six-week summer sessions, in which the student is taking the graduate courses.
3. Total enrollment must not exceed 15 hours in a regular semester, or 12 hours in a 12-week summer session.
4. The student has a minimum graduate admission GPA of at least a 2.5 (on a 4.0 scale) on work completed to date. (For information on the calculation of graduate admission GPA, consult the Graduate Catalog.)
5. The application for such graduate work is submitted to the Graduate School by the published deadline.

Undergraduates cannot count their work in graduate courses toward the bachelor's degree. Such work will be reserved for credit toward a graduate degree.
$\therefore$ Fiscal Policies

## $\star$ GENERAL INFORMATION

The cost of attending The University of Texas-Pan American is relatively low - approximately $\$ 2,027$ per semester for 12 hours of required tuition and fees for an undergraduate resident of Texas. The student financial aid program offering part-time employment, scholarships, grants and loans assists most students at UT Pan American in meeting the costs of attending college. (For more information on financial aid, see the Financial Assistance section on page 44 of this catalog.)

## $\underset{\sim}{\imath}$ FINANCIAL RESPONSIBILITY

State universities cannot extend credit. Students are expected to meet financial obligations to the University within the designated time allowed. Registration fees are payable at the time of registration, and students are not entitled to enter a class or laboratory until all their fees have been paid. (Exception: See Payment by Installment on page 38.)

Other charges are due within 10 days after a bill is rendered by the University, or according to the special payment instructions that may be printed on the bill. Failure to pay the amount owed in the allotted time can result in the withholding of registration privileges, official transcripts, grades and degrees, University disciplinary action, and other penalties and actions authorized by law.

A student is only registered in the University and entitled to university privileges after he or she has paid all required fees. A hold against re-entry is imposed on a student who fails to pay a debt owed to the University.

Initial payment of registration fees may be made by personal check, money order payable to The University of Texas-Pan American, credit card (VISA, MasterCard and Discover only) or cash. Students are advised to exercise care in paying fees by check. When a bad check for registration fees is returned to the University, a \$15 returned check service charge is assessed, and the student is given 10 days from receipt of notice to make full payment by cash, cashier's check or money order. Failure to comply will result in the penalties described above.

## Residency Classification for Tuition Purposes

The Office of the Registrar is responsible for determining residence status of students for purposes of tuition. The office is guided by the Texas Education Code, 54.052, et seq., the Rules and Regulations for Determining Residence Status of the Texas Higher Education Coordinating Board and University regulations. Under the state statutes and regulations, for tuition purposes, a student or prospective student is classified either as a resident of Texas, nonresident (U.S. citizens from another state), or foreign students who are citizens from another country.

- A resident of the state of Texas for tuition purposes is an individual who is either a U.S. citizen, permanent resident alien who has lived and worked in Texas for a period of 12 months prior to enrollment or is an individual (regardless of their immigration status) who graduated from a Texas high school, has resided in Texas for at least three years as of the date of that graduation and provides an affidavit stating that the individual will file an application to become a permanent resident at the earliest opportunity of eligibility.

Students are required to sign an oath of residency as part of the application process. Residency for tuition purposes will be based on this oath and other information/documents submitted by the student.

A nonresident for tuition purposes is a U.S. citizen or permanent resident alien who has not lived and worked in the state of Texas for a period of 12 months prior to enrollment.

A foreign student is an alien who is not a permanent resident of the United States or has not been permitted by Congress to adopt the United States as his or her domicile. Residency for tuition purposes for a dependent is established on the residency of the parents or legal guardian.

While these state requirements for establishing residency are complex and should be referred to in each particular circumstance, they generally require a minimum of 12 months of residing and gainful
employment in Texas prior to enrollment.
Individuals classified as a nonresident or foreign students may qualify for resident tuition rates and other charges while continuing to be classified as a nonresident or a foreign student under the following exceptions:

- Students who receive academic competitive scholarships.
- Teaching or research assistants.
- Faculty employment.
- Special types of visas.
- Military.

Information on residency, reclassification, tuition exceptions and waivers is available at:

The Office of the Registrar Student Services Building, First Floor 1201 W. University Drive Edinburg, TX 78539-2999
Telephone: 956/381-2732 or 956/381-2209

## ExCESS CREDIT HOURS

45 HOUR RULE AND 30 HOUR RULE
The State of Texas has enacted legislation regarding funding for excess undergraduate credit hours (Texas Education Code Chapter 61, Subchapter C, Section 61.0595). As a result of this legislation, funding will not be provided to state institutions of higher education for students exceeding the minimum number of hours required for completion of their degree program.

- 30 Hour Rule: Students initially enrolled as undergraduates in an institution of higher education beginning the 2006 Fall semester and subsequent semesters may not exceed 30 hours more than the minimum number required for the completion of their degree program.
- 45 Hour Rule: Students initially enrolling as undergraduates in an institution of higher education beginning the 1999 Fall semester, but no later than the 2006 Summer semester, may not exceed 45 hours more than the minimum number required for completion of their degree program.
- Exemption: Students who enrolled as undergraduates in an institution of higher education prior to the 1999 Fall semester are exempt from this legislation.

Since funding will not be provided by the State, and as permitted by State law (Texas Education Code Chapter 54, Section 54.014) in addition to resident tuition UTPA will charge an Excess Credit Hour fee to all students that exceed the semester credit hour limit of their program as follows:
\$84 per credit hour - Fall 2007 through Summer

2008
\$125 per credit hour - Fall 2008 and subsequent semesters

The semester hours counted toward the excessive credit hour calculation include all hours attempted by the student except:

- Semester credit hours earned by the student before receiving a baccalaureate degree that has been previously awarded
- Semester credit hours earned by examination or other procedure by which credit is earned without registering for a course for which tuition is charged
- Developmental education (remedial) courses, technical courses, workforce education courses funded according to contact hours, or other courses that would not generate academic credit that could be applied toward a degree at The University of Texas-Pan American
- Semester credit hours earned at a private or out-ofstate institution
- Hours not eligible for formula funding

If you have questions about your tuition and fees under this policy, contact the Registration Accountant at (956) 381-2713.

Students with academic questions are encouraged to contact a Student Development Specialist in the University Retention and Advisement Program at (956) 381-2319.

## Three-Peat RULE

The 78th Texas legislature passed a law that withholds funding from the university when a student enrolls in the same course for three or more times. The intent is to reduce the time that students take to graduate. Since funding will not be provided by the State, and as permitted by State law (Texas Education Code Chapter 54, Section 54.014) in addition to resident tuition UTPA will charge a Three-Peat fee of $\$ 100$ per credit hour fee for "three-peat" courses beginning Fall 2005.

The semester hours counted toward the three-peat calculation include all hours attempted by the student except:

- Courses taken prior to Fall 2002
- Courses dropped prior to the official census date for the semester
- Dissertation, thesis, seminar, independent study and special topics courses
- Courses taken at institutions other than UTPA

If you have questions about your tuition and fees under this policy, contact the Registration Accountant at (956)

381-2713.

Students with academic questions are encouraged to contact the University Center Advisement Center at (956) 381-2529 or the Academic Advisement and Mentoring Center at (956) 316-7121.

## EXCESSIVE DEVELOPMENTAL COURSE HoURS

Students may enroll in 18 hours of developmental courses (Math 1300, 1334; Eng 1310, 1320) without penalty; students enrolling in more than 18 hours of developmental courses will in addition to resident tuition be assessed as permitted by State law (Texas Education Code Chapter 54, Section 54.014) an additional Excessive Developmental Course Hour fee of \$100 per credit hour for these courses.

The semester hours counted toward the Excessive Developmental Course calculation include all developmental hours attempted by the student except:

- Courses taken prior to Fall 2002
- Courses dropped prior to the official census date for the semester
- Courses taken at institutions other than UTPA

If you have questions about your tuition and fees under this policy, contact the Registration Accountant at (956) 381-2713.

Students with academic questions are encouraged to contact the University Center Advisement Center at (956) 381-2529.


| 2007-2008 TUITION \& FEE TABLE |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Semester | Residen | Texas | Nonr | Student |
| Credit <br> Hours | Undergrad | Grad | Undergrad | Grad |
| 1 | 233.45 | 244.45 | 511.45 | 522.45 |
| 2 | 389.45 | 430.45 | 945.45 | 986.45 |
| 3 | 545.45 | 616.45 | 1,379.45 | 1,450.45 |
| 4 | 701.45 | 802.45 | 1,813.45 | 1,914.45 |
| 5 | 857.45 | 988.45 | 2,247.45 | 2,378.45 |
| 6 | 1,013.45 | 1,174.45 | 2,681.45 | 2,842.45 |
| 7 | 1,169.45 | 1,360.45 | 3,115.45 | 3,306.45 |
| 8 | 1,325.45 | 1,546.45 | 3,549.45 | 3,770.45 |
| 9 | 1,481.45 | 1,732.45 | 3,983.45 | 4,234.45 |
| 10 | 1,637.45 | 1,918.45 | 4,417.45 | 4,698.45 |
| 11 | 1,793.45 | 2,104.45 | 4,851.45 | 5,162.45 |
| 12 | 1,949.45 | 2,290.45 | 5,285.45 | 5,626.45 |
| 13 | 2,105.45 | 2,476.45 | 5,719.45 | 6,090.45 |
| 14 | 2,261.45 | 2,662.45 | 6,153.45 | 6,554.45 |
| 15 | 2,338.30 | 2,769.30 | 6,508.30 | 6,939.30 |
| 16 | 2,415.15 | 2,876.15 | 6,863.15 | 7,324.15 |
| 17 | 2,492.00 | 2,983.00 | 7,218.00 | 7,709.00 |
| 18 | 2,566.85 | 3,087.85 | 7,570.85 | 8,462.70 |
| 19 | 2,629.70 | 3,180.70 | 7,911.70 | 7,886.00 |
| 20 | 2,692.55 | 3,273.55 | 8,252.55 | 8,833.55 |

## Each Additional Hour, add:

$\begin{array}{llll}62.85 & 92.85 & 340.85 & 370.85\end{array}$

## Summer Sessions

| 1 | 198.92 | 219.42 | 476.92 | 497.42 |
| ---: | ---: | ---: | ---: | ---: |
| 2 | 354.92 | 405.42 | 910.92 | 961.42 |
| 3 | 510.92 | 591.42 | $1,344.92$ | $1,425.42$ |
| 4 | 666.92 | 777.42 | $1,778.92$ | $1,889.42$ |
| 5 | 822.92 | 963.42 | $2,212.92$ | $2,353.42$ |
| 6 | 978.92 | $1,149.42$ | $2,646.92$ | $2,817.42$ |
| 7 | $1,134.92$ | $1,335.42$ | $3,080.92$ | $3,281.42$ |
| 8 | $1,290.92$ | $1,521.42$ | $3,514.92$ | $3,745.42$ |
| 9 | $1,445.92$ | $1,706.42$ | $3,947.92$ | $4,208.42$ |
| 10 | $1,587.92$ | $1,878.42$ | $4,367.92$ | $4,658.42$ |
| 11 | $1,729.92$ | $2,050.42$ | $4,787.92$ | $5,108.42$ |
| 12 | $1,871.92$ | $2,222.42$ | $5,207.92$ | $5,558.42$ |
| 13 | $2,013.92$ | $2,394.42$ | $5,627.92$ | $6,008.42$ |
| 14 | $2,155.92$ | $2,566.42$ | $6,047.92$ | $6,458.42$ |

## Each Additional Hour, add:

```
142.00
172.00
\(420.00 \quad 450.00\)
```


## Each Additional Hour, add:

| 142.00 | 172.00 | 420.00 | 450.00 |
| :--- | :--- | :--- | :--- |

# TUITION \& FEE DISCLOSURE FOR TEXAS RESIDENTS FY 2008 \& FY 2009 (FALL/SPRING) 

Charge

## FY 2008

Tuition (Texas Resident) Tuition (Nonresident) Plus:
Designated Tuition**

Utility Fee
Registration/Matriculation Fee
Student Service Fee
International Education Fee
Computer Access Fee
Library Technology Fee
Medical Service Fee
Student Union Fee
Undergraduate Advisement Fee
Subtotal-Required Fees
Average Incidental Fees
Total Tuition and Fees
Total Tuition and Fees
FY 2009
Tuition (Texas Resident)
Tuition (Nonresident)
Plus:
Designated Tuition** Utility Fee
Registration/Matriculation Fee Student Service Fee International Education Fee Computer Access Fee Library Technology Fee Medical Service Fee Student Union Fee Undergraduate Advisement Fee Subtotal-Required Fees Average Incidental Fees
Total Tuition and Fees
Total Tuition and Fees

Undergraduate 12 SCH 15 SCH
600.00

3,936.00

| 949.80 | $1,108.10$ |
| ---: | ---: |
| 34.20 | 42.75 |
| 8.00 | 8.00 |
| 168.00 | 210.00 |
| 1.00 | 1.00 |
| 93.00 | 116.25 |
| 27.00 | 33.75 |
| 19.45 | 19.45 |
| 30.00 | 30.00 |
| 19.00 | 19.00 |
| $1,349.45$ | $1,588.30$ |
| $\vdots$ | $\vdots$ |
| $1,949.45$ | $2,338.30$ |
| $5,285.45$ | $6,508.30$ |

750.00

4,920.00
$1,108.10$
42.75
8.00
210.00
1.00
116.25
33.75
19.45
30.00
19.00
$1,588.30$
$\vdots$
$2,338.30$
$6,508.30$

Graduate 9 SCH

Comments

720.00 \$50/SCH-UG, $\$ 80 /$ SCH-Grad.

3,222.00
\$328/SCH-UG, $3358 / \mathrm{SCH}-\mathrm{Grad}$.
\$79.15/SCH, \$1,108.10 max
$\$ 2.85 / \mathrm{SCH}$
\$8 per semester
\$14/SCH, \$250 max
\$1 per semester
$\$ 7.75 / \mathrm{SCH}$
$\$ 2.25 / \mathrm{SCH}$
$\$ 19.45$ per semester
\$30 per semester
\$19 per semester
1,012.45
1,732.45
For Texas Resident For Nonresident
\$50/SCH-UG, $\$ 80 / \mathrm{SCH}-\mathrm{Grad}$. \$328/SCH-UG, $\$ 358 / \mathrm{SCH}-\mathrm{Grad}$.
\$79.15/SCH, \$1,108.10 max
\$2.85/SCH
$\$ 8$ per semester
\$14/SCH, \$250 max
\$1 per semester
$\$ 7.75 / \mathrm{SCH}$
$\$ 2.25 / \mathrm{SCH}$
$\$ 19.45$ per semester
\$30 per semester
$\$ 19$ per semester
1,012.45
1,732.45
For Texas Resident
For Nonresident
*Texas Education Code, 54.504 - Incidental Fees and 55.16 Board Responsibility authorizes the governing board to fix and collect fees and charges. The averages are not given for college and course related fees (laboratory, incidental, supplemental/individual fees) since charges vary according to academic program and courses; actual fees are published in the institutional catalog and/or other publications. A summary description of these fees and the optional student fees may be found in The University of Texas-Pan American Catalog.

> Visit our Web site at http://www.utpa.edu.

General Information: The Texas Legislature, except for basic tuition, does not set the specific amount for any particular student fee. The student fees assessed are authorized by state statute; however, the specific fee amounts and the determination to increase fees are made by the University administration and The University of Texas System Board of Regents.
$\therefore H o u s e ~ B i l l ~ 3015$ authorizes the governing boards of institution of higher education to charge any student Designated Tuition in any amount necessary for the effective operation of the institution effective Sept. 1, 2003.

## TUITION AND MANDATORY FEES

Tuition, fees and charges are assessed to students based on semester credit hours, charge per semester or specific services. The Texas Legislature, except for basic tuition, does not set the specific amount for any particular student fee. The student fees assessed are authorized by state statute; however, the University administration and The University of Texas System Board of Regents make the specific fee amounts and the determination to increase fees. House Bill 3015 authorizes the governing boards of an institution of higher education to charge student designated tuition in any amount necessary for the effective operation of the institution effective Sept. 1, 2003. Texas Education Code, 54.504 - incidental fees and 55.16 - board responsibility authorizes the governing board to fix and collect fees and charges.

Shown in the Fee Tables on pages 35-36 are the required tuition and fees charged each semester:

- Tuition: 2007-2008 is \$50 per semester credit hour for resident undergraduate students and \$328 per semester credit hour for all nonresident undergraduate students and in 2008-2009 \$50 and $\$ 328$, respectively.
- Tuition Designated Charge: 2007-2009 is $\$ 79.15$ per semester credit hour, with a maximum of \$1,108.10 per semester, for all undergraduate students.
- Student Service Fee: Supports student activities such as intramural and intercollegiate athletics, the campus newspaper, student accident insurance, University Program Board, drama, dance group, Student Government Association, University Center and other student services as determined by the Board of Regents. At the time of the printing of this catalog, the fee is charged at \$14 per semester credit hour up to a maximum of $\$ 250$ per regular semester or $\$ 125$ per summer session.
- Student Union Fee: $\$ 30$ per student per regular semester and $\$ 15$ per student per summer session will be assessed to provide operation and maintenance support of the Student Union Building.
- Computer Access Fee: \$7.75 per semester credit hour is charged to fund costs incurred in providing access to and supervision of computer laboratories.
- International Education Fee: \$1 per semester is charged to assist students participating in international student exchanges or study programs.
- Recreation Fee: $\$ 75 / \$ 35$ starting fiscal year 2008.
- Registration Fee: $\$ 8$ per semester is charged to defray the cost of providing ASSIST services for registration.
- Library Technology Fee: \$2.25 per semester credit hour is charged to enhance student access to library information via technology.
- Medical Service Fee: \$19.45 per regular semester or $\$ 9.42$ per summer session is charged to fund Student

Health Services.

- Utility Fee: $\$ 2.85$ per semester credit hour is charged to defray the rising cost of utilities.
- Academic Advisement Fee: \$19 per regular semester or $\$ 9.50$ per summer session is charged to defray the cost of providing the necessary advisement infrastructure for undergraduate students, who are TASP cleared.

NOTE: The Fee Tables do not include required laboratory fees or individual instruction fees, which are listed with the individual course descriptions.

## $\mathcal{Z}$ Course Specific Fees

- Art Course Fee: $\$ 40$ per course for studio art and art education and $\$ 20$ per course for art history. This fee is assessed to defray the cost of technology, materials, student assistants and visiting artists/critics.
- Biology Course Fee: \$15-\$36 will be assessed on biology courses to defray the costs of supplies, chemicals and costs associated with replacement of equipment.
- Clinical Lab Science Course Fee: $\$ 20-\$ 50$ per course. This fee is assessed to defray the costs of consumable supplies, media, diagnostic reagents, chemicals and the clinical practicum cost.
- College of Education Field Experience Fee: $\$ 25$ per course is assessed to defray the cost of the field experience program.
- Communication Course Fee: \$40 for television, photography, and media publishing courses, $\$ 20$ for writing courses, and $\$ 5$ for all other courses. This fee is assessed to defray the cost of supplies, materials and cost associated with the replacement of equipment and software.
- Computer Science Instruction Fee: \$5 per semester credit hour for lower undergraduate level courses, \$7 per semester credit hour for upper undergraduate level courses and $\$ 15$ per semester credit hour for graduate level courses. This fee will be assessed on computer science courses to defray the cost of computer hardware, maintenance, lab monitors and software upgrades.
- Developmental Course Repeat Fee: \$100 per semester credit hour. This fee is assessed to defray the cost associated with students enrolled in an aggregate total of more than 18 semester hours of developmental courses.
- Dietetics Course Fee: $\$ 15$ will be assessed on specific dietetic courses to defray the cost of supplies, chemicals and costs associated with replacement of equipment.
- Distance Education Fee: $\$ 25$ per course will be assessed to students enrolled in distance learning courses offered through interactive video. Students enrolled in these courses may request fee waivers if special circumstances preclude them from using UTPA facilities,
activities and/or student services on which a fee is based. Reference Distance Learning Tuition Waivers on pages 55-56 for additional information.
- Engineering Course Fee: \$5 per semester credit hour for lower undergraduate courses, \$13 per semester credit hour for upper-level undergraduate courses and \$18 per semester credit hour for graduate courses. This fee is assessed to defray costs of lab equipment beyond that provided by the College of Science and Engineering Technology Fee, and for supplies, maintenance of equipment, cost of software and other peripherals utilized
- Excess Credit Hour Fee: $\$ 25$ per semester credit hour is assessed to defray the cost of providing instruction to students who have exceeded the required degree plan hours as described in the Texas Education Code §61.0595.
- Field Trip Fee: Varies based on actual transportation and related costs. This fee is assessed to defray the transportation and related costs associated with field trips.
- Instrument Users Fee: \$10 will be assessed for clinical laboratory science courses, $\$ 25$ to certain College of Education courses, and $\$ 8-\$ 58$ for specific music courses to support maintenance and equipment replacement costs.
- Individual Instruction Fees: For courses in art, communication and music that provide individual coaching or instruction, a fee of $\$ 35$ for a one- or twohour course or \$60 for a four-hour course may be charged. Specific music courses are assessed $\$ 2$.
- Kinesiology Activity Course Fees: $\$ 6$ will be assessed for all two-hour kinesiology activity courses. In the case of bowling, golf and scuba diving, there is an additional fee for the use of non-University facilities and equipment. Additional fees are subject to change at the discretion of the facility provider.
- Kinesiology and Dance Supply Replacement Fee: Actual cost. This fee is assessed to defray the cost of replacing lock, towel and baseball gloves.
- Laboratory Fees: \$3-30 may be assessed for each laboratory course depending upon cost of material used.
- Nursing Course Fee: $\$ 20$ per course is assessed to defray the costs of supplies, materials and other costs associated with the replacement of equipment and software.
- Nursing Testing Fee: The actual cost of testing will be assessed for standardized testing required by the Board of Nurse Examiners. This fee is non-refundable.
- Occupational Therapy Course Fee: $\$ 30$ will be assessed to defray costs of supplies, chemicals and costs associated with replacement of equipment to students enrolled in specific courses.
- Optical Mixed-Media Fee: \$10 to defray the cost associated with producing CDs, DVDs, or other optical media used to supplement course instruction.
- Rehabilitation Course Fee: $\$ 10$ per course is assessed to defray the cost of supplies, chemicals and costs associated with replacement of equipment.
- Technology Fee: Students enrolled in the College of Business Administration or College of Science and Engineering will be assessed a fee to defray costs associated with technical support and software licensing. Fee rates will be:

> - College of Business Administration -

Undergraduates, $\$ 10$ per three semester credit hours with a $\$ 30$ maximum; MBA graduates, $\$ 15$ per three semester credit hours with a $\$ 45$ maximum; doctoral graduates, \$25 per three semester credit hours with a $\$ 75$ maximum.

- College of Science and Engineering -

Biology, chemistry, engineering, physics and geology:
Undergraduates, $\$ 3$ per semester credit hour; graduates, $\$ 15$ per semester credit hour. Mathematics: Undergraduates, \$1 per semester credit hour; graduates, \$5 per semester credit hour.

- Threepeat Fee: \$100 per semester credit hour is assessed to defray the costs associated with students enrolled in a given course for the third or greater time.


## Z PAYMENT BY INSTALLMENT

Section 54.007 of the Texas Education Code provides for payment by installment of tuition and mandatory fees in the fall and spring semesters. Students electing to use the installment plan must be enrolled for a minimum of seven semester hours and must personally fill out a contract at the Office of Payments and Collections, Student Services Building, Room 115. Students already receiving some form of financial aid, including scholarships, are not eligible.

Eligible students may elect one of the following two options during fall and spring registration:
Option A: Full payment on specified due date.
Option B: Half payment on specified due date.
One-fourth payment before the sixth class week.
One-fourth payment before the 11th class week.
Once an option has been selected, it may not be changed; however, advance payments will be accepted.

Students electing to pay in accordance with Option B must personally sign a promissory note. A non-refundable Tuition Installment Incidental Charge of $\$ 22.50$ will be collected to defray the cost to the University of providing this delayed-payment service.

The law requires collection of the second and any subsequent installment before the class week indicated above. Late installments will be accepted during the first three class days of the class week indicated above, but a non-refundable Late Payment Charge of $\$ 5$ will be assessed in addition to the installment amount.

After the first three class days of the class week
indicated above, late installments will still be accepted, but a non-refundable Reinstatement Fee of $\$ 25$ will be assessed in addition to the installment amount.

A student who fails to provide full payment of tuition and fees, including assessed late fees, to the University when the payments are due is subject to one or more of the following actions at the University's option:
a. Being withdrawn from the University.
b. Being barred from readmission to the institution.
c. The withholding of the student's grades, degree and official transcript.
d. All penalties and actions authorized by law.

## $\mathcal{Z}$ OTHER FEES AND DEposits

- Auditing Fees: $\$ 20$ non-refundable fee will be charged if the instructor permits anyone to audit the course.
- Cafeteria Meal Tickets: Cafeteria meals for students residing on campus are included in the Residence Hall contract. Other students may purchase a semester or summer session meal ticket. For more information, see Student Housing on page 93.
- Catalog: The first University Catalog is provided free to each undergraduate and graduate student; subsequent catalogs will cost \$2 each.
- Cooperative Pharmacy Program Application Fee: $\$ 60$ will be assessed to defray the cost associated with the application process and travel of faculty between UT Austin and UT Pan American for admission committee meetings.
- Course Drop Fee: $\$ 5$ non-refundable fee is assessed to students dropping courses on the first day of classes and thereafter.
- Dietetics Course Fee: $\$ 15$ will be assessed on specific dietetic courses to defray the cost of supplies, chemicals and costs associated with replacement of equipment.
- Diploma Replacement Fee: \$20 will be charged to students who request the replacement of a diploma for duplication costs.
- Emergency Loan Processing Fee: \$20 nonrefundable fee to defray administrative costs incurred in processing and collecting emergency loan payments. (See page 53 for more on Emergency Loans.)
- Engineering Magnetic Key Fee: \$15 for magnetic cards ( $\$ 10$ refundable) and $\$ 25$ for electronic cards ( $\$ 18$ refundable).
- Foreign Transcript Evaluation Fee: $\$ 80$ to defray the cost associated with evaluation of foreign transcripts.
- General Property Deposit: \$20 one-time deposit to ensure against losses, damages or breakage in laboratories and libraries.
- Graduation Fee: $\$ 32$ non-refundable fee is assessed for undergraduate and graduate degrees. This fee is payable at the time the candidate presents the application
for graduation to the Office of the Registrar. This fee is used to pay for processing the application for graduation, music, graduation speaker, postage, diplomas and other expenses associated with graduation. All students participating in the commencement ceremony are required to purchase the proper graduation regalia from the University Bookstore. No students will be permitted to participate without the proper regalia. Students wishing to transfer their application for graduation to another semester will be required to pay an additional \$10 fee for each time they transfer.
- Health Insurance Fee: This is mandatory insurance for international students holding non-immigrant visas and living in the United States. The fee is variable, to match the premium for approved UT System Student Insurance Plan. For more information, see page 39.
- ID Card Replacement Fee: $\$ 7$ non-refundable fee for a replacement ID card. Entering students are provided a free University photo identification card. Students may pay the fee at the Office of Student Development, University Center, Room 205, when they request a replacement ID card.
- International Student Service Fee: $\$ 30$ per semester is assessed to defray the cost of providing services to $\mathrm{F}-1$ and J-1 students.
- International Business Doctorate Application Fee: \$35 non-refundable fee to defray costs of processing applications for admission to the doctoral program in international business.
- Late Payment Fee: \$50 non-refundable fee to defray the cost associated with the processing of late tuition and fee payments.
- Late Registration Fee: \$40 non-refundable fee to defray the costs of late registration and extra services required.
- Library Fees: The fees are, for a late book, $\$ .25$ per workday per book; lost book, plus a \$15 processing fee; damage fee, $\$ 5$ if repairable in-house, $\$ 12$ if rebinding is needed by commercial binder; late reserve material, $\$ .50$ per hour; late special collections book, \$1 per day; late vertical file/Annual Report item, \$1 per day; graduate carrel locker, \$10 per year; photocopy fee, $\$ .20$ per page; Interlibrary loan, actual cost; late equipment fee, up to $\$ .50$ per hour and not to exceed $\$ 20$ for equipment with value of up to $\$ 100, \$ 1$ per hour and not to exceed $\$ 75$ for equipment with value of $\$ 101-\$ 300$, $\$ 2$ per hour and not to exceed $\$ 200$ for equipment with value of $\$ 301-$ $\$ 600, \$ 3$ per hour and not to exceed $\$ 400$ for equipment with value of $\$ 601-\$ 1,200$, $\$ 4$ per hour and not to exceed \$600 for equipment with value of $\$ 1,201-\$ 2,000$, and \$5 per hour and not to exceed $\$ 800$ for equipment with value of $\$ 2,001-\{3,000$; locker rental fee, $\$ .25$; lost book returned without CD-ROM, cost of item plus a \$15 processing fee; and lost audio visual and computer
materials, replacement cost plus a $\$ 15$ processing fee. All library fees are paid at the Circulation Desk of the University Library.
- New Student Fee: This \$50 fee is charged to defray costs associated with new student orientation, preregistration and other activities.
- Orientation Deposit Fee: A \$15 non-refundable deposit fee, which will be credited against the New Student Fee if the student enrolls, will be charged to defray the cost associated with providing students materials during Orientation.
- Parking Permit: See Vehicle Registration and Operation Permit on this page.
- Professional MBA Program Fees: Fee is assessed to cover the program-related costs, including textbooks, supplies and guest lecturers. The amount varies based on actual costs.
- Residence Hall Installment Charge: See Student Housing on page 93.
- Returned Check Charge: $\$ 15$ non-refundable service charge will be assessed to a student for each bad check. The University may refuse to accept a check from a student who has previously given a bad check (insufficient funds, account closed, signature irregular, payment stopped, etc.).
- Science Magnetic Key Fee: \$15 for magnetic cards ( $\$ 10$ refundable) and $\$ 25$ for electronic cards ( $\$ 18$ refundable).
- Short-Term Loan Fees: \$5 processing fee and a \$5 late payment fee. (For more information on short-term loans, see page 53.)
- Study Abroad and International Exchange Application and Program Fees: $\$ 125$ application fee will be assessed to defray the cost of administering the programs in addition to the actual cost of travel, lodging, meals, instructional Honorarium and Enrollment. Program fees assessed will be the actual cost of Study Abroad or International Exchange Program. These fees are non-refundable.
- Student Liability Insurance: All students enrolled in specific programs in the College of Health Sciences and Human Services, College of Education or College of Social and Behavioral Sciences must carry liability insurance. This is necessary in order for students to participate in clinical practicum activities associated with coursework. Fee assessed will reflect actual cost of insurance.
- Student Union Game Room Late Payment Fee: This fee is charged to defray the cost of processing late payments of recreation room charges. The fee is \$5 the first day plus \$1 per day after the first day to a maximum of $\$ 10$.
- Teacher Alternative Certification Program Application Fee: $\$ 50$ will be charged for processing applications for the Alternative Certification Program in
the College of Education.
- Teacher Preparation Program Fee: A \$40 one-time fee will be charged to defray costs related to services provided to the College of Education students seeking certification in the teacher preparation program upon completion of 90 hours.
- TELESYS Account Fee: Students are charged \$36 per year or $\$ 17$ per fall or spring semester and $\$ 14$ for both summer terms for 260 hours annually (pro-rated if paid by semester) of Internet access through a SLIP/PPP modem pool. The charges for 520 hours are $\$ 72$ per year or $\$ 34$ per fall or spring semester and $\$ 28$ for both summer terms. The charge for 1,040 hours is $\$ 108$ per year or $\$ 42$ per fall or spring semester and $\$ 36$ for both summer terms. Internet access for more than 1,040 hours annually is available at $\$ 2$ per hour. The fee is assessed only for those students who make use of the service.
- Thesis Binding Fee: Actual cost.
- Thesis Microfilming Fee: Each master's thesis is microfilmed and placed in the University Library. The cost will be approximately $\$ 20$, depending on length of thesis.
- TS/ Activity Fee: $\$ 110$ will be charged to students participating in the Learning Assistance Center's Texas Success Initiative (TSI). This fee supports non-course based developmental education activities.
- TSI Affected Student Advisement Fee: $\$ 45$ per semester will be charged to students not cleared from TSI to defray the cost of advising.
- Tuition Installment Incidental Charge: See Installment Payments on page 38.
- University Testing Services: Fees may be charged for tests to defray the cost of administering and scoring academic tests. Accuplacer Test Fee $\$ 35$; ACT Residual Test $\$ 50$; Local Advanced Standing Examination Fee \$20; CLEP Service Fee $\$ 20$; Correspondence Exam $\$ 20$; Institutional TOEFL \$40; Miller Analogies Test \$45; The Higher Education Assessment of THEA-Quick Test (formerly Q-TASP) \$10; Texas Commission on Law Enforcement Officers Standards and Education \$25; and Texas Examinations of Educator Standards or TExES Qualifying Exam \$15. Please inquire at the University Testing Center, UTPA Annex, 2412 S. Closner, Edinburg, telephone: 956/292-7584 or 7585, e-mail: testing@utpa.edu.
- Vehicle Registration and Operation Permit (Parking Permit): All students, whether full- or parttime, who operate a motor vehicle in the campus area must register the vehicle with the University Police Department. A hangtag permit or decal to be placed on the vehicle indicating the permit number and class "C" parking privileges will be provided. The charge for the academic year beginning Sept. 1 and ending Aug. 31 is \$34 if paid during the fall semester, $\$ 26$ if paid during the spring semester, $\$ 17$ during the first summer session and $\$ 9$ during the second summer session. There are
no refunds after the 12th class day (fourth class day in the summer). Parking and Traffic Rules and Regulations are available at the University Police Department or at http://wz.utpa.edu/~upd ede.

NOTE: Unpaid fees and/or fines that become overdue may result in a "hold" being placed on students' records. The fees listed above must be paid at the Parking Services Department, Office of Payments and Collections, Student Services Building, Room 115, except for the Library Fees and ID Card Replacement Fee as noted above. Students who are unsure where to pay fees or what fees they owe may call the Office of Payments and Collections at 956/381-2715 for more information. For citation fees or fines, call the Parking Services Department at 956/381-2738.

## Refund of Registration Fees

To officially withdraw from the University or drop a course, a student must go to the Office of the Registrar. A student withdrawing officially and completely during a fall or spring semester will receive a refund of total tuition and fees (excluding non-refundable fees) according to the following scale (Section 54.006, Texas Education Code):

- 100 percent before the first day of classes
- 80 percent during the first five class days
- 70 percent during the second five class days
- 50 percent during the third five class days
- 25 percent during the fourth five class days
- No refund after fourth five class day period

Refund of total tuition and fees (excluding nonrefundable fees) during a summer term to students withdrawing officially and completely will be made according to the following scale:

- 100 percent before the first day of classes
- 80 percent during the first three class days
- 50 percent during the fourth, fifth and sixth class days
- No refund after the sixth class day

NOTE: The term "class days" refers to days the University schedules classes, not the individual student's schedule.

Students officially dropping courses but remaining enrolled at the University receive a full refund of tuition and mandatory fees actually paid for the dropped classes through the 12th class day (official census date) during a fall or spring semester or the fourth class day (official census day) during a summer term, minus a nonrefundable $\$ 5$ course drop fee and other non-refundable fees assessed for each course dropped beginning with the
first day of classes.
Students will not receive refunds for classes dropped after these dates. Additionally, per the Texas Higher Education Coordinating Board Rules and Regulations, students may not enroll in a course after the official census date (Chapter 9, Subch. B, 9.31.a).

Refund checks will be mailed within 45 days to the student's billing address on file at the Office of the Registrar (within 30 days if the student did not receive some form of financial assistance through the University). Refunds for a student under the installment plan will be first applied to the student's unpaid balance.

Students who do not officially withdraw through the Office of the Registrar will be responsible for tuition, fees and any circumstances arising from failure to withdraw.

## Tuition Rebates

- Eligible Students

To qualify for a tuition rebate of $\$ 1,000$ upon graduation from UTPA, students must meet all of the following criteria:

1. Student must have attempted no more than three hours in excess of the minimum number of semester credit hours required to complete the degree in the catalog under which they graduated. (See definition of Attempted Hours below.)
2. Student must have enrolled for the first time in an institution of higher education in the fall of 1997 semester or later.
3. Student must be requesting a rebate for work related to a first baccalaureate degree received from a Texas public university.
4. Student must have been a resident of Texas, must have attempted all coursework at a Texas public institution of higher education, and have been entitled to pay resident tuition at all times while pursuing the degree.

Definition: Attempted hours include transfer credits, course credit in excess of nine hours that were earned exclusively by examination, courses that are dropped after the official census date, for-credit developmental courses, optional internship and cooperative education courses, and repeated exclusively by examination; courses that are dropped after the official census date, for-credit developmental courses, optional internship and cooperative education courses, and repeated courses. Courses dropped for reasons that are determined by the institution to be totally beyond the control of the student shall not be counted.

## - Amount of Tuition Rebates

1. The amount of tuition to be rebated to a student

under this program is $\$ 1,000$, unless the total amount of undergraduate tuition paid by the student to the institution awarding the degree was less than \$1,000, for any amount of undergraduate tuition paid by the student to the institution.
2. A student who paid the institution awarding the degree an amount of undergraduate tuition less than $\$ 1,000$ may qualify for an increase in the amount of the rebate, not to exceed a total rebate of $\$ 1,000$, for any amount of undergraduate tuition the student paid to other Texas public institutions of higher education by providing the institution awarding the degree with proof of the total amount of that tuition paid to other institutions.
3. Tuition rebates shall be reduced by the amount of any outstanding student loan, including an emergency loan, owed to or guaranteed by this state, including the Texas Guaranteed Student Loan Corporation. If a student has more than one outstanding student loan, the institution shall apply the amount of the rebate to the loans as directed by the student. If the student fails to provide timely instructions on the application of the amount, the institution shall apply the amount of the rebate to retire the loans with the highest interest rates first.

## - Responsibilities of Institutions

1. Institutions shall notify first-time freshmen of the tuition rebate program. A notice in the official catalog shall be one acceptable form of notice.
2. If requested by potentially eligible students, public institutions of higher education are required to provide these students opportunities to enroll during each fall and spring semester in the equivalent of at least 12 semester credit hours that apply toward their degrees. Institutions
are not required to provide students with the opportunity to enroll in specific courses or specific sections. The requirement may be met by allowing substitutions for required courses or by allowing concurrent enrollment in courses from another institution, so long as the courses are taught on the student's home campus and the student incurs no financial penalty.
3. Texas public universities are required to provide students with appropriate forms and instructions for requesting tuition reimbursement at the time that students apply for baccalaureate degrees.
4. Institutions are required to provide tuition rebates to students who apply for them within 60 days after graduation or provide the student with a statement explaining the reason the student is ineligible for the rebate.
5. Institutions are required to provide a dispute resolution process to resolve disputes related to local administration of the program.
6. Disputes related to lower-division credit transfer should be resolved in accordance with Coordinating Board rules, Chapter 5, Section 5.393 of this title (relating to transfer of lower division course credit).
7. Institutions may adopt rules and regulations for administering the program.

## Responsibilities of Students

1. Students desiring to qualify for tuition rebates are responsible for complying with all University rules and regulations related to administration of the program.
2. Students desiring to qualify for tuition rebates are solely responsible for enrolling only in courses that will qualify them for the rebates.
3. A student who has transferred from another
institution of higher education is responsible for providing to the institution awarding the degree official transcripts from all institutions attended by the student.
4. Students must apply for rebates prior to receiving their baccalaureate degrees on forms provided by the institution admission office and must keep the institution apprised of their address for at least 60 days after their graduation date.

## EREturn of Title IV Funds Policy

When a recipient of federal financial aid funds withdraws from the university during a period of enrollment (i.e. semester) in which the recipient began attendance, the institution must determine the amount of federal loan or grant assistance that the student earned as of the student's withdrawal date.

The percentage of aid that has been earned by the student is equal to the percentage of the semester that the student completed as of the student's withdrawal date. To determine the earned aid, the school will divide the total number of days of enrollment completed for which aid is awarded by the number of calendar days in that enrollment period. If this date occurs after the completion of $60 \%$ of the semester, the student is considered to have earned $100 \%$ of the federal grant and/or loan assistance for the semester. Please note that in cases where a student ceases attendance without providing official notification to the university of his or her withdrawal from the university, the institution must consider the midpoint of the semester as the official date of withdrawal. The student must contact his or her academic Dean's Office to provide official notification of intent to withdraw.

If the total amount of federal grant or loan assistance, or both, that the student earned is less than the amount of federal grant or loan assistance that was disbursed to the student, the difference between these amounts must be returned to the federal aid programs. The amounts of unearned federal aid must be returned regardless of whether the student is eligible to receive a refund of a portion of university fees, such as tuition, fees, or room and board fees. The amount to be returned to the federal student financial aid accounts will be returned to the programs from which the student received aid up to the amount of aid disbursed in the following priority order: Unsubsidized Federal Stafford loans, Subsidized Federal Stafford loans, Federal Perkins Loan, Federal PLUS loans received on behalf of the student, Federal Pell Grants for which a return of funds is required, Academic Competitiveness Grant for which a return of funds is required, National SMART Grants for which a
return of funds is required, and Federal SEOG grants for which a return of funds is required..

If the total amount of federal grant or loan assistance, or both, that the student earned is greater than total amount of federal grant and/or loan assistance that was disbursed to the student or on behalf of the student, as of the date of the institution's determination that the student withdrew, the difference between these amounts must be treated as a post-withdrawal disbursement. If federal loan funds are used to credit a post withdrawal disbursement, the university must provide the student, or parent in the case of a PLUS loan, the opportunity to cancel all or a portion of the post-withdrawal disbursement. The university has 30 days to provide this notice to the student or parent. The student or parent must respond to the notice within 14 days of the date the institution sent the notification. If the student or parent does not respond, the university cannot make a post withdrawal disbursement of federal loan funds

## Federal Policy On all " F 's"

If a student fails to earn at least one passing grade in his/her classes and received Title IV aid, the student must prove within a timely manner that he/she completed the course and earned the failing grade or the date the student stopped attending. Federal regulations, 34 CFR 668.22(c)(1)(iii), require the school to determine if the student earned the failing grades or if the student dropped out of school. If the school cannot make this determination, the school must apply the Return of Title IV Funds Policy on the student's account. This will cause the student to owe a balance due to the school. The student might also owe a balance to the federal government that must be paid within 45 days or the student's account will be reported to the U.S. Department of Education for collections. A hold will also be placed on the student's account that will prevent the student from receiving future Title IV Aid, register for future semesters, and receive any services from the institution.

## FINANCIAL ASSISTANCE

## $\star$ General Information

Financial aid plays a vital role at The University of Texas-Pan American, where a large percentage of students receive some type of financial assistance.

Tuition and fees at UT Pan American are significantly lower than private colleges and equal to, or lower than, most public colleges. This, together with the availability of federal financial aid funds, makes UT Pan American reasonably priced.

There are several sources of undergraduate student aid - work-study employment at the University, placement in off-campus part-time jobs, scholarships, federal and state grants and federal loan funds.

For more information about the various types of financial assistance, contact:

> Student Financial Services Student Services Building, First Floor
> 1201 W. University Drive
> Edinburg, TX 78539-2999
> Telephone: 956/381-2501
> E-mail: finaid@utpa.edu, loans@utpa.edu scholarship@utpa.edu,workstudy@utpa.edu
> verification@utpa.edu
> texasgrant@utpa.edu
> Web: http://www.utpa.edu/finaid/

For other financial aid information, the following services are available:

TDD/Telecommunication Device for the Deaf 956/381-3654
Hours: 8 a.m.-6 p.m., Monday-Thursday
8 a.m.-5 p.m., Friday
Federal Student Aid Information Center 1-800-4-FED-AID (1-800-433-3243)
Hours: 8 a.m. - midnight (Eastern Time)
To find out if his/her federal student financial aid application has been processed, or for a copy of his/her Student Aid Report (SAR), a student should call 1-800-433-3243 or visit the Web site at www.ed.gov/studentaid.

## APPLICATION PROCESS

The University of Texas-Pan American is an equal opportunity institution in the administration of its financial aid program. In keeping with this policy, financial aid is extended to students without regard to race, creed, sex, national origin, veteran status, religion, age or disability.

An applicant will qualify for financial assistance if he or she meets the following criteria:
a. Is a U.S. citizen or eligible non-citizen.
b. Has registered with Selective Service (if required).
c. Has signed a statement of educational purpose/ certification statement on refunds and default.
d. Is enrolled as a regular student working toward a degree in an eligible program.
e. Is not in default on any federal or institutional loan, and does not owe a refund on any federal or state grant program.
f. Demonstrates financial need, except when applying for funds from a program that does not require proof of financial need.
g. Is in satisfactory academic standing and making Satisfactory Academic Progress (as defined by the Satisfactory Academic Progress Policy described below) at the University.
h. Has a financial aid application and all required documentation on file by the appropriate deadline.

How to Apply for Financial Aid:

- File your FAFSA over the Internet at: http://www. fafsa.ed.gov; request a PIN at: www.pin.ed.gov. (This is your electronic signature for FAFSA on the Web).
- Visit the UTPA Financial Aid Express Lab for one-on-one electronic FAFSA submittal assistance.
- Mail your completed FAFSA using the selfaddressed envelope included with the application.

All required documents must be submitted before any aid can be awarded.

The UTPA School Code for FAFSA is 003599.

In the event that two or more completed and eligible applications are submitted on the same date, priority will be given to those students with exceptional need.

## Application Deadlines

To ensure processing before registration, the recommended priority dates for submission of the FAFSA are as follows:

Fall awards: March 1
Spring awards: Sept. 15

## Summer awards: Feb. 15

Final deadline to apply and receive financial aid is June 30.
Students who did not apply for financial aid or submit required documents by the recommended priority dates, may not have their aid awarded at the time payment is due. Arrangements will then need to be made by the student for an alternative method of payment.

- Benefits of Applying Early -
- You increase your chance of receiving some of the state and/or local aid, which is in limited supply.
- You get an eligibility reply (award letter) prior to the payment of tuition and fees.
- If your file needs corrections, these can be completed before the payment date of tuition and fees.

NOTE: For students transferring in less than 60 hours, the Student Financial Services office is required to monitor the completion of a high school diploma or its equivalent by requesting that such documentation be on file or turned in to the Office of the Registrar before awarding any financial assistance.

## The Disbursement Process

Students receiving financial aid can expect to receive their aid in any of the following methods:

1. When the student accepts his/her award, the award will be credited to the student's account to pay for any educational expenses.
2. Stafford Loan funds will be credited to the student's account approximately one week prior to the first class day for students who have successfully guaranteed their loan. If a student is a first-time freshman borrower, the funds will not be received until 30 calendar days after the first class day.
3. Financial aid disbursement checks: Any credits remaining in the student's account after all tuition/fees and all educational expenses have been paid will be dispersed approximately one week prior to the first class day.

NOTE: Changes in class schedule or enrollment status may cause an adjustment or cancellation of your awards, which will require you to pay a balance or return funds.

NOTE: All funds are mailed to your mailing/billing address on file with the Office of the Registrar.

## SATISFACTORY ACADEMIC PROGRESS POLICY

Federal regulations state a student receiving financial assistance under Title IV programs must be maintaining Satisfactory Academic Progress whether or
not the student was receiving financial aid during the period of prior enrollment. The institution must certify that the student is maintaining Satisfactory Academic Progress in his or her course of study. The student is responsible for understanding and adhering to the policy.

¿~ POLICY

Students on Title IV financial assistance must maintain Satisfactory Academic Progress toward completion of their baccalaureate, master's or doctoral degrees. Financial assistance may be provided for a maximum of 12 semesters to undergraduate students and four semesters for students classified as SPECIAL undergraduate.

The 12 and four semesters will be calculated as of the first period of enrollment, regardless of whether the student was receiving financial aid during that period. See separate policy for graduate programs.


Three factors are taken into consideration in determining satisfactory progress - grade point average, increments and Maximum Time Frame.

## Maximum Time Frame

Maximum Time Frame is measured at the end of each fall and spring semester.

The following table illustrates the increment requirements that a student must satisfactorily complete and the Maximum Time Frame requirements:

| Academic To | Total Cumulative | Incremental Hours |
| :---: | :---: | :---: |
| Progress Period Ho | Hours Earned | to be completed |
| 1st Yr.-2 semesters | 20 | 20 |
| 2nd Yr.-4 semesters | rs 40 | 20 |
| 3rd Yr.-6 semesters | S 60 | 20 |
| 4th Yr.-8 semesters | S 84 | 24 |
| 5th Yr.-10 semesters | rs 108 | 24 |
| 6th Yr.-12 semesters | rs 132 | 24 |
| Maximum Time Frame (years)* |  |  |
| Full-time: 6 years | ars Half-tim | : 12 years |


| Academic |  | Total Cumulative | Incremental Hours |
| :---: | :---: | :---: | :---: |
|  | Tolal Student |  |  |
| Progress Period | Hours Earned | to be Completed |  |
| 1st Yr.-2 semesters | 18 | 18 |  |
| 2nd Yr.-4 semesters | 36 | 18 |  |
| Maximum Time Frame (years)* |  |  |  |
| Full-time: 2 years | Half-time: 4 years |  |  |

"Any combination of enrollment status is calculated proportionately not to exceed the maximum number of years as stated for each career level (undergraduate, special). Summer school will not be considered a portion of the semester limits.

Students who have a classification of SPECIAL will be treated as undergraduate students for financial aid purposes. Yet, special students are not eligible to receive Pell or SEOG. Students seeking a second undergraduate degree will be evaluated on the same Satisfactory Academic Progress criterion as the undergraduate students.

Students who hold a first baccalaureate or have met the requirements for the baccalaureate are not eligible for a Federal Pell Grant or Federal Supplemental Educational Opportunity Grant to continue their education.

Grade Point Average Requirement
The student must maintain a grade point average
required for continued enrollment consistent with the University's graduation requirements.

## - Increments

Increments are measured at the end of each academic period. One academic period is defined as the fall and spring semesters. Therefore, the incremental progress will be monitored at the end of the spring semester.

Part-time students will be required to meet their increment requirements on a proportional basis, i.e., half-time students will have to meet 50 percent of the increment requirement.

The requirement for transfer undergraduate students will be adjusted to the appropriate increment based upon the number of accepted transfer hours; i.e., if 40 undergraduate hours are accepted in transfer, the undergraduate student will be in the second year of academic progress.

> - Deficiency Calculation Worksheet The University of Texas-Pan American Satisfactory Academic Progress Deficiency Worksheet Hours Enrolled as of 12th Class Day

| Freshmen and Sophomores <br> Earned hours less than or equal to 59 hours |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Student Enrollment Status | Less Than Half-time | Half-Time | Three | Full-Time |
| Hours being attempted | 1-5 | 6-8 | 9-1 | 12 or more |
| Hours that MUST be passed | All hours attempted | 5 | 8 | 10 |
| Juniors/Seniors <br> Earned hours greater than or equal to 60 hours |  |  |  |  |
| Student Enrollment Status | Less Than Half-time | Half-Time | Three arter | Full-Time |
| Hours being attempted | 1-5 | 6-8 | 9-11 | 12 or more |
| Hours that MUST be passed | All hours attempted | 6 | 9 | 12 |


| Student Enrollment <br> Status | Less Than <br> Half-time | Half-Time | Full-Time |
| :--- | :---: | :---: | :---: |
| Hours being attempted | $1-5$ | $6-8$ | 9 or more |
| Hours that MUST <br> be passed | All hours <br> attempted | All hours <br> attempted | All hours <br> attempted |

NOTE: Students attending UT Pan American summer sessions will clear deficiencies faster than by attending another eligible institution.

## Treatment of Title IV Student Financial Aid Funds When a STUDENT WITHDRAWS

When federal Title IV grant or loan assistance is disbursed and the recipient does not complete the enrollment period, the law requires that UT Pan American calculate the amount that must be returned by the school and/or student to Title IV program accounts.

The date the student initiates the withdrawal is used for calculating the percentage used in the formula for Return of Title IV Funds. The number of days from the first class day to the withdrawal date divided by the number of days in the payment period (semester) equals the percentage of Title IV Funds earned. If the withdrawal date is after the 60 percent point of the semester, the student has earned 100 percent of the Title IV funds.

If a student fails to earn a passing grade in at least one class, UT Pan American is required to calculate the amount for Return of Title IV Funds based on the last day of enrollment. If last day of attendance cannot be determined, UTPA may use the midpoint of the period (in lieu of an official withdrawal date) as documentation of the student's last date of attendance. Unless the student can provide acceptable documentation that shows the student was enrolled more than 60 percent of the semester, the student may owe a refund back to UTPA and the federal government.

## Enrollment Status

Enrollment status will be determined as of the 12th class day of each term in accordance with the definition in this catalog.

Grades of "A" through "D" and "P" will be considered in determining credit hours earned. Grades of "F," "WP," "WF," "DP," "DF" or "I" will not be considered as credit earned for the increment measure. Students who withdraw from the University must still maintain Satisfactory Academic Progress regarding increments and Maximum Time Frame.

Summer school enrollment at UT Pan American may be used as a means to make up credit hour deficiencies. Summer school enrollment elsewhere may be used as a means to clear deficiencies as long as the deficiency occurred prior to the summer enrollment. Repeat courses for which a grade was received and remedial courses not completed at UT Pan American will not clear a deficiency.

When UT Pan American has a consortium agreement with a participating institution, the student must
meet the Satisfactory Academic Progress Policy of the institution that is awarding aid.

Students enrolled concurrently at South Texas College and UT Pan American in the same semester and who are receiving Title IV assistance from UT Pan American for the concurrently enrolled term will have the hours from STC included in the Satisfactory Academic Progress calculations for increments and Maximum Time Frame. The exception will be for remedial classes that do not transfer for a grade. Repeat classes for which a passing grade has been received are also an exception. Classes that come under this exception rule do not clear deficiencies or count in the Maximum Time Frame.

NOTE: Credit by examination will not clear a deficiency.

Continuing education hours or credits earned from continuing education hours will not be calculated in the Satisfactory Academic Progress Policy. Extension courses applied as credit will be used in the Satisfactory Academic Progress calculation.

Students who opt for the Academic Fresh Start policy or qualify under the exclusion of "F" grades seven or more years old will still have to meet financial aid increments and Maximum Time Frame requirements.

## $\approx$ Financial Aid Probation

Students who are placed under academic probation by the Office of the Registrar will automatically be on Financial Aid Probation. Although a student on Financial Aid Probation is still eligible to receive financial aid, the student must ensure that after the spring semester they meet Satisfactory Academic Progress policy requirements (no deficient hours). If, after the spring semester, the student remains deficient in the number of increment hours required, he/she will be on probationary status during the summer sessions. Summer school enrollment may be used as a means to make up deficient hours. The probationary period will not be extended after the student has exhausted Maximum Time Frame.

## Financial Aid Suspension

Students on Academic Suspension will automatically be considered to be on Financial Aid Suspension. Failure to meet the increment requirements after a probationary period (summer sessions) will result in Financial Aid Suspension. Additionally, exceeding the Maximum Time Frame allowed will also result in Financial Aid Suspension.

Appeals Process


Students may appeal Financial Aid Suspension status due to unusual circumstances such as illness, death in the family, accidents or other mitigating circumstances. An appeal form with documentation relating to unusual circumstance must be submitted to the Office of Student Financial Services prior to the intended period of enrollment. Appeal forms are available at the Student Financial Services office, or you can visit our Web site at www.utpa.edu/finaid and print one. The appeal will be reviewed by the Financial Aid Committee consisting of faculty and staff. All decisions made by the committee are final.

## DISTANCE LEARNING

UT TeleCampus
An agreement exists between UTPA and other UT institutions to award eligible student Title IV aid when taking courses at two or more of those institutions. This agreement, entered into between each of the named institutions, hereinafter referred to as "Home" or "Host" Institutions, is intended to provide the basis for the Home Institution to pay and/or certify federal/state and institutional student financial assistance to UT TeleCampus students matriculated at a Home Institution and also studying at a Host Institution.

## Participating Institutions

The University of Texas at Arlington
The University of Texas at Brownsville
The University of Texas at El Paso
The University of Texas-Pan American
The University of Texas at Permian Basin
The University of Texas at Tyler

The University of Texas Health Science Center at San Antonio
The University of Texas Health Science Center Houston The University of Texas Southwestern Medical Center at Dallas
The University of Texas Medical Branch at Galveston
The University of Texas M.D. Anderson Cancer Center
The University of Texas at Austin
The University of Texas at Dallas
The University of Texas at San Antonio
Home: The UT component at which a student is fully admitted and enrolled in a degree or certificate program. The Home Institution will award the student's degree or certificate.

Host: The UT component institution at which a student may enroll and take courses applicable to the degree or certificate program at his/her Home Institution.

A student wishing to enroll in a distance-learning course must first complete an Inter-Institutional Distance Education Admission and Registration (IDEAR) Form. The form can be completed at the following Web site: http://www.telecampus.utsystem.edu under the heading TeleCampus System.

## $\approx$ Study abroad Program

Enrollment in a program of study abroad approved for credit by UTPA may be considered enrollment at UTPA for the purpose of applying for federal student aid.

Students who apply for the financial assistance for study abroad should apply in the same manner as if they were planning on being in residence at UT Pan American. A study abroad student must file a FAFSA and complete the Study Abroad Financial Aid Form. This form can be obtained at the Student Financial Services office.

To be considered for Title IV funds, the study abroad applicant is expected to meet all financial aid application priority deadlines, to adhere to other financial aid deadlines, to meet all the eligibility requirements for Title IV awards and be making Satisfactory Academic Progress and to be enrolled halftime (six hours) in the study abroad program.

## - Stafford Loans

Students who will be eligible for Federal Stafford Loans, unsubsidized loans and/or Perkins Loans should be aware that:

1. First-time borrowers will not receive loan proceeds until 30 days into the term.
2. Loan counseling sessions will be required for all loan applicants and the required applications and
promissory notes must be completed and approved.
NOTE: If a student is not automatically awarded a Stafford Loan, he/she may submit an additional Financial Aid Request available online at www.utpa.edu/finaid.

The study abroad applicant should also note that if awarded an institutional or outside scholarship, these awards may result in a reduction or cancellation of financial aid.

## - Disbursement Process (Study Abroad)

Disbursement of financial aid awards will adhere to the regular university schedule of funds disbursement. Study abroad applicants who need to meet earlier payment deadlines must make arrangements to pay from their own resources.

## - Pell Grant

The study abroad applicant who is eligible for the Federal Pell Grant will have the award based on hours enrolled and the length of the study abroad academic school year.

## - Return of Title IV

Any time a student withdraws from the study abroad program, he or she will be responsible for repayment of federal funds.

The Center for International Studies can provide additional information on eligible study abroad programs. For additional information, call 956/381-3572.

## * Types of Financial Assistance

GRANTS

## Federal Pell Grant:

This grant is available to qualifying students who complete a Free Application for Federal Student Aid, which is online at www.fafsa.ed.gov. Applications are also available at the Office of Student Financial Services. Pell Grants are not available to students who have already received a bachelor's degree.Student Financial Services determines the amount of the grant after the U.S. Department of Education has calculated the estimated family contribution.

The federal government established this program for
students with high financial need. Graduate students, special students or others who have already received a bachelor's degree are not eligible for FSEOG. The actual amount and qualification is determined after the FAFSA is submitted for processing. Awards from this program are based on the availability of funds.

Texas Public Educational Grant (TPEG):

A Texas Public Educational Grant is a campus-based grant for undergraduate and graduate students with financial need. Unlike the Federal Pell Grant, there is no guarantee that a student is eligible to receive a TPEG; awards from this program are based on the availability of funds. If a student is awarded a TPEG at UT Pan American, his/her account will be credited.

## TEXAS GRANT:

The TEXAS Grant was created to provide a grant to enable well-prepared students to attend public and private nonprofit institutions of higher education in Texas. To qualify for TEXAS Grant, a student must:

- Be a Texas resident.;
- Complete the FAFSA and demonstrate financial need.
- Complete the Recommended, Advanced or Distinguished Curriculum in high school or receive an associate's degree on or after May 2001.
- Enroll at least 3/4 time (nine hours or more) in an undergraduate program.
- Not have been convicted of a felony or a crime involving a controlled substance.

Students must ensure that an official high school transcript is on record with the Office of Admissions before they can recieve an award.

## $\because$ ACADEMIC COMPETITIVENESS GRANT (ACG)

The U.S. Department of Education established a need-based grant program for undergraduate students who successfully complete a rigorous high school program as determined by the state or local education agency and recognized by the secretary of education. To qualify for an ACG students must be:

- Eligible for Federal Pell Grants.
- U.S. citizens.
- Full-time students.
- Enrolled in a degree program.

Students eligible for the ACG will receive the award for the first and second academic year of their program of study. Second-year students must also have maintained a cumulative GPA of at least 3.0 on a 4.0 scale as of the end of their first academic year.

## NATIONAL SCIENCE AND MATHEMATICS ACCESS TO RETAIN TALENT GRANT (SMART GRANT)

The U.S. Department of Education established a need-based program for undergraduate students who are pursuing a major in mathematics, science (including physical, life and computer sciences), technology, engineering, or a foreign language determined critical to national security. To qualify for SMART Grants, students must be:

- Eligible for Federal Pell Grants.
- U.S. citizens.
- Full-time students.
- Enrolled in at least one class that meets the specific requirements of the eligible major

Students eligible for the SMART Grant will receive the award for the third and fourth academic year of their program of study. Students must also maintain a cumulative grade point average of at least 3.0 on a 4.0 scale every semester in coursework required for the major.

## \& FEDERAL WORK-STUDY <br> PROGRAM (FWS)

The Federal Work-Study Program provides jobs for undergraduate and graduate students with financial need. This program allows the student to earn money to help pay educational expenses and also encourages community service work and work related to the student's course of study.

The FWS salary will be at least the current federal minimum wage. Students employed by UT Pan American through the Federal Work-Study Program will be paid directly and once a month.

Work-study employment may be on campus or off campus. Off campus, the employer is usually a private

nonprofit organization or public agency, and the work performed must be in the public interest.

The amount a student receives in wages under work-study cannot exceed the total Federal WorkStudy amount awarded. The employer will consider the student's class schedule when preparing the work schedule. Funds are limited; therefore, funds are awarded at the discretion of the Office of Student Financial Services.

## $\star$ State Exemptions

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This program provides exemption of tuition and required fees for individuals who were adopted; and were subject of an adoption assistance agreement under Subchapter D, Chapter 162, Family Code, that provided monthly payments and medical assistance benefits and was not limited to providing only for the reimbursement of nonrecurring expenses.

## H Foster Care Students

This program provides exemption of tuition and required fees for persons who were in foster care or other residential care under the conservatorship of the Department of Protective and Regulatory Services on or after the day preceding their 18th birthday, the day of the student's 14th birthday if the student was
eligible for adoption on or after that day, or the day the student received a high school diploma or equivalent. In order to take advantage of this exemption the student must enroll as an undergraduate no later than the 3rd anniversary of date of discharge from that care or the 21st birthday.

## TEMPORARY ASSISTANCE FOR Needy Families Program

This program is for Texas residents who during the student's last year of public high school in this state, was a dependent child receiving financial assistance under Chapter 31, Human Resources Code, for not less than six months. Student must have successfully completed the attendance requirements under Section 25.085 and be younger than 22 years of age on the date of enrollment. The student must also enroll at the institution as an undergraduate student not later than the second anniversary of the date of graduation from a public high school in this state and met the entrance examination requirements of the institution before the date of enrollment. A student eligible for this program will be exempt from tuition and fees not to exceed their first academic year.

## $\Sigma$ CHILDREN OF DISABLED OR DECEASED FIRFIGHTERS AND LAW Enforcement Officers

Exemption is for children under 21 years of age (or 22 if the student was eligible to participate in special education under Tx Code 29.003) of disabled full-paid or volunteer firefighters, full-paid municipal, county, state peace officers, custodians of the Department of Criminal Justice, or game wardens. Disability/death must have occurred in the line of duty. Students are exempted from tuition and required fees, not to exceed 120 undergraduate credit hours or any semester begun after age 26.

## VALEDICTORIAN TUITION EXEMPTION

Valedictorians of each accredited Texas high school are exempted from tuition during the first two regular semesters immediately following their high school graduation.

In order to qualify for this exemption, the student must submit a copy of their certificate to Student Financial Services, confirming that the student was the highest-ranking student of his/her high school.

## $\approx$ EDUCATIONAL AIDE EXEMPTION PROGRAM

This program exempts eligible students attending public colleges or universities in Texas from the payment of tuition and fees (other than class or lab fees).

To apply for an Education Aide Exemption (EAE), you must:

- Be a Texas resident;
- Have applied for financial aid through the college to be attended, including filing the Free Application for Federal Student Aid or by qualifying on the basis of adjusted gross income using a current income tax return
- Have been employed as a full-time educational aide for at least one of the past five school years, or as a substitute teacher for 180 days of the past five school years preceding the term or semester for which the student is awarded his or her initial exemption;
- Be employed in some capacity by a school district in Texas during the full term for which the student receives the award unless granted a hardship waiver as described in Section 21.1089 of this title (relating to Hardship Provision);
- Enroll in courses leading to teacher certification;
- Register for the Selective Service or are exempt from this requirement and
- Meet academic requirements established by the college or university

Applications for the Educational Aide Exemption Program are available through the school district, university and college financial aid offices, or call the Texas Higher Education Coordinating Board at (512) 427-6387 (Austin metro) or (800) 242-3062, ext. 6387 (outside Austin) to get a printed application.

## SENIOR CITIZEN EXEMPTION

Senior citizens may be exempt from payment of tuition for up to six credit hours per term on a spaceavailable basis. A senior citizen is defined as a student of age 65 or older.

## HAZLEWOOD ACT FOR VETERANS

The purpose of the Hazlewood Act (Section 54.203) is to encourage U.S. veterans to pursue higher education. To qualify for the Hazlewood Act the applicant must:

- Have resided in Texas for 12 months prior to registration
- Be a bona fide legal resident of Texas at time entered service
- Have served in armed forces in World War II, Korean Conflict, the Cold War, Vietnam, Grenadaera, Lebanon, Panama, Persian Gulf, the national emergency related to 9/11/01
- Honorably discharged
- Not eligible for federal education benefits. Students are entitled, not to exceed 150 credit hours, to an exemption from payment of all dues, fees, and charges (excluding only student property deposits, student service fees, books, lodging, board or clothing) that would otherwise be paid to attend the University of Texas Pan American.


## TUITION AND FEE EXEMPTION FOR Children of Veterans of the ARMED Forces

Program for the children of members of the U.S. Armed Forces who were killed in action, who die or died while in service, who are missing in action, whose death is documented to be directly caused by illness or injury connected with service in the U.S. Armed Forces, or who become totally disabled for purpose of employability according to the Dept. of Veterans Affairs' disability rating as a result of a service-related injury.

For orphans or children of members of the Texas national Guard who after January 1, 1976 were killed while on active duty or became totally disabled for purpose of employability according to the Dept. of Veterans Affairs' disability rating as a result of service -related injury.

These students must be Texas residents who resided in the state at least 12 months immediately preceding date of registration. They are entitled, not to exceed 150 credit hours, to an exemption from payment of all dues, fees, and charges (excluding only student property deposits, student service fees, books, lodging, board or clothing) that would otherwise be paid to attend the University of Texas Pan American.

## $\mathcal{Z}$ Ex-Prisoners of WAR ExEMPTION

This program is available to a student who is a resident of Texas and was a resident of Texas at the time of original entry into the armed forces, and was first classified as a POW on or after January 1, 1999. The student must enroll for at least 12 semester credit hours. Student is exempted from tuition and required fees, student housing \& food not to exceed 120 hours.

[^1]
## SECURITY OR EMERGENCY PERSONNEL Killed in the line of Public Duty

Program is available for the surviving spouse or children of certain public peace officers, probation officers, parole officers, jailers, police reservists, fire fighters, and emergency medical personnel. Texas Govt. Code 615.003. Death must have occurred in the line of duty as a result of a risk inherent in the duty. Student must enroll full time. Student is exempted from tuition and fees, student housing and food not to exceed bachelor's degree or 200 hours.

## EXEMPTION FOR BLIND AND DEAF Students

A blind disabled person or a person whose sense of hearing is nonfunctional and is a Texas resident may be eligible for exemption from payment of tuition and required fees if appropriately certified by a state vocational rehabilitation agency. Contact the Texas Department of Assistive and Rehabilitative Services for more information.

## EXEMPTION FOR FIREFIGHTERS ENROLLED IN FIRE SCIENCE COURSES

Eligible students must be firefighters enrolled in course offered as a part of fire science curriculum. They are exempted from tuition and laboratory fees.

## Z EXEMPTION FOR CHILDREN OF PRISONERS OF WAR OR PERSON MISSING IN ACTION

Eligible student must be a dependent person, under 25 years of age who receives majority of support from parent. Parent must be a resident of Texas on active military duty and classified by Department of Defense as a Prisoner of War or Missing in Action at time of the student's registration. They are exempted from tuition and required fees.

## $\approx$ CHILDREN OF PROFESSIONAL NURSING PROGRAM FACULTY

Program is available for children whose parent is a faculty member or teaching assistant in a nursing program in Texas. Student must:

- be 25 years or younger
- be a Texas resident


## FINANCIAL ASSISTANCE

- not previously received a baccalaureate degree
- not previously received an exemption under this section for 10 semesters or summer sessions

Exemption applies only at institution that employs the parent/faculty member. Students are exempted from tuition and it may be prorated if parent is not full-time.

## $\approx$ NURSING PRECEPTORS AND THEIR Children

In order to be eligible for this exemption, student must be a Texas resident and a Registered nurse serving under contract as a clinical preceptor
OR
A child 25 years or younger whose parent meets the criteria above, has not previously received a baccalaureate degree and has not previously received an exemption under this section for 10 semesters or summer sessions.

Students are eligible to receive $\$ 500$ off tuition per semester.

## $\mathcal{Z}$ DISTANCE/OfF-CAMPUS LEARNING EXEMPTION

Eligible students must be enrolled only in distance learning courses or other off-campus courses to be able to apply for this exemption. To be eligible, a student must prove special circumstances exist that preclude the student from utilizing activities, facilities and/or services on which a fee is based.

Submit a written request with supporting documentation (as needed) to:

Office of the Vice President for Business Affairs 1201 W. University Drive
Student Services Building, Room 5.101
Edinburg, TX 78539-2999
Consideration for fee waivers will be determined prior to the 12th class day during a fall or spring semester or prior to the fourth class day during a summer term.

## $\approx$ Mandatory or Discretionary Fee EXEMPTION:

A student or specific category of students may apply for an exemption of mandatory or discretionary fees. Exemptions may be considered if a student will not utilize the activity, service or facility for which a fee
is charged. Consideration may also be given if the exemption is in the best interest of the institution or is critical to the viability of an academic initiative. Exemptions will not be granted for tuition or laboratory fees.

Students must submit a written request with supporting documentation (as needed) to:

Office of the Vice President for Business Affairs
1201 W. University Drive
Student Services Building, Room 5.101
Edinburg, TX 78539-2999
Consideration for fee waivers will be determined prior to the 12th class day during a fall or spring semester or prior to the fourth class day during a summer term.

## $i \sim$ Early High School Graduates SCHOLARSHIP

This exemption is available to Students who graduated between 9/1/2005 and 6/14/2007 and ...

- Graduated from a Texas public high school;
- Completed either the recommended high school curriculum or the distinguished achievement high school curriculum in no more than 36 consecutive months, no more than 41 months or no more than 45 months;
- Attended high school in Texas only;
- Register for the Selective Service or are exempt from this requirement; and
- Are Texas residents.

Students who graduated on or after 6/15/2007 and ...

- Graduated from a Texas public high school;
- Completed either the recommended high school curriculum or the distinguished achievement high school curriculum in no more than 36 consecutive months, no more than 41 months or no more than 46 months;
- Attended the majority of high school in Texas;
- Register for the Selective Service or are exempt from this requirement; and
- Are US citizens or otherwise lawfully authorized to be in the United States.

Students are eligible for:

- An otherwise eligible student who graduates in no more than 36 months receives $\$ 2,000$ for use toward tuition and required fees. If he/she also graduates with at least 15 semester credit hours of college credit, he/she may receive an additional $\$ 1,000$.
- An otherwise eligible student who graduates in more than 36 months but no more than 41 months receives \$500 for use toward tuition and required fees. If he/she also graduates with at least 30 semester credit hours of

college credit, he/she may receive an additional \$1,000.
- An otherwise eligible student who graduates in more than 41 months but no more than 45 months ( 46 months for students graduating after 6/15/2007) can receive $\$ 1,000$ if he/she graduates with at least 30 semester credit hours of college credit.


## $\underset{\sim}{i}$ FIFTH-YEAR ACCOUNTING STUDENT SCHOLARSHIP PROGRAM

The Fifth-Year Accounting Student Scholarship Program was established to recognize and support outstanding scholars who plan to pursue careers in accounting and serve as Certified Public Accountants in the state of Texas.

The program can provide up to $\$ 5,000$ (lifetime maximum) to eligible students to assist with the cost of completing the educational requirements to sit for the CPA exam in Texas.
In order to apply, students must:

- Be classified as residents of Texas
- Be enrolled at least half-time
- Have completed at least 120 hours of college course work (including at least 15 semester credit hours of accounting) at the beginning of the term in which the award is being made
- Be making satisfactory academic progress
- Have not already taken the CPA exam, but plan to take the CPA examination in the State of Texas and are willing to sign a written statement confirming the
intent to take the written examination conducted by the Texas State Board of Public Accounting for the purpose of being granted a certificate of "Certified Public Accountant;"
- Register for the Selective Service or be exempt from this requirement, and
- Demonstrate financial need.

Applications are available in mid-June at the Student Financial Services office. Funding is limited therefore only complete applications will be considered.

## $\underset{\sim}{\imath}$ PROFESSIONAL NURSING SCHOLARSHIP PROGRAM

The purpose of this program is to provide financial assistance to students who are planning on becoming professional nurses. No individual award may be for more than the student's financial need. The maximum award is $\$ 3,000$. Some, but not all the funds are targeted to students from rural communities, while others are targeted to graduate students in nursing.

To apply, the student must:

- Be a Texas resident.
- Show financial need (FAFSA must be completed to show basis of need).
- Register for the Selective Service or be exempt from this requirement.
- Enroll in the classes leading to licensure as a Professional Nurse.
- Be enrolled at least half time.

Applications are available in the Student Financial Services office. Funding is limited therefore only complete applications will be considered.

## $\underset{\sim}{\imath}$ GOOD NEIGHBOR SCHOLARSHIP

A limited number of Good Neighbor Scholarships (as prescribed by the Texas Higher Education Coordinating Board), which provide exemption of tuition, are available to native-born citizens and residents from nations of the Western Hemisphere other than the United States. Information is available from the Office of International Admissions and Services at the University Center, Room 113, 956/381-2922.

[^2]For additional information on any of these programs contact:
Student Financial Services
Student Services Building, First Floor
1201 W. University Drive
Edinburg, TX 78539-2999
Telephone: 956/381-2501
E-mail: finaid@utpa.edu, loans@utpa.edu
scholarship@utpa.edu,workstudy@utpa.edu
Web: http://www.utpa.edu/finaid/
Also visit the Texas Higher Education Coordinating Board Web site at http://www.collegefortexans.com/.

## LOANS

Federal Perkins Loan: ut Pan American recognizes that loans are an increasingly important aspect of financing an education. Participating in the Federal Perkins Loan program allows funds to be made available with which a student may finance a substantial part of his or her education. When the borrower ceases to be enrolled at an accredited higher education
institution at least half time or graduates, he/she has nine months after graduation or a break in enrollment before he/she begins repayment on their Federal Perkins Loan.

Applicants are considered on the basis of financial need and demonstrated academic ability. Funds are limited and preference is given to renewal borrowers. Further information may be obtained from Student Financial Services.

## Z FEDERAL FAMILY EDUCATIONAL LOAN PROGRAM (FFELP): The FFELP offers subsidized

 and unsubsidized Stafford Loans. The first step in the application process is the completion of the Free Application for Federal Student Aid or Renewal FAFSA. After the student's FAFSA is processed, Student Financial Services will review the results and advise the student as to his or her loan eligibility. The student may complete the loan process electronically through Loans by Web. Loans by Web will direct the student to take a pre-loan online session, select a lender, and complete a Master Promissory Note if needed. A student may be eligible to borrow $\$ 3,500$ as a freshman, $\$ 4,500$ during the sophomore year, $\$ 5,500$ each year during the junior and senior years, and $\$ 8,500$ a year as a graduate student. The lender will send the loan proceeds to the University in at least two payments by Electronic Funds Transfer, which is credited to the student's university account. The school will mail any loan-credited balance to the student within 3-5 days. No single disbursement may exceed onehalf of the loan amount.ش The purpose of the Texas B-On-Time Loan program is to provide eligible Texas students no-interest loans to attend colleges and universities in Texas. If the student meets specified goals, the entire loan amount can be forgiven upon graduation.

Eligibility Requirements:

- Texas resident.
- Graduated 2002-2003 academic year or later under the recommended high school program from public or accredited private high school in Texas or received an associate's degree from an eligible institution no earlier than May 1, 2005.
- Has not earned a bachelor's degree.
- Enrolled full time in an undergraduate degree or certificate program at an eligible institution.
- Has completed a FAFSA and is eligible to receive federal financial aid.


## Forgiveness Requirements:

A Texas B-On-Time Loan shall be forgiven if the student receives an undergraduate degree or certificate
from an eligible institution and the student either:
(c) Graduated with a cumulative GPA of at least a 3.0 on a 4.0 scale, within:

- Four calendar years after the date the student initially enrolled in an eligible institution.
- Five calendar years after the date the student initially enrolled in an eligible institution, if the degree is in architecture, engineering, or any other program determined by the board to require more than four years to complete.
- Two calendar years after the date the student initially enrolled in a public or private two-year institution.
(c) Graduated with a cumulative GPA of at least 3.0 on a 4.0 scale, with a total number of credit hours (including transfer hours and hours earned exclusively by examination) that is no more than six hours beyond what is required to complete the degree or certificate.
IRS regulations indicate that these loans must be reported as taxable income when they are forgiven.

NOTE: Funds are limited and students will be selected based on priority guidelines determined by the Texas Higher Education Coordinating Board.
$\mathcal{Z}$ College Short-Term Loans: Made possible through donations from a number of individuals and organizations, these funds are administered by Student Financial Services and are available to students for short-term loans. Loans are limited and must be repaid within the semester for which they are borrowed. The loans are designed to aid students who do not have sufficient funds to purchase books and supplies or to assist students when emergencies arise. A \$5 charge is assessed against each loan. Funds are limited. Apply at Student Financial Services.

Emergency Tuition and Fee Loans: Emergency loans are available to UT Pan American students needing assistance in paying registration costs. Emergency loans must be paid back to the University during the same semester in which they are borrowed. An applicant will be assessed a $\$ 20$ processing fee per semester. Students may borrow up to the amount of tuition and applicable fees. Applications and information about the Emergency Loan program are available at the Student Loan Collections Office in Room 214 of the Marialice Shary Shivers Administration Building.

## SCHOLARSHIPS

The University of Texas-Pan American awards a variety of scholarships through the University


Scholarship Committee and departmental committees. These scholarships are based on various prerequisites and are intended to recognize students for their outstanding academic accomplishments and future potential. These awards are made possible through the generosity of local as well as national business firms, organizations, individuals and University-endowed funds.

The majority of the scholarships are not automatically renewed, and students must apply each year for continued consideration. Although most awards are restricted to U.S. citizens and permanent residents of the United States, some are open to international students, who are encouraged to apply.

For a complete list of scholarships and application requirements, view our UT Pan American Scholarship Guide online at www.utpa.edu/scholarships. Who to contact for an application are provided for each scholarship and because the scholarship process is very competitive, students are encouraged to apply early
and make sure their applications are complete when submitted. The deadline to apply for most scholarships is Dec. 1.

Important: It is UT Pan American's policy not to award institutional scholarships to students who have received aid (including institutional, state, federal and private sources) in excess of their cost of attendance. If your cost of attendance is exceeded, any UTPA scholarship(s) may be reduced or cancelled.

## U UNIVERSITY SCHOLARS PROGRAM

If you are an entering freshman from one of several designated counties in the South Texas area (Brooks, Cameron, Duval, Hidalgo, Jim Hogg, Jim Wells, Kenedy, Kleberg, Nueces, Starr, Webb, Willacy and Zapata counties) who has earned college credit through Advanced Placement (AP) examinations and/or the Concurrent Enrollment (CE) program and The University of Texas-Pan American, or are an International Baccalaureate (IB) Diploma recipient, you may qualify for a four-year renewable scholarship, valued at \$12,000, at The University of Texas-Pan American and the special designation of being a "University Scholar."

The University Scholars Scholarship is a $\$ 3,000$ annual scholarship ( $\$ 1,500 /$ per semester) that is applied toward your tuition and fees. However, if you receive another scholarship or group of scholarships from UTPA, that combined covers tuition and fees, your University Scholars Scholarship then becomes a \$1,000-a-year award ( $\$ 500$ per semester) for books and supplies at the University Bookstore or on-campus housing.

## - InITIAL AWARD GUIDELINES

To be eligible to become a University Scholar, you must be an entering freshman who meets the criteria for regular admission, qualifies for Texas resident tuition and has graduated from a public or private school (or home school) in one of the designated South Texas counties listed above.

## - SCHOLARSHIP QUALIFICATION CRITERIA

You can qualify for the University Scholars Scholarship by meeting the initial award guidelines and fulfilling one of the following requirements while in high school:

For a scholarship first awarded to take effect beginning with the fall 2007 semester and after, the student:

- Must have four courses (total of 12 hours) of AP credit and/or CE credit earned at UTPA with a " $B$ " or better in each course (from four separate
exams or courses in different subject areas; credit must include both English 1301 or higher and Math $1340^{*}$ or higher) AND have a minimum ACT 22 composite or a minimum SAT score of 1030. or
- Must be an International Baccalaureate diploma recipient AND have a minimum ACT 22 composite or a minimum SAT score of 1030.
*For business majors, Math 1321 or higher is acceptable.

NOTE: For students with 30 or higher ACT who have English 1301 and 1302 waived, they must still take Math 1340 plus nine hours with a " $B$ " or better in different subject areas.

## HOW TO APPLY

The University Scholars Scholarship is awarded on a competitive basis. To ensure you are considered for this scholarship, you must do the following:

- Submit a completed University Scholars Scholarship application by one of the priority deadlines published below.
- Submit an Entering Freshmen Application for admission to The University of Texas-Pan American and be admitted by the priority deadlines below.
- Submit an official high school transcript to the UTPA Office of Admissions and New Student Services, which must include ACT or SAT scores, GPA (on a 100-point scale), rank and class size (at time of application).
- Request your AP scores (if applicable) be sent directly to UTPA.


## Priority Deadlines

Students who complete the application process by the indicated priority deadline will be notified if selected by the indicated date below:

| Application Deadline |  | Selected By |
| :--- | :--- | :--- |
| Oct. 1 |  | Nov. 1 |
| Feb. 1 |  | March 1 |
| July 1 |  | Aug. 1 |

## OUTSIDE SCHOLARSHIPS

Many agencies, employers, military and service organizations award funds to students. Receipt of these external awards may result in a reduction of your financial aid from UT Pan American. Therefore, if you
are a financial aid recipient, you must notify the Student Financial Services office, in writing, of any scholarships you are awarded from sources other than UTPA. To the extent possible, we will adjust loan awards before reducing grants.

It is also the student's responsibility to notify the Office of Student Financial Services of any special instructions or billing information regarding external scholarships. All checks for these awards should be made payable to The University of Texas-Pan American and sent to:

## UT Pan American

Office of Student Financial Services
Attn: Scholarship Coordinator
1201 W. University Drive
Edinburg TX 78539-2999
No credit will be entered on your account before the check arrives. It is UTPA's policy to equally divide external scholarships between fall and spring.

## FELLOWSHIPS

The University of Texas-Pan American awards a limited number of fellowships. Applications may be requested from the department or college awarding the fellowship.



## EnROLLMENT

## $\star$ GENERAL INFORMATION

~ Classification

Students are classified according to the number of hours of college credit they have earned. Classifications are as follows:

| Freshmen | 0-29 earned hours |
| :--- | :--- |
| Sophomores | $30-59$ earned hours |
| Juniors | $60-89$ earned hours |
| Seniors | 90 or more earned hours |
| Special Students | Undergraduate students who <br> hold a bachelor's degree from <br> an accredited institution. |
| Graduate Students | Students who have earned a <br> bachelor's degree and have <br> been accepted to UT Pan <br> American for graduate study. |
|  |  |



If the course has defined weekly contact hours, these will be shown in brackets [ ] following the course title, with lecture hours first, laboratory hours second, and clinical hours, if any, third. These contact hours are for the fall and spring semesters. Summer weekly contact hours will be adjusted according to the length of the summer session. (See page 386 in the Glossary for more information and an example.)

## ¿ COMMON COURSE NUMBER

If the course is generally equivalent to other lowerdivision courses taught at universities and community colleges within the state, the Texas Common Course Number is shown for informational purposes. See page 27 for further information.

## COURSE FREQUENCY INFORMATION

If the course is normally taught on a regular schedule, such as every fall or every fall and spring semester, this information is provided under the course title. If circumstances warrant, the schedule for offering the course may be changed without notice. Therefore, it is in the students' best interest, as well as their responsibility, to determine by other means (such as semester course schedules) when courses required for their degree programs are being offered. Program requirements will not be waived as a result of the course not being offered as indicated in the course frequency information provided in this catalog.

Courses not normally offered on a regular schedule are identified "as scheduled."

## COURSE DESCRIPTION

This portion of the course listing includes a brief description of the course content.

## COURSE NUMBERS

Courses are numbered to show both the collegiate level at which they are offered and the hour value of the course. The first digit shows the level, and the second digit shows the credit hours. The last two digits are departmental designations. For example, Spanish 1301 shows that the course is taught at the freshman level and carries three hours of credit per semester. All lowerdivision undergraduate courses ending in the numbers 87 and 88 are honors courses.

1000 numbered courses Freshman level
2000 numbered courses
3000 numbered courses
4000 numbered courses Sophomore level Junior level Senior level
All 5000-7000 numbered courses are master's-level courses.

All 8000-9000 numbered courses are doctoral-level courses.

## Grading Policies

-Grading System
UT Pan American uses a 4.0 system. The following grades are used to designate achievement in coursework. Their corresponding grade values and points are indicated.

A Excellent
B Good
C Satisfactory
D Below Average

F Failure
P Passing

NP No Pass

IP In Progress
(4 grade points per hour) (3 grade points per hour) (2 grade points per hour) (1 grade point per hour may not be assigned in graduate classes)
(o grade points per hour) (not considered in calculating grade points or attempted hours) (not considered in calculating grade points or attempted hours) (not considered in calculating grade points or attempted hours; for remedial courses only)
\(\left.\left.$$
\begin{array}{ll}\text { I Incomplete } & \begin{array}{l}\text { (not considered in } \\
\text { calculating grade points or } \\
\text { attempted hours) }\end{array} \\
\text { CR Credit } & \begin{array}{l}\text { not considered in } \\
\text { calculating grade points or } \\
\text { attempted hours; however, } \\
\text { hours are counted in total } \\
\text { earned hours) } \\
\text { (not considered in }\end{array} \\
\text { NC No Credit } & \begin{array}{l}\text { calculating grade points or } \\
\text { attempted hours) } \\
\text { (not considered in }\end{array} \\
\text { DR Course Dropped } \\
\text { calculating grade points or } \\
\text { attempted hours) } \\
\text { (not considered in }\end{array}
$$\right\} \begin{array}{l}calculating grade points or <br>
attempted hours) <br>

(considered as an "F" for\end{array}\right\}\)| calculating the grade point |
| :--- |
| average) |
| (not considered in |

## $\mathcal{*}$ CALCULATION of Undergraduate Grade point average

The grade point average (GPA) is computed by dividing the total grade points earned by the total hours attempted. The cumulative GPA is calculated using all coursework (excluding repeated courses) attempted. The current semester grade point average is calculated using only coursework attempted within a specific semester.

Some courses may be repeated by the student to improve his or her GPA. (For more information, see the section on Repeated Courses on page 59.)

All failing grades received in undergraduate courses more than seven years old shall be excluded from the grade point average computation, except in determining Graduate Admission GPA. (See the Graduate Catalog for additional information.) The failing grades will remain on the student's transcript, although they will not be used to compute the GPA.

Attempted hours are the total number of hours for
courses that a student has attempted, including failing grades such as F, DF and WF. Repeated courses, failing grades more than seven years old, incomplete grades and credit ( $C R$ ) grades are not included in attempted undergraduate hours (with the exception of the calculation of graduate admission GPA).

Grade Points: Grade points are assigned based on the grade received multiplied by the number of credit hours. For example, a grade of " $A$ " is equivalent to four grade points. If the course was offered for three credit hours, the grade points would be calculated as follows:

4 (for grade of A) $\times 3$ (hours) $=12$ grade points Grade points are assigned as follows:
Grade
A
B
C
D
F

Grade Points
4 pts.
3 pts.
2 pts.
D 1 pt.
F o pts.
The following is an illustration of the method of calculation of the grade point average:

|  |  |  |  | Points |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |$\quad$| Total |
| :---: |

Total attempted hours $=15$
Total grade points $=26$
To calculate the GPA for this example, divide the grade points by the attempted hours as follows:

$$
26 \div 15=1.73
$$

## InCOMPLETE GRADES

A grade of "I" may be given when a student has not completed the required work of a course within the allotted time of a regular semester or summer session if the instructor determines that the reasons for the work being incomplete are valid and that the grade of " $I$ " is justified. A grade of " $I$ " must be changed within one regular (fall or spring) semester from the date received, unless an extension is requested by the student's instructor. If a Change of Grade Form is not received from the instructor upon completion of the one regular semester, the grade will automatically be recorded as an "F" on the student's official transcripts.

Improper Use of the "/" Grade: A student must not be given an "I" grade to permit the student time to prepare

## Registration Procedures and Policies

coursework in addition to that assigned the entire class, time to repeat the entire course or the opportunity to raise a grade. "Incomplete" grades are not issued for student or faculty convenience; they may be issued for the reasons stated in the paragraph above only in the case of compelling, non-academic circumstances beyond the student's control.

## is CREDIT BY EXAMINATION

Students may receive credit by examination for some course requirements. For more information, see page 72.

## î QUALITY OF WORK

While a grade of " $D$ " is considered passing in a subject, an overall average of "C," which corresponds to a grade point average of 2.0, must be maintained by the student if the student expects to graduate. In addition, UT Pan American has certain specific grade requirements. For example, the student must make a "C" in college algebra and required freshman English courses. The student must also have at least a "C" average in both the major and minor fields.

NOTE: Other specific requirements can be found in the program descriptions in other sections of the catalog.

## ~ Repeated Courses

When an undergraduate course is repeated (and the grade received is $A, B, C, C R, D, D F, F, P$ or $W F$ ), only the last grade and hours attempted are used to calculate the grade point average. However, repeated courses will remain on the student's academic record (transcript).

NOTE: Repeated courses will be used in determining the Graduate Admission GPA. See the Graduate Catalog for further information.

## $\approx$ Grade Change

If an error in computation, evaluation or recording warrants a grade change, only the instructor may process a Change of Grade Form through the Office of the Dean of his or her college. If the grade change is made after graduation for a course taken prior to graduation, the change request form must have written justification by the instructor, the recommendation of the college dean and approval by the Council of Deans. Change of Grade Forms may not be released to students, and must be sent directly from the appropriate academic department.

## DEAN'S LIST

After each regular (fall or spring) semester, a Dean's List is published listing the names of all full-time undergraduate students (those who have completed 12 or more hours of non-remedial coursework) who have a grade point average of 3.5 or better for courses taken that semester. A Dean's List is not produced during summer sessions.

## GRADE REPORTS

Student grade reports are not mailed automatically for students in good academic standing. Students may obtain their grades using ASSIST via telephone (956/3813020), Web (assist.utpa.edu) and KIOSK services. Students requiring a paper copy of their grades may request a transcript to be mailed to their home address on file with the Office of the Registrar using ASSIST via telephone, Web and KIOSK services.

# Registration Procedures 

## Registration

Students must officially register through the proper registration procedure to be eligible to receive credit for a course. Students will not be added to the official class rolls or grade sheets after the registration periods have ended. Per The Texas Higher Education Coordinating Board Rules and Regulations, students may not enroll in a course after the official census date (Ch. 9, Subchapter B, Sec. 9.31a).

## ASSIST REGISTRATION (TELEPHONE OR WEB)

Registration by a touch-tone telephone and on the World Wide Web is available to currently enrolled students and students who apply by the published admission deadline for ASSIST registration. Academic advisement is mandatory to receive a Registration Access Code (RAC)
and be eligible for priority registration by ASSIST. Students with admission, disciplinary, financial or TSI holds will not

be permitted to register until the hold has been cleared. A schedule change period by telephone or Web is scheduled prior to the beginning of each semester. Students who register during the designated late registration period will be assessed additional late fees.

Computers are available in the Academic Services Building for Web registration.

## * DROPPING/WITHDRAWING

If a student chooses not to attend a class or classes, he or she is responsible for officially dropping or withdrawing through the Office of the Registrar. (See the sections on Withdrawal from the University and on Dropping a Course on page 61.) Students who decide not to attend and do not officially notify the Office of the Registrar will be responsible for tuition, fees and any other circumstances resulting from failure to officially drop or withdraw. Students must not assume that they will "automatically" be dropped from their classes if they do not attend or do not pay. (If a student has requested some form of financial assistance, payment may have been posted to his or her account.) Refer to the published Schedule of Classes for refund schedules.

In accordance with Texas Education Code, 51.907, students may not drop more than a total of six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six course drop limit. A student may appeal a drop, if he/she shows good cause. Contact the Office of the Registrar for details concerning the appeals process.

## Selection of Courses

During the freshman and sophomore years, the
student should plan to satisfy not only the University core curriculum requirements for a bachelor's degree (see pages 103-107) but also any introductory or prerequisite courses in the major and minor field, as specified by the departments. Also, he or she should, enroll in one activity course in kinesiology (physical education) each semester until the required hours are satisfied. Although each of the departments of the University lists many of the specific courses required in the major and minor areas, usually some choice of courses is permitted at the lower level, the advanced level or at both levels. Choice is permitted when hours are specified as elective hours.

The student should develop an outline of required courses, supplementing it with those courses he or she wishes to take in satisfaction of any elective hours allowed by the department. Any deviation from courses required must be approved by the department chair and the dean of the college, and must be incorporated into the student's Degree Plan. If deviations are made that subsequently are not approved, the student may find that these will merely add hours to graduation requirements. (See also Degree Requirements on pages 70-71.)

Many courses listed in the catalog are not offered every semester. This is particularly the case with upperlevel courses. In planning a program, the student should ascertain whether a particular course will be offered during the semester he or she plans to take it, and that prerequisites to the course will be achieved prior to enrollment for the course.

When students enter this University with the expectation of subsequently transferring to another institution, they should be certain to obtain a copy of the catalog of that other institution and use it as a guide to courses for which they will register at UT Pan American. It is the student's responsibility to check the
requirements, although a faculty advisor will be glad to help interpret requirements of other colleges.

Students who plan to graduate from UT Pan American should consult the catalog sections concerning graduation and the specific requirements and suggestions listed under their respective colleges and departments to ensure that all required work is satisfied. The department chairs and deans will help clarify matters if the student has questions.

Prior to registering, students go through academic advisement to be counseled concerning the best selection of courses. First-year freshmen, students who have not passed the Texas Success Initiative (TSI) test or students who are enrolled under the Provisional Enrollment Program (PEP) are advised at the Advisement Center. All other students are advised by faculty members in their major area or college.

At advisement, each student receives a Registration Access Code that provides access to the ASSIST telephone/Web registration system.

## * Dropping a Course

A student is "dropping" a course or courses if he or she remains enrolled in a minimum of one credit hour after all course drops have been completed. Students who drop all classes for which they are enrolled are considered to have withdrawn from the University for that semester. (For more information on withdrawal, see the section below on Withdrawal from the University.)

To drop a course or courses after the official census date (after all registration functions are completed for the semester), a student must: (1) obtain a Class Drop Form from the Office of the Registrar, (2) obtain the signature of the instructor of record on the form, and (3) return the completed form to the Office of the Registrar, Student Services Building, Room 1.150.

All course drops must be completed at least two weeks prior to the end of a regular semester and one week prior to the end of a summer session (refer to the University Calendar in this catalog for drop deadlines). A student dropping a course during the first 30 calendar days of the semester (10 days in a summer session) will
receive a "DR" on the permanent record for the course dropped. If a course is dropped later in the semester, the student will be given a grade of "DP" or "DF" by the instructor for the course dropped.

If a student chooses not to attend a class or classes, he or she is responsible for officially dropping or withdrawing through the Office of the Registrar. Students who decide not to attend and do not officially notify the Office of the Registrar may be responsible for tuition, fees and any other circumstances resulting from failure to officially drop or withdraw. Students must not assume that they will "automatically" be dropped from their classes if they do not attend or do not pay. (Although the student may not have paid for classes personally, payment may have been posted to his or her account by a financial assistance agency. It is important that the student officially notify the Office of the Registrar of his or her intention not to attend.) Refer to the Registration Bulletin on the Web at: www.assist.utpa.edu.

## WITHDRAWAL FROM THE UNIVERSITY

To withdraw from the University, a student must complete a formal withdrawal procedure through the Office of the Registrar at least two weeks prior to the end of a regular semester or one week prior to the end of a summer session. Withdrawals must be requested by completing the appropriate withdrawal form, or by providing written notification, to the Office of the Registrar, Student Services Building, Room 1.150, 956/381-2201.

A student withdrawing during the first 30 calendar days of a semester (10 calendar days in a summer session) will receive a W on his or her permanent record for each course in which the student was enrolled. If the student withdraws later in the semester, he or she will be given a grade of WP or WF by the instructor for each course in which the student was enrolled. Refer to the Registration Bulletin on the Web at www.assist.utpa.edu for refund periods.

## * TRANSFER STUDENT

Transfer students with 30 or more hours but without the University College-approved courses, or courses deemed comparable by The University of Texas-Pan American, may take upper-division courses if otherwise qualified, but they too must complete all University core curriculum requirements before graduation. Transfer
students who lack six hours of freshman English or the equivalent and three hours of mathematics with a grade of at least " $C$ " in each course should complete these requirements within their first two semesters at UT Pan American. Students will be required to complete the Texas state-mandated coursework in U.S. history and political science if this has not already been completed at their prior institution.

## $\star$ NON-CREDIT ENROLLMENT

Students have the option of enrolling in a course for non-credit, which allows the student to participate fully in the course but not to receive a grade or to count the course in fulfilling degree requirements. Enrollment for non-credit requires the same payment of tuition and fees as enrollment for credit. (Students may also audit
courses for a lesser fee; this normally allows only limited participation. For more information on auditing a class, see below.)

A student who enrolls in a course for credit may change the enrollment to non-credit by completing a Non-Credit Form in the Office of the Registrar, Student Services Building, Room 1.150, no later than 30 calendar days in a regular semester or 10 calendar days in a summer session from the date university classes begin.

## * AUDITING Classes

Students must obtain special permission from the instructor of record to audit or visit a class. Students who wish to audit graduate classes (5000-9000 level) must be eligible to enroll in the course for credit before they will be allowed to audit.

Students auditing classes do not receive academic

credit and do not have the course or courses listed on their academic record. One may enroll as an auditor at any time by: (1) obtaining a Class Audit Form from the Office of the Registrar, (2) having it approved by the instructor of the class to be audited, (3) paying the required fee at the Office of Payments and Collections, and (4) using the receipt as an admission card to the class. Such approval may be granted only when space is available and if the instructor permits the student to be a visitor. Instructors reserve the right to refuse any request to visit a course. Enrollment as an auditor does not permit the enrollee to take examinations, have tests or other papers checked by the instructor or to participate in the class discussion. Audited courses are not posted on the student's permanent record. Audit fees ( $\$ 20$ per course) are non-refundable and may not be appealed. Individuals who are not regularly enrolled students at the University are also eligible to audit classes subject to the regulations stated above.

## $\star$ Residency

Residency for tuition purposes is determined by regulations set forth by the state of Texas. Students are required to sign an oath of residency as part of the application process. Residency for tuition purposes will be based on this oath and other information documents submitted by the student. The requirements are outlined on page 33 of the Fiscal Policies section of this catalog.

## OTHER PROCEDURES

## * IDENTIFICATION CARDS

Every student enrolled at The University of TexasPan American must possess an official identification card, issued through the supervision of the dean of students. The card remains the property of The University of Texas-Pan American.

The card must be presented for:

- Any University or department-sponsored activity.
- Admission to all intercollegiate athletic events.
- Identification for cashing checks on campus.
- Authorization to resell books to the University Bookstore or Student Book Exchange.
- Checking out equipment from the Office of

Student Development and the Student Union Recreation Room.

- Identification for receipt of transcripts at the Office of the Registrar.
- Identification for receipt of awards from Student Financial Services.
- Use of the University food service meal plans.
- Use of recreation facilities.
- Use of the Student Health Services.
- Purchase of campus parking permit.
- Campus library privileges.
- Voting in campus elections and referendums.
- Identifying oneself to a University official when requested to do so.
- Use of computer equipment in computer labs.

This card is non-transferable. Beginning freshmen and first-time entering transfer students will receive their original ID cards at no charge. A service charge of \$7 will be required for cards processed during subsequent semesters and for replacement cards. Loss or mutilation of cards must be reported to the Office of Student Development, University Center, Room 205. Fees are subject to change.

Students may not have in their possession more than one student ID card at the same time. This includes teaching assistant cards, which are special identification cards given to students who are employed by the University as teaching assistants. For more information, call the Office of Student Development at 956/381-2660.

## $\star$ Name Change

A student or former student may change the full, legal name on his or her permanent academic record by completing a Change of Name Form and submitting the appropriate documentation as follows to the Office of the Registrar, Student Services Building, Room 1.150:

1. Misspelling: Student must present a copy of the birth certificate.
2. New Legal Name: Student must present a copy of the signed court order showing the authorized new legal name.
3. Marriage: If a student wishes to assume his or her spouse's name, the student must present a copy of the marriage certificate.
4. Divorce: A student who wishes to discontinue the use of a married name and resume the use of their former name, or another name, must present a divorce decree or signed court order showing court restoration of the former, or other, name.


## $\star$ CHANGE OF ADDRESS AND/OR Telephone Number

If a student changes his or her address or telephone number, he or she is expected to notify the Office of the Registrar in writing immediately. The student will be held responsible for any communication from University offices sent to the address last given to the Office of the Registrar. No special consideration will be given to students who move and fail to receive the communication. Students whose mail is returned to the University will not receive additional communication until an address change has been submitted.

## * EnROLLMENT VERIFICATION

Enrollment verification for lending agencies can be requested from the National Student Clearinghouse at www.studentclearinghouse.org, phone: 703/742-7791, fax: 703/742-7792, or if further assistance is required, contact Student Financial Services, Student Services Building, Room 1.194.

Enrollment verifications for personal use (i.e., insurance companies, employment) can also be requested at the National Student Clearinghouse, or you may contact the Office of the Registrar, Student Services

Building, Room 1.150.

- Full-time Undergraduate

An undergraduate student who is enrolled for at least 12 semester hours during a regular semester, or at least six hours of credit during a summer session, is considered full time.

- Half-time Undergraduate

A half-time undergraduate student is one who is enrolled for six to eight semester hours during the regular semester or three hours of credit during a summer session.

Three-quarter time Undergraduate
A three-quarter time undergraduate student is one who is enrolled for nine to 11 semester hours during the regular semester.

## $\star$ TRANSCRIPTS

A student may secure an official transcript of his or her UT Pan American record by presenting picture identification at the Office of the Registrar, by requesting the transcript in writing from the Office of the Registrar, or on the Web at assist.utpa.edu. Transcripts will be issued at no charge.

## ATTENDANCE POLICIES, CONTINUING ENROLLMENT

The term "transcript of records" is understood to refer to the recorded results of the student's work in the classroom and is a comprehensive record of an individual's total academic progress at UT Pan American. This statement will contain all the important facts pertaining to the student's admission, academic level and academic achievements. No partial or incomplete classroom records (for example, with grades of "F" omitted) will be given. Students who owe debts to the University will have their official transcripts withheld until the debts are paid.

## ATTENDANCE POLICIES

## $\star$ ATTENDANCE

In accordance with the policy on absences in the University's Handbook of Operating Procedures, regular attendance in all meetings of courses for which the student is registered is expected. When a student is absent excessively (when in the judgment of the instructor the student has missed more work than can be made up successfully), the student may be dropped from the course with a grade of DP or DF. The Office of the Registrar will notify the student that he or she has been dropped from the course. A student who enrolls for a course and then does not attend is considered absent from class until the student officially drops the course.

If the student does not plan to attend the course, he or she must officially drop or withdraw through the Office of the Registrar by the published deadline dates. Students will be responsible for all tuition, fees and grades received in classes in which they do not officially drop or withdraw. (See the Registration Bulletin or the Web at www.assist. utpa.edu for refund periods for drops and withdrawals.)

## Absences On Religious Holy Days

Definition
Religious holy days mean holy days observed by a religion whose place of worship is exempt from property taxation under Section 11.20 Tax Code.

- Rules

Students who are excused from classes for the observance of a religious holy day are required to inform their class instructors at least one week in advance of
the absence and arrange with the instructor to make up missed work or missed examinations. Instructors are encouraged to provide those students the opportunity to make up the work (either prior to or after the anticipated absence) or otherwise adjust the grading to ensure that the student is not penalized for the absence.

## $\approx$ ABSENCES FOR UNIVERSITYRecognized Activities

Students absent while representing the University in officially-recognized University activities (such as athletic events or scholastic or student development activities) are required to inform their class instructors at least one week in advance of the absence and arrange with the instructor to make up missed work or missed examinations. Instructors are encouraged to provide those students the opportunity to make up the work (either prior to or after the anticipated absence) or otherwise adjust the grading to ensure that the student is not penalized for the absence.

## * Special Populations

$\underset{\sim}{\sim}$ PERSONS WITH DISABILITIES

UT Pan American will not discriminate against any individual on the basis of a disability or because of Vietnam Era/Disabled Veteran Status in either admission to, or treatment of employment in, its programs and activities.

Students with disabilities should visit the Office of Services for Persons with Disabilities prior to registration to receive information on the variety of services available. The office is located in Emilia Schunior Ramirez Hall, Room 1.101, Voice/Telecommunications Device for the Deaf (TDD) 956/316-7092. Non-students should contact the Equal Opportunity Office in the Student Services Building, Suite 6.105, 956/381-2100.

The Texas Rehabilitation Commission also provides services for individuals with disabilities.

For more information, see page 91.

## VARSITY ATHLETES

To be in compliance with NCAA Division I eligibility requirements for athletic participation and/or athletically related financial aid, a student-athlete must meet University and NCAA admission requirements and "progress toward degree" requirements in addition to the University's grade point progress requirements stated under Scholastic Probation and Suspension:


1. Enrollment during each regular semester must not drop below 12 hours.
2. Academic Year Requirements consist of both credit hour and grade point average minimums for each term of enrollment.

## Military Absence

Under certain circumstances, a student who is required to participate in active military service is excused from scheduled classes or other required activities and will be allowed to complete an assignment or exam within a reasonable time after the absence. The excused absence is permitted only if the student will not miss more than $25 \%$ of the total number of class meetings or the contact hour equivalent (not including the final examination period) for the specific course or courses in which the student is enrolled at the beginning of the period of active military servce.

## VETERANS

The Office of Veterans Affairs (VA) assists veterans in completing documents necessary to receive educational benefits for attendance at UT Pan American. Personnel coordinate activities with the veterans certification officer in the Office of the Registrar, Student Services Building, Room 1.150, 956/381-2280 and the Learning Assistance Center, LEAC Building, Room 100, 956/381-2585.

Students receiving VA educational benefits must make progress toward a degree as specified in this catalog under Satisfactory Progress and Scholastic Probation and Suspension (see page 46 and page 67).

ROTC
The Army maintains a senior division of the ROTC at UT Pan American. A four-year program and a two-year program are available to interested students, both male and female.

The four-year program consists of the basic course (freshman and sophomore) and the advanced course (junior and senior). Advanced instruction is oriented toward general military science and includes a six-week summer camp, usually at the end of the junior year.

Students who have successfully completed three or four years of Junior ROTC in high school may, at the discretion of the professor of military science, be given placement credit for one year of the basic course regardless of academic classification. Veterans also may be given advanced placement for the basic course, at the discretion of the professor.

Successful students are, upon graduation, commissioned as second lieutenants in the U.S. Army Reserve or U.S. Army National Guard. Students may elect to serve as reserve officers on active duty for an initial commitment period of three years or they may elect to serve for as little as three months of branch schooling followed by an extended tour with a Reserve or National Guard Unit. Qualified cadets may apply for commission in the regular Army.

During the course of instruction, the Army furnishes all required uniforms and military textbooks. Advanced course students receive a tax-free monetary allowance of \$150 per month.

A special two-year program is available for full-time students who have a minimum of two years remaining on a degree plan and who have not had prior military training or ROTC. This program consists of an intensified course of instruction in military subjects that will qualify the student for the advanced course. The course of instruction is normally taken in the summer between the sophomore and junior years. Students attend a six-week Basic Camp at Fort Knox, Ky. receive transportation allowance to and from the camp, uniforms, room and board and are paid approximately $\$ 750$ for the period. No military obligation is incurred by attendance at this camp.

Application for the two-year program must be completed during the spring semester so that attendance at Basic Camp may be arranged. Further details are available at the Department of Military Science, Lamar Building B, Room 103, 956/381-3600.

# CONTINUING ENROLLMENT 

$\star$ ACADEMIC STANDARDS<br>FOR REGULARLY<br>Admitted Students

Undergraduate students are expected to meet certain minimal academic standards in work completed in postsecondary education. Students who fail to maintain these minimum standards will be placed on academic probation or academic suspension, as appropriate. In determining whether a student will be placed on academic probation or suspension, all grades earned by the student (only the last grade is used if the student has attempted the course more than once) will be included in the computations of the grade point average.

## * SCHOLASTIC PROBATION AND SUSPENSION POLICY

The Academic Probation and Suspension Policy for undergraduate students at The University of Texas-Pan American is as follows:

1. Academic probation or suspension will be determined each regular (fall or spring) semester on the basis of the student's current semester and cumulative grade point average.
2. An undergraduate student will be placed on academic probation as follows:
a. Freshman - whenever the student's cumulative grade point average is below 1.70.
b. Sophomore - whenever the student's cumulative grade point average is below 1.80 .
c. Junior and Senior - whenever the student's cumulative grade point average is below 2.0.
3. An undergraduate student will be placed on academic suspension for one regular semester whenever the student enters a semester on academic probation and does not remove himself or herself from academic probation. If the student's current semester grade point average is 2.25 or above for a fall or spring semester, the student will continue on probation.

Level of

## Academic

Status
GOOD STANDING

PLACED ON ACADEMIC PROBATION

CONTINUED ON ACADEMIC PROBATION

ACADEMIC SUSPENSION

## GPA criteria

Cumulative GPA is 2.0 or above (1.70 in case of freshmen or 1.80 in case of sophomores).

Cumulative GPA has dropped below -2.0 (1.70 in case of freshmen or 1.80 in case of sophomores).

Previously on Academic Probation, cumulative GPA is below 2.0 ( 1.70 in case of freshmen or 1.80 in case of sophomores), and current semester GPA is 2.25 or above.

Previously on Academic Probation, cumulative GPA is below 2.0 ( 1.70 in case of freshmen or 1.80 in case of sophomores), and current semester GPA is below 2.25 .
4. A student on academic suspension may enroll for summer sessions for the purpose of raising the cumulative GPA to the level required for good standing for the student's classification. (Once placed on suspension for a semester, the suspension cannot be removed or changed to probation on the basis that the current semester GPA is a 2.25 or higher.) Removal from suspension can be most efficiently accomplished by enrolling only for courses in which the student has previously earned a low or failing grade.
5. A student on academic suspension who raises the cumulative GPA to the level required for good standing will be reinstated as a student in good standing following notification of the Office of the Registrar.
6. If a student who has been suspended for failure to meet academic probation requirements feels that unusual circumstances warrant a review, the student may direct a written appeal to the Admissions Committee, in care of the Office of the Registrar, no later than one week prior to registration. The petition must detail the reasons for alleging that circumstances warrant special consideration and should indicate reasons why the circumstances will not recur. The committee may reinstate a student who has not served the period of academic suspension only when convinced the best interests of both the University and the student will be served by such action.

All students are responsible for knowing whether they are eligible to continue at the University. An ineligible student who nevertheless registers, or has registered prior

to completion of the semester in which academic standing is determined, shall be dropped and cannot attend classes. Students shall not receive special consideration for lack of knowledge of scholastic status, regardless of whether the student registered and paid fees.

Scholastic probation and suspension for graduate students is discussed in the Graduate Catalog.

## * Texas Success Initiative

The Texas Success Initiative (TSI), formerly TASP, is a statewide, comprehensive program designed to ensure that students attending public institutions of higher education in Texas have the necessary academic skills to perform effectively in college-level coursework.

TSI, in part, requires the following:

1. Mandatory Testing and Assessment - All students must take the THEA (Texas Higher Education Assessment) or approved alternate test prior to enrolling in college-level courses at a Texas public post-secondary institution.
2. Mandatory Orientation - All new students to UT Pan American, including transfer and transient students, must attend an orientation session prior to being allowed to register for classes. TSI information is disseminated at these orientation sessions.
3. Mandatory Academic Advisement - All students
who have not passed all sections of the TSI must be advised prior to registration each semester.
4. Mandatory Developmental Education (if indicated by TSI assessment) - The TSI approved tests concentrate on three basic skills: reading, mathematics and writing. The standards for passing the test represent the minimum knowledge students entering college in Texas should have in order to succeed academically. Developmental courses or programs are provided to help students overcome deficiencies identified from the assessment; students must remain in continuous developmental education activities until they pass all sections of TSI.

## Z The TSI approved Tests

TSI approved tests are designed to determine whether students possess the basic skills in reading, writing and mathematics necessary for University courses.

In accordance with Texas Education Code, Section 51.3062, all students in the following categories who enter public institutions of higher education must take the TSI test prior to enrolling in college-level courses. State-approved exams are: ASSET, COMPASS, ACCUPLACER and THEA.

The law exempts the following categories of students:

- For a period of five years from the date of testing, a student who is tested and performs at or above the following standards:
A. ACT: Composite score of 23 with a
minimum of 19 on both the English and mathematics tests (partial exemptions are allowed).
B. SAT: A combined verbal and mathematics score of 1070 with a minimum of 500 on both the verbal and the mathematics tests.
- For a period of three years from the date of testing, a student who is tested and performs on the Texas Assessment of Knowledge and Skills (TAKS) with a minimum score of 2200 on the English Language Arts with a writing subscore of 3 or 4 and a minimum score of 2200 on the mathematics test (partial exemptions are allowed).
- A student who has graduated with an associate or baccalaureate degree from an institution of higher education in the state of Texas.
- A student who transfers to an institution from a private or independent institution of higher education or an accredited out-of-state institution of higher education and who has satisfactorily completed college-level coursework as determined by the receiving institution.
- A student who has previously attended any institution and has been determined to have met readiness standards by that institution.
- A student who is enrolled in a certificate program of one year or less (level-one certificates, 42 or fewer semester credit hours or the equivalent) at a public junior college, a public technical institute, or a public state college.
- A student who is serving on active duty as a member of the armed forces of the United States, the Texas National Guard, or as a member of a reserve component of the armed forces of the United States and has been serving for at least three years preceding enrollment.
- A student who on or after Aug. 1, 1990, was honorably discharged, retired, or released from active duty as a member of the armed forces of the United States of the Texas National Guard or service as a member of a reserve component of the armed forces of the United States.


## $\approx$ OTHER TSI RULES

1. Students who fail one or more parts of a TSI approved test must register for developmental courses or enroll in developmental programs in a deficient area every semester until they meet standards for each part of the test. Standards are set by the Texas Higher Education Coordinating Board and are subject to change.
2. Students who have not passed all parts of the TSI approved test may not register for any 3000- or 4000-
level courses if the number of college hours they already earned plus the number of hours for which they wish to register totals 60 or more hours.
3. Students may not enroll in courses designated as skill intensive courses until both TSI and departmental developmental education requirements have been met. The following have been designated as skill intensive courses: Reading: ENG 2303, ENG 2305, ENG 2307, HIST 2313, HIST 2314, PSY 1310, POLS 2313, and POLS 2314; Math: MATH 1340 or higher level math; Writing: ENG 1301, ENG 1302.
4. Concurrent enrollment students and international students seeking a degree are subject to the same TSI requirements as all other students.
5. Test scores are considered official only if they are sent directly from the testing company to UT Pan American, or if they appear on an official transcript from another Texas college or university.

Additional TSI information, including the rules adopted by the Texas Higher Education Coordinating Board, and information about special provisions related to certain disabilities, is available in the Learning Assistance Center and the Office of the Registrar at UT Pan American. Students needing more information on TSI rules or their TSI status can call 956/381-2529 or 956/381-2735. The TSI Registration Bulletin is available from the University Testing Center, UTPA Annex, Suite 180, 2412 S. Closner, Edinburg, Texas. For more information, call 956/292-7585 or e-mail testing@panam.edu.

## UNDERGRADUATE Degree INFORMATION

The University of Texas-Pan American offers the following types of undergraduate curricula:

1. Those leading to one of the following bachelor's degrees conferred by UT Pan American:

- Bachelor of Arts (BA)
- Bachelor of Applied Arts and Sciences (BAAS)
- Bachelor of Business Administration (BBA)
- Bachelor of Fine Arts (BFA)
- Bachelor of General Studies (BGS)
- Bachelor of Interdisciplinary Studies (BIS)
- Bachelor of Science (BS)
- Bachelor of Science in Computer Engineering (BSCE)
- Bachelor of Science in Criminal Justice (BSCJ)
- Bachelor of Science in Electrical Engineering (BSEE)
- Bachelor of Science in Mechanical Engineering (BSME)
- Bachelor of Science in Manufacturing Engineering (BSMF)
- Bachelor of Science in Nursing (BSN)
- Bachelor of Social Work (BSW)

2. Those satisfying the requirements leading toward degrees offered at other institutions, such as curricula leading to degrees in law, pharmacy, medicine and other specialized fields.
3. Courses satisfying requirements for a minor field.
4. Courses meeting requirements for certification as a teacher.

A complete list of degrees UT Pan American offers is located on pages 13-15.

The College of Science and Engineering also offers curricula meeting requirements for pre-dental (with a major in biology or chemistry), pre-optometry (with a major in biology or chemistry), pre-pharmacy (two

years) and premedical (with a major in biology or chemistry) studies.

Minors are offered in most of the fields that offer majors. Additional minors are available in geology, bilingual/bicultural education, generic special education, French, statistics, military science, MexicanAmerican studies, leadership studies, folklore, electrical engineering for computer science majors, electrical engineering, computer science for engineering majors, middle school mathematics and reading (for students seeking certification only).

Supporting courses are available in a variety of fields, including astronomy, Bible, geography and German.

Students also may choose to graduate within the framework of honors studies. Requirements are listed on pages 21-22.

## $\star$ Requirements for A BACHELOR'S DEGREE

General Requirements: The general requirements for graduation are the same for each bachelor's degree and are listed below. Specific requirements for each major field are listed in the catalog sections dealing with majors. It is the responsibility of the student to be familiar with all the requirements for the degree sought.

1. Degree, Minimum Hours and GPA: A student cannot receive two degrees at the same time. Students who wish to pursue more than one major, that fall under different disciplines, must decide at the point of graduation the type of degree he/she will receive. For students wishing to pursue a new degree, please refer to the section titled Additional Bachelor's Degrees on the next page. A minimum of 124 hours of work is required with an overall minimum GPA of 2.o. Some major requirements exceed the minimum hours and/or require a higher minimum grade point average.

## UNDERGRADUATE DEGREE INFORMATION

2. Major and Minor GPA: A minimum GPA of 2.0 in the required hours for both the major and minor fields, or for the broad-field major, is required. Graduates who seek certification as elementary teachers must have a minimum 2.25 cumulative GPA, and for middle school, high school and all-level certification, a 2.5 cumulative GPA is required. Accounting majors are required to have a 2.5 in their accounting courses.
3. Core Curriculum Hours and GPA: 48 hours of University core curriculum requirements must be satisfactorily completed with a minimum GPA of 2.0. (See page 70-71 for specific coursework.)
4. Freshman English: A minimum grade of " $C$ " must be achieved in each of the two required freshman English courses (ENG 1301, ENG 1302 or equivalent honors courses).
5. College Algebra: A minimum grade of " $C$ " must be achieved in college algebra or an approved higher-level math course.
6. Advanced Hours Overal/: Must include a minimum of 51 hours of advanced-level (3000/4000) work. Some degrees require additional advanced hours.
7. Major/Minor Requirements: The coursework must include a minimum of the following: 30 hours of work in a major field of concentration ( 15 of which must be advanced) and 18 hours in a minor field (six of which must be advanced). A minimum of 48 hours of work in a broadly integrated area (such as business administration, music) may be substituted for the major and minor requirement. In such cases, at least 21 advanced hours must be included, and a department may specify not more than 60 total hours in the area.
8. University Requirement: All entering freshmen with fewer than 30 completed semester credit hours are required to enroll in the UNIV 1301 - Learning Framework course during the first year of college (fall, spring or summer). Transfer students with fewer than 30 completed semester hours will be required to take the course, unless they have completed an equivalent course at another institution.
9. Residency: The student must complete and receive credit in residence for: (a) a total of at least 25 percent of the semester hours of coursework counted toward the degree, and (b) 24 of the last 30 semester hours, and (c) six semester hours of advanced work in the major. (Clinical Laboratory Sciences Majors: The last 30 hours of college work must be completed at UT Pan American; they must include at least eight hours of biology or chemistry, and a minimum of six advanced hours.)
10. "Re-Using"a Course: A course may not be used to satisfy a requirement for both a major and minor, or for two majors or for two minors.
11. Teacher Certification: All applications for teacher certification are processed through the UT Pan American

Certification Office. Since degree plans for bachelor's degrees with teacher certification may differ from plans without certification, students should ensure that a revised, official degree plan and degree worksheet are filed by their major department with the Office of the Registrar.
12. Course Distribution: The major-minor or broad-field major course distribution must follow the requirements set forth by the various departments, subject to any limitations and requirements noted in the catalog or in published form issued by the various departments or colleges of the University.
13. Degree Plan: The degree plan must be approved by the student's department chair and dean and must be on file in the dean's office of the college. This requirement is normally to be accomplished as soon as possible after the close of the sophomore year (completion of 60 or more hours). In any event, the degree plan must be on file before the deadline for submitting the Application for Degree.
14. Application for Degree: The Application for Degree must be filed by the student with the Office of the Registrar on or before the date specified in the University Calendar, which is approximately nine months prior to the intended date of graduation.
15. Catalog - Seven Year Limit: The degree requirements that must be completed for graduation will be those in effect at the time of the student's entrance or those provided in a subsequent catalog. In any case, the catalog used to determine the degree requirements must not be more than seven years old. Any changes in the degree plan to comply with a later catalog must be approved by the department chair and the dean of the college. For purposes of graduation requirements, this catalog expires August 2016.
16. Substitutions/Waivers: A Substitution Form, initiated at the departmental level, is required for any deviation from the degree plan and University requirements. Appeals for substitutions and/or waivers that involve the core curriculum (general education) require approval from the student's major college, from the college of the core curriculum area if in a different college and from the provost/vice president for Academic Affairs or his designee. Appeals for substitutions/waivers for general graduation requirements, such as total number of semester hours, grade point average and number of advanced semester hours, require approval from within the student's major college and from the provost/vice president for Academic Affairs or his designee only. Appeals for substitution of courses within the major, minor or elective areas of a student's degree plan require the approval of the department chair and the dean of the college only. Content of substituted courses must be consistent with approved degree/
program requirements.
17. Graduate Courses: Graduate courses may not be used to satisfy any undergraduate graduation requirements for a bachelor's degree.
18. Non-Traditional Credit: A maximum of 45 hours of college credit will be accepted toward a bachelor's degree by any combination of extension, examination or correspondence, with an 18-hour limit on correspondence credit. No credit will be awarded for "life experience."

All course requirements for a bachelor's degree in any one of the several disciplines are formulated within the department in which the discipline falls, and are announced and listed elsewhere in the catalog by the respective departments of the University. Students should contact their major department and request a degree plan as soon as possible upon completion of their sophomore year.

## $\mathcal{Z}$ Additional bachelor's Degrees

Students who received their first bachelor's degree from UT Pan American or other accredited institution may earn an additional bachelor's degree in a different major from UT Pan American. Such students continue to be classified as undergraduates and must:

1. Complete an additional minimum of 30 hours of credit in UT Pan American courses (of which at least 12 must be advanced and a minimum of six of these must be in the major field; in the case of a double major, a minimum of six advanced hours is required in each major field) for each bachelor's degree sought beyond the first.
2. Complete all requirements for the additional major(s), as set forth in the catalog.
3. Complete all requirements for the additional degree(s), including grade point average requirements, any minor requirements, elective courses, and advanced courses, as set forth in the catalog.
4. Comply with all other regulations as stated under University core curriculum on pages 103-107.

Completion of a baccalaureate degree at another accredited institution will fulfill The University of Texas-Pan American's general education (core curriculum requirements) exclusive of any state specified coursework. Students will be required to complete the Texas state mandated coursework in U.S. history and political science if this has not already been completed as part of their first degree. Students must also complete any other University and departmental requirements for the second degree as stipulated in the catalog.
> $\star$ Graduation Under a Specific CATALOG

The degree requirements that must be completed for graduation will be those in effect at the time the student begins their college career or those provided in a subsequent catalog. In any case, the catalog used to determine the degree requirements must not be more than seven years old.

Any changes in the degree plan must be approved by the department chair and the dean of the college. For purposes of graduation requirements, this catalog expires August 2016.

## * Graduate Programs

A list of graduate degrees offered by UT Pan American is on pages 13-14. For more information on graduate programs, consult the Graduate Catalog.

## GENERAL INFORMATION

## CREDIT BY EXAMINATION

UT Pan American offers college credit by examination to qualified students through a variety of approved examinations. A student may receive up to 45 hours of undergraduate credit by examination through the following programs:

- American College Testing (ACT) Program Credit by Examination
- College Entrance Examination Board (CEEB) Achievement Tests
- Advanced Placement (AP) Tests
- International Baccalaureate (IB) exams
- College Level Examination Program (CLEP)
- UT Pan American Local Advanced Standing Examinations - For Credit
Test scores must be sent directly from the testing agency; student or hand-carried copies are not accepted.

Credit is posted on the student's permanent record (transcript) when the student officially enrolls at UT Pan American. Credit by exam is accepted as "credit only" (CR) and does not affect the student's cumulative grade point average. Unsuccessful attempts to earn credit by examination are not recorded on the student's official transcript. Policies on credit earned by examination are reviewed every two years in conjunction with the publication of a new catalog.

For further information regarding credit by examination at UT Pan American, visit the:

Office of the Registrar

## UNDERGRADUATE DEGREE INFORMATION

Student Services Building, Room 1.150<br>1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/381-2201<br>E-mail: registrar@utpa.edu<br>For additional information regarding testing, contact the:

Testing Center
UTPA Annex, 2412 S. Closner
Edinburg, TX 78539-2999
Telephone: 956/316-2457
E-mail: testing@utpa.edu
Credit by examination at UT Pan American is available as follows:

## - ACT Exam Scores

Subject
English Language
English Lang./Comp.

$$
\begin{array}{cc}
\text { Minimum ACT } & \text { UTPA } \\
\text { English Score } & \text { Course } \\
30 \text { (SAT 680) } & \text { ENG } 1301 \\
31 \text { (SAT 700) } & \text { ENG } 1302
\end{array}
$$

## - CEEB Achievement and Advanced

Placement (AP) Tests
If you are a high school student anticipating course credit through CEEB Achievement and/or AP Tests, you should make arrangements to take the proper examination(s) with your high school counselor or AP coordinator. This should be done in time for your scores to be received and evaluated by UT Pan American before you begin your first semester. Course credit or exemptions may be obtained in the subjects listed below:

|  | Min. | UTPA | Hrs. |
| :---: | :---: | :---: | :---: |
| Subject | Score | Course | Credit |
| Chemistry | 600** | CHEM 1301 and CHEM 1101 | - |
| American History |  | HIST 2313 |  |
| "Exempts students from CHEM 1301 and CHEM 1101; no credit given. |  |  |  |

## - CEEB Advanced Placement Tests

UTPA

Course
Number
ART 1301
ART 1311
ART 1331
BIOL 1401,1402
BIOL 2305
CHEM

Sem.
Subject
Exam Title
Art History 33
Studio Art-Drawing Portfolio 3 Studio Art-General Portfolio 3 Biology Environmental Science

| Min. | Sem. <br> Credit |
| :---: | :---: |
| Score | Hour |
| 3 | 3 |
| 0 | 3 |
| 3 | 3 |
| 3 | 8 |
| 3 | 3 |


| 1302 \& 1102 | Chemistry | 3 | 8 |
| :---: | :---: | :---: | :---: |
| CSCl 1380 | Computer Science (A) | 3 | 3 |
| CSCI 1380,2380 | Computer Science (AB) | 3 | 6 |
| ECON 2301 | Economics (Macro) | 3 | 3 |
| ECON 2302 | Economics (Micro) | 3 | 3 |
| ENG 1301 | English Literature | 3 | 3 |
| ENG 1301,1302 | English Language | 3 | 6 |
| ENG 1301,2300 | English Literature | 4 | 6 |
| FREN 1321 | French Lang or French Lit | 3 | 3 |
| FREN 1321,1322 | French Lang or French Lit | 4 | 6 |
| FREN 1321,1322 |  |  |  |
| 2321 \& 2322 | French Lang or French Lit | 5 | 12 |
| GERM 1331 | German Language | 3 | 3 |
| GERM 1331, 1332 | German Language | 4 | 6 |
| GERM 2331,2332 | German Language | 5 | 6 |
| HIST 2313, 2314 | U.S. History | 3 | 6 |
| HIST 2331,2332 | European History | 3 | 6 |
| MATH 1401 | Calculus AB | 3 | 4 |
| MATH 1401,1402 | Calculus BC | 3 | 8 |
| PHYS 1401,1402 | Physics (B) | 3 | 8 |
| PHYS 1401, 2301 | Physics (C) Mechanics | 3 | 4 or 3 |
| PHYS 1402,2302 | Physics (C) |  |  |
|  | -Electricity and Magnetism | 3 | 4 or 3 |
| POLS 2313 |  |  |  |
| or 2314 | U.S. Government | 3 | 3 |
| SPAN1301,1302 | Spanish Lang or Spanish Lit | 3 | 6 |
| SPAN 1303,1304 | Spanish Lang or Spanish Lit | 4 | 6 |
| SPAN 1303,1304 |  |  |  |
| 2307,2308 | Spanish Lang or Spanish Lit | 5 | 12 |
| STAT 2330 | Statistics | 3 | 3 |

NOTE: High school students anticipating college credit through College Entrance Examination Board Achievement, Advanced Placement Tests and/or International Baccalaureate should make arrangements to take the proper examination(s) with their high school counselors, AP, or IB coordinators. This should be done in time for scores to be received and evaluated by UT Pan American before students begin their first semester.

## - International Baccalaureate

The International Baccalaureate (IB) tests are offered world-=wide to students enrolled in programs affiliated with the IB program. The University of TexasPan American (UTPA) will grant credit on IB higher-level tests for the courses listed below. Please contact the Office of the Registrar for additional information.

| IB Test | Min. ScoreUTPA Course | Credit |  |
| :--- | :--- | :--- | :--- |
| English, First Language |  |  |  |
| $\quad$ Higher Level | 4 | ENG 1301 | 3 |
| $\quad$ Higher Level | 5 | ENG 1302 | 3 |
| Higher Level | 6 | ENG 2307 | 3 |
| Biology, Higher Level | 4 | BIOL 1401 | 4 |
| Chemistry, Higher Level | 4 | CHEM 1301 and 1101 | 4 |
| Physics, Higher Level | 4 | PHYS 1401 | 4 |


| Economics, Higher Level | 4 | ECON 2301 | 3 |
| :---: | :---: | :---: | :---: |
| Economics, Higher Level | 5 | ECON 2302 | 3 |
| Spanish, A2, Higher Level | 4 | SPAN 1303 and 1304 | 6 |
| Spanish, A2, Higher Level | 6 | SPAN 2307 and 2308 | 6 |
| French, A1 and A2, Higher Level | 4 | FREN 1321 and 1322 | 6 |
| French, A1 and A2, Higher Level | 6 | FREN 2321 and 2322 | 6 |
| Geography, Higher Level | 4 | GEOG 2313 | 3 |
| Geography, Higher Level | 5 | HIST 3303 | 3 |
| History, Higher Level | 4 | HIST 2313 | 3 |
| History, Higher Level | 5 | HIST 2314 | 3 |
| History, Higher Level | 6 | HIST 3302 | 3 |
| Information Technology, Higher Level | 4 | CSCI 1380 | 3 |
| Philosophy, Higher Level | 4 | PHIL 1310 or PHIL 132 |  |
| Psychology, Higher Level | 4 | PSY 1310 | 3 |
| Anthropology, Higher Level | 4 | ANTH 1323 | 3 |
| Mathematics, Higher Level | 4 | MATH 1401 | 4 |
| Mathematics, Higher Level | 6 | MATH 1401 and 1402 | 8 |
| Visual Arts, Higher Level | 4 | ART 1301 | 3 |
| Music, Higher Level | 4 | MUS 1307 | 3 |
| Theatre Arts, Higher Level | 4 | COMM 2312 | 3 |
| Theatre Arts, Higher Level | 6 | COMM 1615 | 6 |

## College Level Examination Program

Students can earn course credit at UT Pan American in a wide variety of subject areas through CLEP Subject Examinations, which are standardized 90-minute, multiple-choice tests. These exams are administered by the UT Pan American Testing Center once a month during the academic year; one or two tests can be taken in one day of testing. For a list of testing dates, contact the

> Testing Center UTPA Annex 2412 S. Closner Edinburg, TX $78539-2999$
> Telephone: 956/292-7585
> E-mail: testing@utpa.edu

Listed below are subject areas in which UT Pan American credit can be earned through the CLEP testing program, along with the required minimum score for each test. (The minimum score usually represents successful completion of 35 to 50 percent of the questions on an examination.) UT Pan American credit is posted to a student's transcript only after he or she officially enrolls at the University.

Students who do not plan to enroll at UT Pan American are also permitted to take CLEP tests at the

UT Pan American Testing Center. However, it is the responsibility of the student to contact the institution at which he or she plans to enroll in order to verify which CLEP tests are accepted for credit.

In order to prepare for CLEP testing, students may purchase The Official Guide for the CLEP Examinations at the UT Pan American Bookstore or order it from The College Board using the order form attached to the CLEP Registration-Admission Form. Many students also obtain an appropriate textbook and/or study guide for the specific test(s).

The steps to follow in registering for CLEP testing are outlined in College Credit by Examination, a brochure available at the UT Pan American Testing Center.

## - CLEP Subject Examination

UTPA
Course Subject
Number Exam Title
ACC 2421, 2329 Principles of Accounting
BIO 1401 Biology
BIOL 1401, 1402 Biology
BLAW 3337 Intro Business Law
CHEM 1301, 1101 Chemistry
1302 \& 1102
CIS 1301 Info Sys and Comp Appl 51
EDCI $4302 \quad$ Intro to Educ Psychology 473
ECON 2301 Prin of Macroeconomics 55
ECON 2302 Prin of Microeconomics 53
ENG 1301 Freshman College Comp $48^{*} 3$
ENG 1301,1302 Freshman College Comp $60^{*} 6$
ENG 2300 Analysis and Interp Lit 50
ENG 2303 American Literature 50
ENG 2305 English Literature
FREN 1321 College-Level French Lang
FREN 1321, 1322 College-Level French Lang
FREN 1321,1322
\& 2321 College-Level French Lang 659
FREN 1321,1322
2321,2322 College-Level French Lang 7512
GERM 1331 College-Level German Lang 413
GERM 1331, 1332 College-Level German Lang 506
GERM 1331,1332
\& 2331 College-Level German Lang $65 \quad 9$
GERM 1331,1332
2331,2332 College-Level German Lang $75 \quad 12$
HIST $2313 \quad$ History of the United States I 46
HIST 2314
MANA 3361
MARK 3371
MATH 1340
MATH 1356
MATH 1401,

```
1402
```

POLS 2313

History of the United States II 46
Prin of Management 53
Prin of Marketing 53
College Algebra $45 \quad 3$
Trigonometry 503
Calculus $\quad 47 \quad 8$
American Government $\quad 47 \quad 3$

Sem.
Min. Credit

## Score Hour



$50 \quad 3$
413

3
6

| PSY 1310 | Introductory Psychology | 47 | 3 |
| :--- | :--- | :--- | :--- |
| SOC 1313 | Introductory Sociology | 47 | 3 |
| SPAN 1303 | College-Level Spanish Lang | 41 | 3 |
| SPAN 1303,1304 | College-Level Spanish Lang | 50 | 6 |
| SPAN 1303,1304 <br> \& 2307 | College-Level Spanish Lang | 65 | 9 |
| SPAN 1303,1304 <br> 2307,2308 | College-Level Spanish Lang | 75 | 12 |
| "Plus departmental essay |  |  |  |

- UT Pan American Local Advanced Standing Examinations - For Credit Students interested in acquiring credit through local departmental examinations at UT Pan American may contact the University's Testing Center to find out more about the requirements and fees. Projected local test possibilities are planned for each separate department.

Local examinations may not be taken for courses for which an approved CLEP subject exam exists.

## - Local Advanced Standing <br> Examinations - For Credit

Students may acquire college credit through local departmental examinations at UT Pan American. Local examinations may not be taken for courses for which an approved CLEP subject examination exists. Students are encouraged to contact the individual academic departments for more information regarding the availability of local examinations, requirements and fees.

## TEACHING CERTIFICATES

Requirements for teaching certificates in various fields or areas are shown in the respective academic sections of the catalog. General information for undergraduates is shown on page 156 of this catalog and in the Graduate Catalog for graduate students.

Consult the Office of the Dean of the College of Education for full details on all certification requirements.

## Degree Plan

In general, a student may follow the degree requirements listed in this catalog by the respective departments of the University, thus planning a schedule of courses. However, having a degree plan on file is a requirement for graduation, and a student is well advised to have the degree plan drawn up by the department chair on the proper form as soon as possible to preclude the possibility of taking courses that will not satisfy requirements for the degree the student seeks.

Students seeking a bachelor's degree are expected to file an official degree plan with their major department
upon completion of their sophomore year. (Students seeking a master's degree or doctoral degree are expected to meet with their graduate advisor and file an official degree plan during their first semester of enrollment. For more information, refer to the Graduate Catalog.)

Students who change their major, area of concentration or teacher certification status must have a new official degree plan reflecting their current status on file with the appropriate department.

Upon request, the department chairs will aid students in preparing degree plans that may be required by institutions or agencies other than UT Pan American. As an illustration, some public school systems require prospective teachers who have not completed their degrees to file an approved plan in the superintendent's office.

# 3 Graduation POLICIES AND PROCEDURES 

## * Application for Degree

All students who intend to receive a degree from The University of Texas-Pan American must submit a completed Application for Degree form to the Office of the Registrar by the published deadline in the University Calendar, which is approximately nine months prior to the intended date of graduation. Applications received after the deadline will be processed for the next available graduation date. These deadlines are necessary in order for prospective graduates to be notified of any deficiencies in time to register for the appropriate coursework.

## $\star$ Graduation Fee

A non-refundable graduation fee of $\$ 32$ is charged for undergraduate and graduate degrees. This fee is payable at the Office of Payments and Collections, Student Services Building, Room 1.145, at the time the candidate presents the Application for Graduation to the Office of the Registrar. This fee is used to pay for the processing of applications for graduation, music, graduation speakers, postage, diplomas and other expenses associated with graduation.

## Transfer of Graduation Date

Prospective graduates who have submitted their Application for Degree form and do not meet graduation requirements for that graduation date must "transfer" their application to a later graduation date. Students will be required to pay an additional \$10 fee each time the graduation date is transferred.

## $\because$ COMMENCEMENT EXERCISES

The University of Texas-Pan American confers degrees four times each year - in December, May, July and August. Commencement exercises are scheduled for December, May and August.

## REGALIA (CAP AND GOWN)

All students participating in the commencement ceremony are required to purchase the proper graduation regalia from the University Bookstore. (No students will be permitted to participate without the proper regalia.)

## Z CORRESPONDENCE

In order to ensure that information regarding graduation requirements, deficiencies and commencement exercises are received on a timely basis, the student's correct address must be on file with the Office of the Registrar. Prospective graduates will not receive special consideration for lack of knowledge of graduation requirements, deficiencies or deadlines.

## HONORS

Upon graduation, a student receiving a bachelor's degree is listed with "Honors" in accordance with the following standards based on his or her final overall grade point average:

$$
\begin{array}{ll}
\text { Summa Cum Laude } & \text { GPA of } 3.9 \text { to } 4.0 \\
\text { Magna Cum Laude } & \text { GPA of } 3.7 \text { to } 3.89 \\
\text { Cum Laude } & \text { GPA of } 3.5 \text { to } 3.69
\end{array}
$$

Honors are listed in the graduation program based on the student's GPA prior to completion of his or her last semester of coursework, and does not guarantee graduation with honors upon calculation of the overall GPA after the student's last semester has been completed.

## ACADEMIC SUPPORT SERVICES

## $\star$ UNIVERSITY LIBRARY

The University Library is the campus center for resources that support the academic programs at The University of Texas-Pan American. The four-story brick and glass structure contains 202,000 square feet. The cornerstone of the building was dedicated on April 10, 1978; a modern addition was completed in early 1999.

The Library houses a collection of approximately 450,000 volumes, 300,000 government documents, more than 6,000 subscriptions, 1 million microform units and 10,000 audiovisual items. Library collections and databases may be accessed at workstations throughout the building; instructional services are provided in state-of-the-art-classrooms. Of interest to the region and beyond are the special collection materials contained in the Lower Rio Grande Valley Historical Collection and the Rio Grande Folklore Archive. Materials available pertain to the Texas counties of the Valley and northeastern Mexico.

The reference area has numerous microcomputers connected to the Library local area network (LAN) and available for accessing information resources and e-mail. Connectivity with the Internet provides access to the catalogs of other library collections and shared databases made available by The University of Texas System and the TexShare project. Available via CD-ROMs, the Internet or stand-alone systems are different subject area citation and abstract databases; many include an array of full text articles.

Library patrons are offered services that include reference and information consultation and assistance, computerized database searching, interlibrary loan and library use instruction.

All UT Pan American students must be registered in order to borrow materials from the library and obtain use of other services during the fall and/or spring semester(s). Graduate students who are registered in the spring semester will automatically receive privileges for the summer sessions. Students who are not registered during the fall or spring semester(s) may join the Friends of the Library for library privileges.

The benefits of the Friends of the Library membership extended for one full year are that members:

- May check out materials according to circulation policies.
- Receive in advance the library newsletter and notification of all special events sponsored by the organization and will be admitted free of charge to such events.

Students enrolled in cooperative programs: Students enrolled in cooperative programs must be registered in either of the cooperating institutions to have library privileges. They will follow the policy for UT Pan American graduate students.

The program coordinator must submit a letter with the list of students in the cooperative program to the Circulation Department. The list must include the following information:

- Names of the students.
- Students' Social Security numbers.
- Students' mailing addresses.
- Students' telephone numbers.
- Name of the institution where the students are registered.
- Name of the program.

Students with incomplete courses: Unenrolled UT Pan American students with incomplete courses during the fall or spring semesters need to purchase the Friends of the Library card if they wish to use the library services.

Resources of the University Library are available seven days a week during regular academic sessions. Detailed information about hours and services may be obtained at the circulation desk or the Library Web site at www.lib.utpa.edu, or by calling 956/381-3306 or voice/ TDD 956/381-2763.

## * AcADEmiC ADVISEMENT AND MENTORING CENTER

The Academic Advisement and Mentoring (AAM) Center utilizes a hybrid model of academic advisement with both a centralized and decentralized component. Centrally located in Southwick Hall, nine academic career advisors provide informative academic advisement, career advising and referral services for Texas Success Initiative (TSI) cleared freshmen. Housed in the six academic colleges (two each), professional guidance counselors provide informational, developmental and career advisement for sophomores. The professional guidance counselors also provide career guidance/exploration and referrals for all TSI cleared undergraduate students with undeclared or changing majors. Once a student has been accepted into their desired academic program and/or has become a junior or senior with a declared major, the professional guidance
counselor provides information to the student as needed and refers the student to the most appropriate department or faculty advisor for program specific advisement and mentoring.

## ACADEMIC ADVISEMENT AND Career Guidance Services

The AAM Center provides the following services for UTPA students:

- Academic information and guidance for prospective students.
- Academic advisement during new student and transfer student orientations.
- Academic degree planning assistance.
- Required academic advisement for current TSI cleared Freshmen and TSI cleared Sophomores.
- Academic presentations for UNIV 1301 Learning Framework classes.
- Academic skills development assistance (goal setting, GPA calculation, academic selfmonitoring, study skills, four-year plans, etc.).
- Retention advisement for at-risk students (probation, suspension, financial aid deficiency, etc.).
- Career exploration and career guidance services.
- Information and referrals to academic departments, UTPA support services, student organizations, internships, employment and leadership development opportunities.
- Transfer information and resources.

Academic Advisement and Mentoring (AAM) Center Southwick Hall, Room 105 Telehone: 956/316-7120 E-mail: aamc@panam.edu Web: www.utpa.edu/dept/advisement

## $\star$ LeARNING Assistance Center

The purpose of the Learning Assistance Center (LAC) is to provide all students with an equal opportunity to succeed in college by maintaining a program of support services to address their unique educational, career and personal needs. The major goal is to increase UT Pan American retention and graduation rates while providing quality academic programs.

The LAC is made up of various units. The tutorial unit and some activities of the Counseling and Advisement Center are coordinated with a U.S. Department of Education Title IV federal project - Student Support

Services Program. Call 956/381-2585 or 381-2529 for connections to any of the services listed below. The LAC is located in the Learning Assistance Center, Room 100. The Counseling Center is in the first floor of the University Center, Room 109, Academic Advisement is in University Center, Room 215. Please check the Web at www.utpa.edu for more information. The Writing Center is located in the first floor of the Library.

Academic Advisement: Designed to assist students with educational planning with regard to University core curriculum requirements and to inform them about course placement as it relates to legislation governing the Texas Success Initiative and institutional policy. Mandatory advisement is provided for UT Pan American students who have not met the state passing standard in the three areas of reading, mathematics and writing.

Tutoring: Designed to help students improve their comprehension of coursework material and to develop the academic skills required for achievement at the University by providing professional staff and peer tutors to work with them on an individual or small group basis. These services assist those who are having difficulty comprehending course content, who have low grades or who wish to improve their grade point average. Tutoring is available in the subject areas of English, Spanish, mathematics, biology, chemistry, physics and the social sciences.

Reading Program: Designed to assist students who wish to improve their reading skills. Students may work selectively in improving vocabulary, reading comprehension or other areas of need specific to reading skills development.

Study Skills: Designed to assist students who are having difficulty with their coursework. The study skills focus on getting organized, procrastination, listening and notetaking, reading textbooks, memory and concentration, time management, test-taking skills and test anxiety.

Developmental Education Program: The LAC tutorial laboratories provide academic support to students who must enroll in developmental courses and/or are in the process of fulfilling legislative requirements of the Texas Success Initiative test.

S/ Labs: Designed to meet the state-mandated noncourse based developmental education requirements in the TSI areas of writing, reading and mathematics.

Computer-Assisted Instruction: Designed to provide assistance by use of commercial software program tutorials in certain college-level courses, basic skills development and TSI preparation.

Personal Counseling: Designed to assist students who are having issues with personal, social, emotional and/or interpersonal relationships that may be affecting their adjustment to the University environment or interfering with academic achievement. Counseling activities help
students clarify their goals, facilitate personal growth, increase effective coping skills, provide support and encourage personal responsibility for their actions. Some activities are conducted in group counseling sessions, topical seminars or workshops. Students with serious mental health pathology are referred for psychiatric evaluation when appropriate.

Career Counseling: Designed to assist students in career exploration activities through individual counseling, the career library and career seminars. To facilitate the process, testing or standardized evaluation may be used to help students gain a better understanding of their academic abilities, interests, aptitudes and personality. Test instruments may be of special interest to those who are unsure of a choice of major or career, or students who want to verify a tentative choice.

## * The UniVERSITY Writing Center

The University Writing Center (UWC), located in the University Library, offers UTPA faculty and students assistance with academic writing in all disciplines. Peer tutors, certified by the College Reading and Learning Association, assist students with their class writing assignments. Individual tutoring in writing may include the following: clarifying an assignment; assisting with the drafting process from ideas, notes and outlines; revising and editing an essay for effective organization, sentence structure and grammatical issues; creating appropriate voice and tone; identifying errors and methods for correction; assisting with all documentation styles; and assisting with incorporating source materials. In addition to offering on-site and online weekend writing tutoring, the UWC provides an area for developmental education labs, a computer classroom for student drop-in use or for faculty members to reserve, and a resource area and meeting room for the University's Writing Across the Curriculum program.

University Writing Center University Library, Room 101 East Phone: 956/381-2538
Web site: http://www.panam.edu/writingcenter

## $\star$ UNIVERSITY RETENTION AdVISEMENT PROGRAM

The University Retention Advisement Program (URAP) serves students through the development

## Student Services/Information, Rights/ReSponsibilities

and implementation of programs that supplement the instructional and support services offered at the University. It also supports the advisement process through focused advisement with special populations.

The University Retention Advisement Program
Southwick Hall, Room 202
Phone: 956/381-2319
Fax: 956/381-2480
Web site: www.panam.edu/programs/urap

## STUDENT SERVICES

AND INFORMATION

## * ADVANCED SERVICES FOR STUDENT INFORMATION SUPPORTED BY TECHNOLOGY

In order to provide students with easy access to student information, The University of Texas-Pan American developed Advanced Services for Student Information Supported by Technology (ASSIST).

With ASSIST technology, students may access general, academic and financial information from home or various locations on campus. Personal information is protected by a Personal Identification Number (PIN), which initially is the student's date of birth entered as a six-digit number (for example, March 15, 1964, is entered as 031564).

A Registration Access Code (RAC) and a PIN are required to access ASSIST registration services. The RAC is issued to students by an academic advisor each semester.

ASSIST services include the following:

- Kiosk Information Stations: Currently 15 Kiosk Information Stations are located across the UT Pan American campus, with plans to add more stations in the future. These stations are located in the Administration Building, Academic Services Building, Business Administration Building, Communication Arts and Sciences Building, Education Building, Engineering Building, Health and Physical Education II, Health

Sciences East Building, Science Building, Social and Behavioral Sciences Building, University Library, Student Union, Student Services Building and the Visitors Center. Kiosk services include:

- Campus Map and Directory
- Calendar of Events
- Staff and Faculty Job Openings
- General Information: Course Availability, Department List, Standard Forms, Financial Aid Awards (PIN required)
- Student Records (PIN required): Account Balance, Admission Status, Grades/Unofficial Transcript, Student Schedule, Degree Audit
- Voice Response (Telephone) System: Information on admissions, grades, registration and payments can be accessed through the voice response system with a touch-tone phone. (These are not toll-free numbers.) Courtesy telephones are available in the Office of the Registrar. Voice Response services include:
- Application Status
- Deadline Dates/How to Apply
- Requirements for Admission
- TSI Information
- Grades (PIN required)
- Registration Information:
- Class Schedule (PIN required)
- Dates and Procedures
- Registration Holds (PIN required)
- Transcript Information
- Dates Available/How to Request

Payment may be made with your VISA or MasterCard or Discover via ASSIST:

- ASSIST Telephone Payment: 956/381-3030
- ASSIST Web Payment: www.utpa.edu/assist
- KIOSK Payment at 15 locations:
- Academic Support Services Building
- Administration Building
- Business Administration Building
- Communication Arts and Sciences Building
- Engineering Building
- Education Building
- Physical Education II Building
- Health Sciences East Building
- Science Building
- Social and Behavioral Sciences Building
- Student Union
- University Library
- Student Services Building
- Visitors Center
- Payments and Collections: 956/381-3030
- How to Pay Fees/Office Location
- Tuition Information/Deadline Dates
- Current Balance/Residency Status (PIN required)
- Request Parking Permit (PIN required)
- Credit Card Payment (PIN required)
- Web for Students: Admission, grade, registration and financial information can be accessed on the Web at www.asisst.utpa.edu. Web services include:
- University Catalogs
- Class Schedules
- Admission Information
- Apply for Admission
- View Admission Status
- Registration (RAC and PIN required)
- Add/Drop Classes
- View Class Availability
- Conditional Drop/Add
- Student Schedule (graphic)
- Student Schedule (detailed)
- View Fee Assessment
- Student Records (PIN required)
- View Address Information
- Update Address
- View Grades
- Academic Transcript
- Account Summary
- Change PIN Number
- Degree Audit
- Financial Aid Awards (PIN required)
- Payment Services
- Credit card
- E-check
- Emergency Loan Applications


## 3 STUDENT RIGHTS AND Responsibilities

## Student Guide

Students are responsible for becoming familiar with policies that govern students. The University of Texas-Pan American Student Guide provides detailed information on numerous aspects of campus life and

University policies governing students. The Student Guide can be viewed at www.utpa.edu/depts/dos/ judicialaffairs/studentguide.htm.

## $\star$ Student Travel

Student travel at The University of Texas-Pan American will be guided by the student travel policy in the Handbook of Operating Procedures Section 5.6.3 as follows:

## A. Purpose

The purpose of this policy is to set forth University rules and procedures regarding student travel and to comply with The University of Texas System policy and State Law (Texas Education Code §51.949) relating to student travel. University students may travel off campus when representing a student organization, University department or engaging in intercollegiate competition or academic activities. Examples of student travel include, but are not limited to, class field trips and assignments; attendance at scholarly or professional conferences; University-funded student organization travel; class trips for educational or cultural enrichment; athletic, student publication, dramatic, music or forensic competition or performances; student leadership conferences; placement forums; and graduate school visits.

## B. Authorization

Student travel, as described above, must be registered with and approved by the dean of students or his or her designee. The Authorization for Student Travel and Release of All Claims forms must be completed and submitted to the Office of the Dean of Students at least two weeks prior to the trip. Each individual requesting authorization for travel must submit a completed Release of all Claims Form with the Authorization for Student Travel Form.
C. Statutory Requirements

The statutory requirements in Section D of this policy are applicable to student travel undertaken by one or more currently enrolled students to reach an activity or event that meets all of the following criteria:

1. An activity or event organized and sponsored by the University. An activity or event is considered to be organized and sponsored if it has been planned and funded by the University and approved by the dean of students or his or her designee.
2. The activity or event is located more than 25 miles from the University.
3. (a) Travel to the activity or event is funded and undertaken using a vehicle owned, rented or leased by the University; or (b) attendance at the activity or event is required by a registered student organization and
approved in accordance with this policy.
D. Safety and Mode of Travel
4. All Motor Vehicle Travel
(a) Seat Belts

Occupants of motor vehicles shall use seat belts or other approved safety restraint devices required by law or regulation at all times when the vehicle is in operation. The number of occupants in a vehicle cannot exceed the number of working seatbelts in the vehicle.
(b) Alcohol and Illegal Substance Prohibited

Occupants of motor vehicles shall not consume, possess, or transport any alcoholic beverages or illegal substance. Operators shall not drive while under the influence of drugs or alcohol; this includes over the counter or prescription medication that may impair the driver's ability.
(c) Passenger Capacity

The total number of passengers in any vehicle at any time it is in operation shall not exceed the manufacturer's recommended capacity or the number specified in applicable federal or state law or regulations, whichever is lower. Fifteen-passenger vans shall not be used to carry more than nine occupants (including the driver) at any one time. Consideratiorshould be given to decreasing the number of passengers if luggage is to be transported in the same vehicle; luggage should be stored under seats or in the rear storage area.
(d) License and Training

Each operator of a motor vehicle shall have a valid operator's license, be at least 18 years of age and trained as required by law to drive the vehicle that will be used. Persons who drive a 15-passenger van must successfully complete a van driving training course at least once every three years.

Van driving training is available at the Department of Environmental Health and Safety.
(e) Proof of Insurance, Inspection and Safety Devices

Each motor vehicle to which this policy applies must be covered by liability insurance and display a current state inspection certificate, be equipped with all safety devices or equipment required by federal or state law or regulation and comply with all other applicable requirements of federal or state law or regulations.
(f) Legal Operation of Vehicle and Driving Schedule

Operators of motor vehicles shall comply with all laws, regulations, and posted signs regarding speed and traffic control and shall not operate the vehicle for a continuous period that is longer than the maximum provided by federal or state law. A driver may not drive longer than four continuous hours without a scheduled rest stop. The rest stop must last a minimum of 30 minutes before that same driver may resume driving. Total driving time within a 24-hour period may not exceed
eight hours per authorized driver. There should be no driving between the hours of 11 p.m.-6 a.m. without prior approval of the appropriate administrative official.
2. Travel Using a Vehicle Owned, Rented or Leased by the University
(a) Service and Maintenance

In addition to those provisions in Section F.1, each vehicle owned or leased by the University must be subject to scheduled periodic service and maintenance by qualified persons and comply with all applicable requirements of The University of Texas System Business Procedures Memoranda.
(b) Operators of Vehicles

All operators of vehicles owned, rented or leased by the University shall be employees of the University and shall have a valid operator's license for the operation of the particular vehicle. All drivers of rental vehicles must be listed on the vehicle rental agreement. In addition, operators shall have a current motor vehicle record on file with the University Department of Environmental Health and Safety. Drivers must have a rating of three points or less as required by The University of Texas System Business Procedures Memorandum 16-03O2 Automobile Insurance Coverage for Officers and Employees and General Requirements for the Use of Vehicles (BPM 16-03-02).

When a common carrier is used for student travel covered by this policy, the University shall take reasonable steps to assure the travel is undertaken in conformance with this policy.

## * Student Right to Know and Campus Security Act

## The Student Right to Know and Campus Security

 Act of 1990 requires that colleges and universities take reasonable steps to publicize campus crime statistics. One purpose of this federal legislation is to give students, prospective students, parents of students, employees and others who may be interested a better understanding of the frequency of serious crime on campus and, ultimately, to make this and other campuses safer.The University of Texas-Pan American is concerned about the safety and security of the entire University community. In an effort to provide a safe and secure campus, the University maintains a full-time professional police force composed of state-certified, licensed law enforcement officers, commissioned by The University of Texas System, with the power of arrest, and other noncommissioned security personnel. They patrol the campus 24 hours a day, 365 days a year.

The University Police Department maintains a police
substation at the University Library as well as emergency phones throughout campus with direct lines to the police department. The department also provides escort to and from any location on campus upon request.

All members of the University community should be aware of dangers to their personal safety. Crime happens on campus just as it happens off campus. If someone is the victim of a crime or witnesses a crime, he or she should report it and cooperate with the University Police Department to ensure that the crime is properly investigated and prosecuted.

To report a crime, call the University Police at 956/316-7151. In the event of an emergency, call H-E-L-P (381-4357), or dial 911, 24 hours a day, 365 days a year.

Crimes reported on the UT Pan American campus can be accessed at the following Web address: www.utpa. edu/campussafety.

A hard copy of the UTPA Campus Safety and Security Report can be requested by contacting the UTPA Empowerment Zone at 956/318-5375.

Any law enforcement information provided by state law enforcement agencies concerning registered sex offenders may be obtained from the UT Pan American Police Department at 956/316-7151.

University policies and Texas law prohibit the disruption of University operations and events and regulate the use of alcoholic beverages on campus. Violators will be subject to prosecution under the law and the University's disciplinary code. University policies related to the possession, sale and use of alcoholic beverages on campus are described in The University of Texas-Pan American Student Guide. Copies are available on request in the Office of the Dean of Students, University Center, Room 104.

Other policies that pertain to crime reporting and crime prevention, facilities access and security, authority of police and related matters are contained in the Student Guide and in the University's Handbook of Operating Procedures. All are available from the Office of the Dean of Students. The following offices are also available to assist you:


## * FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

The Family Educational Rights and Privacy Act (FERPA), 20 U.S.C. §1232g, and the Texas Public Information Act, Texas Government Code §552.001 et seq., are respectively federal and state laws that provide for the review and disclosure of student educational records.

In accordance with these laws, The University of Texas-Pan American has adopted the following policy. Individuals are informed of their rights under these laws through this policy, which is included in the University's Handbook of Operating Procedures (HOP), Section 5.2.3 and this catalog. The catalog is available for inspection at http://www.utpa.edu/catalog/ and the Handbook of Operating Procedures is available at http://www.utpa. edu/hop.

The University will not permit access to or the release of personally identifiable information contained in student education records without the written consent of the student to any party, except as follows:

1. To appropriate University officials who require access to educational records in order to perform their legitimate educational duties.
2. To officials of other schools in which a student seeks or intends to enroll, is enrolled in or receives services from, upon request of these officials.
3. To federal, state or local officials or agencies authorized by law.
4. In connection with a student's application for, or receipt of, financial aid.
5. To accrediting organizations or organizations conducting educational studies, provided that these organizations do not release personally identifiable data and destroy such data when it is no longer needed for the purpose for which it was obtained.
6. To the parents of a dependent student as defined in section 152 of the Internal Revenue Code of 1954. This is for financial Aid records only and does not include academic records.
7. In compliance with a judicial order or subpoena provided a reasonable effort is made to notify the student in advance, unless such subpoena specifically directs the institution not to disclose the existence of a subpoena.
8. In an emergency situation if the information is necessary to protect the health or safety of students or other persons.
9. To an alleged victim of any crime of violence, the results of the alleged perpetrator's disciplinary proceeding may be released.

Additionally, any law enforcement information provided by state law enforcement agencies concerning registered sex offenders may be released from the UT Pan American Police Department. The police department can be contacted at 956/316-7151.

The University will release information in student education records to appropriate University or University of Texas System officials as indicated in no. 1 above when there is a legitimate educational interest. A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor or collection agent); a person serving on The University of Texas System Board of Regents; or a student serving on an official committee or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility.

Upon request, the University discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

Where required by regulations, a record of requests for disclosure and such disclosure of personally identifiable information from student education records shall be maintained by the custodian of the public record for each student and will also be made available for inspection pursuant to this policy. If the University discovers that a third party who has received student records from the university has released or failed to destroy such records in violation of this policy, the university will determine any future access by that third party and may take further appropriate action. Respective records no longer subject to audit nor presently under request for access may be purged according to regular schedules.

## * DIRECTORY INFORMATION

At its discretion, the University may release directory information which shall include:

1. name, address, telephone number
2. date and place of birth
3. major field of study
4. participation in officially recognized activities and sports
5. dates of attendance
6. most recent previous educational institution attended
7. classification
8. degrees and awards received
9. date of graduation
10. physical factors (height and weight) of athletes
11. photographs
12. University e-mail address

Students may have any or all directory information withheld by notifying the Office of the Registrar in writing. Requests for nondisclosure will be honored by the institution until such time that the student grants permission, in writing, to release the information.

## $\star$ Access to File

Upon written request, the University shall provide a student with access to his or her educational records. The Vice President for Business Affairs at UT Pan American has been designated by the institution to coordinate the inspection and review procedures for student education records, which include admissions files, academic files and financial files. Students wishing to review their education records must make written requests to the Vice President for Business Affairs listing the item or items of interest. Education records covered by the Act will be made available within 45 days of the request.

A list of education records and those officials responsible for the records shall be maintained at the Office of the Vice President for Business Affairs. This list includes:

- Academic Records

Office of Admissions and New Student Services:
SSB 109
Office of the Registrar:
Registrar, SSB 1.150
College, Division, Department and Faculty Offices

- Enrollment and Student Services/

Student Services Records
Counseling Services Office: Director, SSB 513
Student Services: Dean of Students Office, UC 104
Residence Life: Director, MRH
Office of Career Services: Director, SSB, Second Floor

- Financial Records

Business Office: Vice President for Business Affairs, SSB, Fifth Floor
Student Financial Services: Director, SSB 186
Educational records do not include:

1. Financial records of the student's parents or guardian.
2. Confidential letters of recommendations that were placed in the educational records of a student prior to January 1, 1975.
(FERPA) concerns the maintenance and confidentiality of student records. The University's policy regarding FERPA may be found in the Student Guide, the Handbook of Operating Procedures and page 83 of this catalog. Students who believe their records are inaccurate or have been disclosed in an unauthorized manner should contact the vice president for Business Affairs, Student Services Building, Fifth Floor, 956/381-2121.

## $\underset{\sim}{\sim}$ All OTHER NON-ACADEMIC Complaints

In an effort to resolve misunderstandings or concerns, a student must first make every effort to resolve the problem by discussing his or her concerns with the faculty or staff member against whom the complaint is lodged. If the concern still exists, the student may discuss the complaint with the appropriate chair or head of the department in which the complaint originated. Additional appeals may be pursued through administrative channels. Students should consult "Student Complaint Procedures" in the Student Guide or Handbook of Operating Proceduresfor detailed information or request assistance from the Office of the Dean of Students, University Center, Room 104, 956/381-2262.

## $\hat{\sim}$ STUDENT ADVISEMENT FOR CONCERNS/COMPLAINTS

The Office of the Dean of Students in University Center, Room 104, offers assistance to students who have concerns or complaints other than those addressed above, or who have questions regarding existing policies and procedures.

## STUDENT CONDUCT AND DISCIPLINARY CODE

All students at The University of Texas-Pan American are subject to the rules and regulations governing student conduct and discipline as described in the UT Pan American Student Guide and Handbook of Operating Procedures and in Part One, Chapter VI, Section Three of the Rules and Regulations of the Board of Regents of The University of Texas System. These documents are available for review in the University Library, the Office of the Dean of Students and the Office of the Vice President for Enrollment and Student Services.

## $\star$ HAZING

Hazing is both a violation of University policy and a criminal offense (Sections 37.151 et seq. and 51.936, Texas Education (ode) and may result in arrest and prosecution by civil authorities as well as disciplinary action pursuant to the Regents' Rules and Regulations (Part One, Chapter VI, Sections 3.28 and 3.6) and the University'sHandbook of Operating Procedures, Section 6.4.1.

Hazing with or without the consent of a student is prohibited by the University and by the UT System. Both the hazer and victim are subject to discipline.

According to state law, a person can commit a hazing offense not only by engaging in a hazing activity, but also by soliciting, directing, encouraging, aiding or attempting to aid another in hazing; by intentionally, knowingly or recklessly allowing hazing to occur; or by failing to report in writing to the dean of students or other appropriate individual of the institution firsthand knowledge that a hazing incident is planned or has occurred. The fact that a person consented to or acquiesced in a hazing activity is not a defense to prosecution for hazing under the law.

In an effort to encourage reporting of hazing incidents, the law grants immunity from civil or criminal liability to any person who reports a specific hazing event to the dean of students or other appropriate individual of the institution and immunizes that person from participation in any judicial proceeding resulting from that report. The penalty for failure to report is a fine of up to $\$ 1,000$, up to 180 days in jail, or both. Penalties for other hazing offenses vary according to the severity of the injury which results in fines from \$5,000 to $\$ 10,000$ and/or confinement for up to two years. The law does not affect or in any way restrict the right of the University to enforce its own rules against hazing.

The law defines hazing as any intentional, knowing, or reckless act, occurring on or off the campus of an educational institution, by one person alone or acting with others, directed against a student, that endangers the mental or physical health or safety of a student for the purpose of pledging, being initiated into, affiliating with, holding office in or maintaining membership in any organization whose members are or include students at an educational institution.

Hazing includes, but is not limited to:

- Any type of physical brutality, such as whipping, beating, striking, branding, electric shocking, placing of a harmful substance on the body or similar activity.
- Any type of physical activity, such as sleep deprivation, exposure to the elements, confinement in a small space, calisthenics or other activity that subjects the student to an unreasonable risk of harm or that

3. Records of instructional, administrative and educational personnel that are kept in the sole possession of the maker and are not accessible or revealed to any other individual except a temporary substitute for the maker.
4. Records of law enforcement units.
5. Employment records related exclusively to an individual's employment capacity.
6. Medical and psychological records.
7. Thesis or research papers.
8. Records that only contain information about an individual after the individual is no longer a student at the institution.

## Challenge to Record

Students may challenge the accuracy of their educational records. Students who believe that their educational records contain information that is inaccurate or misleading, or is otherwise in violation of their privacy or their rights, may discuss their problems informally with the department that generated the record in dispute. If an agreement is reached with respect to the student's request, the appropriate records will be amended. If an agreement is not reached, the student will be notified within a reasonable period of time that the records will not be amended, and he or she will be informed by the head of that department of his or her right to a formal hearing.

Students' requests for a formal hearing must be made in writing to the vice president for Business Affairs who, within a reasonable period of time after receiving such requests, will inform students of the date, place and the time of the hearing. Students may present evidence relevant to the issues raised and may be assisted or represented at the hearings by one or more persons of their choice, including attorneys, at the student's expense. The hearing officer who will adjudicate such challenges will be appointed by the vice president for Business Affairs in non-academic matters and by the Provost/Vice President for Academic Affairs in academic matters.

Decisions of the hearing officer will be final, will be based solely on the evidence presented at the hearing, will consist of the written statements summarizing the evidence and stating the reasons for the decisions, and will be delivered to all parties concerned. The education records will be corrected or amended in accordance with the decision of the hearing officer, if the decision is in favor of the student. If the decision is unsatisfactory to the student, the student may place with the education records statements commenting on the information in the records or statements setting forth any reasons for disagreeing with the decision of the hearing officer, or both.

The statements will be placed in the education records, maintained as part of the student's records and released whenever the records in question are disclosed.

Students who believe that the adjudications of their challenges were unfair or not in keeping with the provisions of the Act may request, in writing, assistance from the president of the University.

## COPIES

Students may have copies of their educational records and this policy. These copies will be made at the student's expense at rates authorized in the Texas Public Information Act. (There is no charge for student transcripts.) Official copies of academic records or transcripts will not be released for students who have a delinquent financial obligation or financial "hold" at the University.

## î COMPLAINTS

Complaints regarding alleged failures to comply with the provisions of the FERPA may be submitted in writing to the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue SW, Washington, D.C. 20202-4605.
$\star$ StUDENT ACADEMIC RESPONSIBILITIES AND APPEALS

## ~ ACADEMIC RESPONSIBILITIES

Students are expected to inform themselves thoroughly concerning the regulations of the University and the course requirements for degrees and to make inquiries in case of doubt. It shall not be the University's responsibility should complications arise because of failure to follow regulations and requirements.

Regulations will not be waived nor exceptions to requirements made on a plea of ignorance of the regulation or requirement. Students, therefore, should become familiar with all of the information related to the program contained in the printed University Bulletins.

Each student, by registering, enters some college of the University and, except as to conduct, is thereafter under its jurisdiction with regard to the student's program of study and degree requirements. Students should work directly with the person in their major department who is assigned the responsibility of supervising their programs concerning course requirements and options, deficiencies, degree plan and special regulations. Requests to waive regulations and/or requirements should be directed in
writing to the dean of the college.

Zu ACADEMIC APPEALS

Periodically, misunderstandings arise with regard to academic expectations and final grades. Students wishing to appeal final grades or misunderstandings in academic standards should first discuss the matter with the instructor of the class. If no resolution occurs, and the student wishes to pursue the matter further, he or she should appeal in writing to the department chair involved. The department chair will respond in writing to the student within 10 class days of the receipt of the student's written appeal.

Pursuant appeals will be written and directed within 10 class days of the date of the department chair's decision to the College Academic Appeals Committee. The committee will consist of a panel of three faculty members, two of whom may not be from the department in which the appeal originated. The dean of the college will appoint the panel members upon receipt of the written appeal and notify the student in writing of the date, time and location of the hearing and the names of the members of the panel. The student and the faculty member involved may appear in person before the panel and present evidence and/or witnesses. The hearing will be closed to the public and no person other than the student, the faculty member involved and panel members may be present. No person may represent the student or the faculty member.

After the College Academic Appeals Committee has heard the appeal, it will deliberate and come to a decision. The committee's decision will be written and mailed or delivered in person to the student and faculty member within three class days of the close of the hearing. The student may appeal in writing within 10 class days to the dean. The dean's decision will be final and must be mailed or delivered in person to the student within 10 class days of the receipt of the student's written appeal. This policy may be found in the Student Guide.

## $\star$ Student Complaint PROCEDURES

## PURPOSE

The University of Texas-Pan American endeavors to provide fair and objective procedures for hearing student complaints and endorses compliance with the spirit of non-discrimination regulations. The following will advise students of procedures to be followed in filing non-
academic complaints.

## DISCRIMINATION/DISABILITY COMPLAINTS

Students with questions concerning discrimination in employment or based on sex or disability must contact the appropriate compliance officer prior to initiating grievance procedures. Compliance officers are listed below:

1. Title IX (non-discrimination on the basis of sex): Student inquiries or complaints concerning Title IX or discrimination on the basis of sex may be presented to the director of the department in question or to the Dean of Students (Compliance Officer), University Center, Room 104, 956/381-2262.
2. Sexual Harassment: The University of TexasPan American condemns sexual harassment of its students, staff and faculty. Sexual harassment is a form of sexual discrimination and is illegal. Students who believe they have been subjected to sexual harassment are encouraged to immediately report the incident to the Dean of Students, University Center, Room 104, 956/381-2262. The University's policy concerning sexual harassment may be found in the Student Guide and the Handbook of Operating Procedures.
3. AIDS-Related Issues:Students may not be subjected to impermissible discrimination on the basis of Acquired Immune Deficiency Syndrome (AIDS) or Human Immunodeficiency Virus (HIV). The policy addressing AIDS-related issues may be found in the Student Guide and the Handbook of Operating Procedures. Student complaints or inquiries should be directed to the director of Student Health Services, Emilia Schunior Ramirez Hall, Room 1.105, telephone 956/381-2511.
4. Section 504 of the Rehabilitation Act/Americans with Disabilities Act: The University of Texas-Pan American provides for the prompt and equitable resolution of complaints alleging violations of these acts, including complaints regarding a refusal to provide requested accommodations and auxiliary aids or services and programs that are perceived to be inaccessible. Students should address ADA or Section 504 complaints to:

The University of Texas-Pan American ADA Coordinator 1201 W. University Drive Edinburg, TX 78539-2999
Telephone:956/381-2127

## Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act

## STUDENT RIGHTS AND RESPONSIBILITIES, STUDENT SERVICES

adversely affects the mental or physical health or safety of the student.

- Any activity involving consumption of food, liquid, alcoholic beverage, liquor, drug or other substance which subjects the students to an unreasonable risk or harm or which adversely affects the mental or physical health of the student.
- Any activity that intimidates or threatens the student with ostracism, that subjects the student to extreme mental stress, shame or humiliation, or that adversely affects the mental health or dignity of the student or discourages the student from entering or remaining registered in an educational institution, or that may reasonably be expected to cause a student to leave the organization or the institution rather than submit to acts described in this subsection.
- Any activity that induces, causes or requires the student to perform a duty or task which involves a violation of the penal code.


## $\star$ SOliCITATION ON CAMPUS

The University's policy on solicitation is outlined in The University of Texas System Regents' Rules and Regulations, Part One, Chapter VI.6.6. (The term "solicitation" means the sale, lease, rental or offer for sale, lease, rental of any property, product, merchandise, publication or service, whether for immediate or future delivery; an oral statement or the distribution or display of printed material, merchandise or products that is designed to encourage the purchase, use or rental of any property, product, merchandise, publication or service; the oral or written appeal or request to support or join an organization other than a registered student, faculty, or staff organization; the receipt of or request for any gift or contribution; or the request to support or oppose or to vote for or against a candidate, issue or proposition appearing on the ballot at any election held pursuant to state or federal law or local ordinances.)

In a time when heavy academic emphasis is being placed on career-oriented programs, UT Pan American's Office of Career Services is an important component of any student's preparation.

Through this office, students gain new insight into their future career plans, different job opportunities, average pay scales and other useful information. The Career Information Center is located in the office and is available to any interested student.

The UT Pan American Office of Career Services places students in jobs in three ways. During the students' college years, the office will assist them in locating parttime employment. An internship or co-op assignment is strongly encouraged during the sophomore and junior years for any student wishing to improve his job marketability. Then as they approach graduation, the office helps connect them with prospective employers. Many major corporations, government agencies and other top employers recruit at UT Pan American each year.

Placement: A placement credential service, an online resumé service and on-campus employment interviews are available for seniors. Special activities are also held for all UT Pan American students and alumni in preparation for the career search. These include Career Day, Teacher's Job Expo, Health Professions Career Day, Graduate and Professional School Fair, Engineering and Computer Science Career Day and job preparation workshops, as well as other activities.

Career Information Center: The Career Information Center houses a computer/printer with Internet capability to assist students in conducting company research; a kiosk sponsored by U.S. Customs facilitates student access to all federal government jobs; sources of occupational information; registers and directories; information on hundreds of different companies, school districts and government agencies; fellowship/ scholarship information; and graduate/professional school catalogs. Computers are available to assist with company research.

Student Employment Program: A number of local businesses and agencies contact the office seeking students for part-time or full-time employment. The Student Employment Program operates as a referral system to match these employers with UT Pan American students. International students are required to apply through the international student advisor in the Communication Arts and Sciences Building, Room 125, telephone 956/381-2922.

Cooperative Education Program: The Cooperative Education (Co-op) Program at UT Pan American offers students an opportunity to gain work experience in an employment situation directly related to their major course of study.

The Co-op Program has three options:

- Alternating/Full-time - Students alternate semesters or six-month terms of full-time work with fulltime study.
- Paral/el/Part-time - Students work parttime, usually 25 hours or less, while continuing to take classes.
- Summer Internship - Students work during the summer months on a full-time basis.

To be eligible to participate in the Co-op Program, students must:

- Have completed a minimum of 30 semester credit hours.
- Maintain at least a 2.0 grade point average.
- Be enrolled at least halftime (six hours).
- Either be currently enrolled, or have been enrolled the previous semester and be registered for the upcoming semester.

The co-op student may be eligible to receive academic credit for his or her co-op work assignment in ART 4391, COMM 3623, COMM 3627, CRIJ 4402, GENB 2346, POLS 2343 and POLS 3185. Refer to the course descriptions in the academic departments section of this catalog for more information.

> The Office of Career Services Student Services Building, Second Floor 1201 W. University Drive Edinburg, TX 78539-2999
> Telephone: 956/381-2247
> E-mail: career_place@utpa.edu Web site: careerservices.utpa.edu

## $\star$ High School TO UNIVERSITY SERVICES

The Office of High School to University Services promotes educational excellence in local public schools by providing University resources and services to support a wide variety of programs and activities. These initiatives are designed to encourage students to pursue high levels of academic achievement in high school and to help prepare them for success in college and beyond.

The Advanced Placement Summer Institutes prepare high school and middle school teachers to teach Advanced Placement and Pre-AP courses. These intensive weeklong training sessions are sponsored by the University in cooperation with the College Board.

Advanced Placement Summer Institutes UTPA Annex, 2412 S. Closner

> Edinburg, TX 78539-2999
> Telephone: 956/292-7570

The Concurrent Enrollment program allows outstanding high school juniors and seniors to enroll in University courses and receive college credit. Concurrent Enrollment opportunities are offered through both distance learning and on-campus attendance programs. The High School to University Program makes tuition incentives available to qualified students from participating school districts.

> Concurrent Enrollment
> UTPA Annex, 2412 S. Closner
> Edinburg, TX $78539-2999$
> Telephone:956/292-7570
> E-mail: ce@utpa.edu

Texas Scholars, an initiative of the Texas Business and Education Coalition, encourages secondary students to enroll in challenging courses and to complete the Recommended high school curriculum. UT Pan American supports the program by serving as a resource for school districts and by providing incentives to students.

Texas Scholars
UTPA Annex, 2412 S. Closner
Edinburg, TX 78539-2999
Telephone: 956/292-7570
The Training for Educators program provides a wide variety of in-service training opportunities for professionals and paraprofessionals employed in the field of education. Non-credit courses, workshops and certificate programs are available for teachers, counselors and substitute teachers.

> Training for Educators
> UTPA Annex, 2412 S. Closner
> Edinburg, TX $78539-2999$
> Telephone: $956 / 292-7570$

## $\star$ University Testing Services

The University Testing Services offers numerous national and institutional examinations such as the American College Test (ACT), Scholastic Assessment Test (SAT), Graduate Record Exam (GRE), Graduate Management Admissions Test (GMAT), Law School Admissions Test (LSAT), Medical College Admission Test (MCAT), Texas Success Initiative (TSI), Quick THEA, Test of English as a Foreign Language (TOEFL), Institutional

TOEFL, College Level Examination Program (CLEP), Local Advanced Standing Exam (LASE), Miller Analogies Test (MAT), TExES Qualifying Exam and a number of others.

University Testing Services<br>UTPA Annex, 2412 S. Closner<br>Edinburg, TX 78539-2999<br>Telephone: 956/292-7584 or 7585<br>E-mail: testing@utpa.edu

## $\star$ New Student Orientation

All entering freshmen and transfer students are required to participate in a New Student Orientation Program. The orientation program is conducted by the Admissions and New Student Services and is a retention initiative designed to connect new students to UTPA.

Our mission is to introduce new students and their family members to the University. During orientation new students and their families receive a campus tour and are introduced to faculty, academic advisors, curricular and degree requirement information and course registration. Students also receive information about student life, cultural and athletic events, and information regarding accessing student services such as tutoring, student health, counseling and campus events.

To ease their transition from high school to university with few difficulties, each student is given a New Student Planner. An additional Family Orientation is also part of the orientation program. New Student Orientation recognizes that family plays a strong role in the success of our students. By allowing family members to participate in the orientation program their students become acclimated to their new environment more quickly.

New Student Orientation programs are held during late fall for spring semester enrollment and in late spring and early summer for both summer sessions and fall semester enrollment. A fee of \$50 is assessed to each new student participating in the orientation program. A nonrefundable $\$ 15$ portion of this fee is required to reserve a seat for each orientation session. Once an academic schedule has been made the balance of $\$ 35$ is applied to the student's tuition account.

## Services for Persons WITH DISABILITIES

The Office of Services for Persons with Disabilities (OSPD) is designed to provide supportive services that meet the educational, career and personal needs of
persons with disabilities who attend or plan to attend UT Pan American.

Major program responsibilities include:

- Identifying persons with disabilities, verifying disabling condition(s) and determining and providing appropriate accommodations to meet students' needs.
- Promoting full utilization of existing resources, full participation and enjoyment of the University environment, and the development of better, more effective methodologies for meeting special needs.
- Increasing service and disability awareness among UT Pan American students, faculty, staff and the general public.
- Promoting and assisting with the development of "accessible" programs and facilities at UT Pan American.

Persons with disabilities requiring information or services are encouraged to contact the OSPD as early as possible. Requests for services must be accompanied by professional assessments/reports not more than three years old from individuals qualified to diagnose the disability involved.

Additional information may be obtained by calling 956/316-7005 (Voice/TDD 316-7092, fax 316-7034) or visiting Emilia Schunior Ramirez Hall, Room 1.101.

## * Student Health Services

Student Health Services is here to meet the health care needs of our students so they can focus on their studies. As a UTPA student you have paid a Medical Service Fee that allows you to be seen at the clinic as often as needed. The office visits are free of charge as are most educational services. There are low cost charges for medicines, supplies and any needed lab tests.

The Student Health Cinic offers the same types of services you can get from your family doctor and much more. Our services include general medical care as well as specialty clinics in women's wellness, skin care and STD screening. We also have routine immunizations and tuberculosis (TB) testing required by many educational programs at UTPA. Our Class D pharmacy can fill most prescriptions written in the clinic and carries a selection of over-the-counter items.

Student Health Services has moved from its current location on the first floor of Emilia Schunior Ramirez Hall to a new facility adjacent to the Wellness and Recreational Sports Center. We see students on a limited walk-in basis but you will spend less time waiting and be allowed to choose your health care provider if you call ahead for an appointment at 956/381-2511.

The UTPA Student Health Services is accredited by the Accreditation Association for Ambulatory Health

Care (AAAHC). UTPA has the distinguished honor to be the first in the UT System to hold the AAAHC accreditation. There are currentlly only six college health facilities accredited in the state of Texas.

## $\underset{\sim}{\imath}$ SERVICES OFFERED

Eligibility Payments: As a registered student, you pay a Medical Service Fee each semester, which entitles you to a wide variety of Student Health Services. With a validated UTPA ID, you are entitled to office visits to see a health care provider as many times per semester as you need with no office visit charge. There are charges for many services and procedures to diagnose and treat illnesses and injuries, such as for laboratory and pharmacy services, but these charges are much lower than those for comparable services provided elsewhere. Services rendered may be paid by cash, check and most credit cards. Payment arrangements are available.

General Medicine: Students with common medical problems are diagnosed and treated on a limited walkin basis; however, appointments are preferred and necessary for students requesting elective procedures. Referrals to outside providers are made when necessary.

Physical Exams: UTPA students requiring a physical exam prior to admittance to a school program can have a physical exam done at Student Health Services for a nominal fee. Call Student Health Services to schedule an appointment.

Pharmacy: A fully licensed Class D pharmacy is conveniently available. The pharmacy carries both prescription and over-the-counter medications. The costs of medications are greatly reduced compared to retail prices.

Laboratory: A full-service, economical lab is equipped to do routine procedures as well as specimen collections for more sophisticated procedures that must be sent to a reference lab for testing.

Immunization: measles/mumps/rubella, tetanus/ diptheria, hepatitis $A$ and $B$, varicella, meningitis and flu vaccines are available. TB skin testing is also offered.

Women Wellness Clinics: These services include Pap smears, family planning education and counseling, treatment of sexually transmitted diseases, pregnancy testing and other women's health issues.

HIV Testing: Free confidential HIV testing and counseling is available weekly. Call for scheduled days.

Other Services: Health education resources, nutritional counseling, vision screenings and weight and blood pressure screenings are also available.

## $\star$ EMPOWERMENT ZONE: Substance Abuse Services

Substance Abuse Services has been established to meet the needs of all UT Pan American students who may have a substance abuse concern/issue or who may be dealing with a related concern. The Drug-Free Schools and Communities Act Amendments of 1989, Public Law 101-226, require that each campus implement a program to address substance abuse issues.

Substance Abuse Services is committed to all UT Pan American students by providing an environment for education, exploration and personal growth. The Substance Abuse Services staff maintains a dedication to the overall wellness of each student on campus. Substance Abuse Services strives to fulfill its responsibilities by providing a variety of different services to the student body. Some of these services include, but are not limited to, counseling, crisis intervention and consultations. In addition, Substance Abuse Services has books, videos and literature available to faculty, staff and students.

The Substance Abuse Services staff is fully trained and licensed in chemical dependency and related issues. All of the services offered are strictly confidential, and services are free to all students.

The program offers individual counseling for students who are experiencing a substance abuse problem or who may be in recovery. All individual counseling is by appointment. Substance Abuse Services also provides group counseling through a campus recovery group. Groups are run once a week at designated times. The staff is available for referrals, consultations, group presentations and crisis intervention services.

Substance Abuse Services is located in the University Center, Room 305, telephone 956/318-5375. Substance Abuse Services is open from 8 a.m. to 5 p.m., Monday through Friday and by appointment.

## $\star$ STUDENT PUBLICATIONS

Students at UT Pan American are invited to contribute and work on the staff of student publications. Writing, editing and photography usually start before the opening of classes in the fall semester. Some positions are paid, but volunteer workers also are sought as reporters, copyreaders and headline writers. The studentrun newspaper, The Pan American, and Panorama magazine are headquartered in the Department of

Communication in the Communication Arts and Sciences Building, Room 170, telephone 956/381-2541, fax 956/3167122, Web page: http://www.utpa.edu/dept/panamerican.

## $\star$ Clubs and Organizations

A variety of clubs and organizations offer the UT Pan American student friendship, relationships with people of similar interests, avenues for organized and meaningful service and opportunities for selfdevelopment. Because new organizations are formed each year, a complete updated list - and assistance in starting up new organizations - is available in the Office of Student Development, University Center, Room 205, telephone 956/381-2660.

- UTPA Fraternities

Delta Upsilon
Kappa Sigma
Omega Delta Phi
Phi Kappa Theta
Phi Sigma Kappa
Sigma Lambda Beta
Tau Kappa Epsilon

- UTPA Honor Societies

Alpha Lambda Delta
Alpha Phi Sigma
Golden Key International Society
Lambda Alpha
Phi Kappa Phi
Phi Theta Kappa Alumni Association
Psi Chi
Sigma Tau Delta

- UTPA Faith and Spiritual Organizations

Provide an opportunity for people with similar belief systems to share their values, ideas and faith.

- UTPA Government Association
- UTPA Sororities

Alpha Sigma Tau
De Ha Xi Nu
Delta Zeta
Eta Omega Tau
Kappa Delta Chi
Sigma Lambda Gamma

- UTPA Special Interest Organizations

Reflect a wide range of interests and include political and social action-based organizations, artistic experiences, hobbies and activities.

UTPA Multicultural Organizations
Represent and reflect UTPA's ethnic and international diversity.

## UTPA Departmental Organizations

Accounting Society
ACTUE
Advertising Club
ALEGRE
Alpha Kappa Psi
American Advertising Federation
American Marketing Association
American Sign Language Club
American Society of Mechanical Engineers
Anthropology Club
Asociación de Futuros Maestros de Español
Association for Computing Machinery
Association of Clinical Laboratory Sciences
Association of Information Technology Professionals
Association of Public Administration
Bilingual Education Student Organization
Biology Club
Bronc Cadet Club
Bronc Pre-Pharmacy Club
Criminal Justice Association
Dr. Wiener's Society of Mathematics
Elliott Chemical Society
Financial Management Association
Forum on International Relations
and Business Affairs
French Club
Graduate Association of Student Social Workers
Health and Kinesiology Club
History Club
Institute for Electrical and Electronic Engineers
Julian Castillo Association of Physical Assistants
MBA Association
Music Educator National Conference (Chapter 652)
National Student Speech Language and Hearing Association
Philosophy Club
Political Science Association
Pre-Law Society
Pre-Med/Bio-Med Club
Psychology Club
Public Relations Student Society of America
Rehab Club
Residence Hall Association
Social Work Association
Society for Human Resource Management
Society for Manufacturing Engineers
Society of Automotive Engineers
Society of Hispanic Professional Engineers
Society of Women Engineers
Sociology Club

Student Council of Exceptional Children Student Dietetics Association Students in Free Enterprise Student Nursing Organization Student Occupational Therapy Association University Program Board UT Cares

## $\star$ The Office of Residence Life: Student Housing

The University experience is about trials and triumphs in the classroom, as well as friendships made and new ideas explored throughout your college career. A college career can be very exciting, but also has its own special challenges.

The Residence Life staff at UTPA invites you to join our residence life community to help through this transition and assist you in taking full advantage of all the resources the University offers. While living on campus, you will have a tremendous opportunity to learn more about yourself, others and the world around you. Whether you are beginning your collegiate experience or continuing your education, Residence Life encourages you to consider the many benefits of campus living.

NOTE: Residence Life opening and closing dates, and all fees for room and board rates are subject to change. Please verify all of this information with the Office of Residence Life at 956/381-3439. For reservation and other information on University residence halls and the Bronc Village Apartments, contact the:

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The University of Texas-Pan American Office of Residence Life 1201 W. University Drive Edinburg, TX 78539-2999
Telephone: 956/381-3439
Fax: 956/384-5055
E-mail: home@utpa.edu
Web page: http://www.utpa.edu/reslife
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## Residence Halls

## Contract Policy

Housing at the UTPA Residence Halls is available for UTPA students, faculty, staff and participants of University-sponsored programs. Individuals seeking housing accommodations at the University must sign a Residence Hall Reservation Agreement and a Room and Board Contract on a semester basis. Space in the

University Residence Halls is reserved on a first-come, first-served basis.

## - Housing Dining Services

The University Cafeteria, part of the University Center complex, is conveniently located southeast of the Residence Halls. All residents must purchase the minimum required meal plan per semester, which is included in the room and board fee.

## - Room Furnishings

Each Residence Hall is designed in suite-style configurations. Two adjacent rooms and a bathroom comprise one suite. Residents are responsible for providing their own bed linen, blankets, towels and toiletries. Room contents include:

- Two chests of drawers
- Two single beds
- Two closets
- Two desks and chairs
- Window blinds
- Basic cable connection
- Central air and heat
- Individual Ethernet connections
- Residence Hall Services

For your convenience, the UTPA Residence Halls provide the following in-house services:

- Study rooms
- Computer labs with network extension
- Laundry facilities
- Vending machines
- Community kitchenette and microwave
- Recreation room (with pool table, foosball, air hockey table and cable television)
- Lounges
- Refrigerator rental
- Free on-site student parking

Safety and Security
Providing a safe living and learning environment for University residents is our foremost mission. To that end, the Residence Life staff coordinates various safety programs for residents throughout the year highlighting topics such as securing personal belongings, personal safety on and off campus, and the use of University Police escorts. In addition, resident and night assistants, trained in emergency procedures, are available to assist residents when necessary.

- How to Apply

To reserve a room, complete a Residence Hall
Reservation Agreement and return it with a deposit to:

## The University of Texas-Pan American Office of Residence Life 1201 W. University Drive Edinburg, TX 78539-2999

The deposit is held by UTPA for as long as you are housed in the residence halls and is transferable from semester to semester. Deposits are refunded within two to three weeks upon official check out or cancellation of the Residence Hall Reservation Agreement provided that all deadlines are met, procedures are followed, no damage to the facility is recorded and no extra room cleaning is required.

## BRONC VILLAGE ApARTMENTS

Leasing Policy
Housing at Bronc Village is available for enrolled UTPA students and current faculty and staff only. The only exception to this policy relates to children and spouses of current UTPA students, faculty, or staff. Individuals seeking housing accommodations at Bronc Village must sign a Bronc Village Reservation Agreement. Space in Bronc Village is reserved on a firstcome, first-served basis.

In order to be eligible for residency at Bronc Village, students must be at least 21 years of age.

Appropriate documentation must be presented in the case of married or family housing if the spouse and/ or children are not current UTPA students, or faculty or staff members.

## - Dining Services

All Bronc Village residents must purchase at least the minimum declining balance meal plan for each fall and spring semester; the meal credit can be used at the University Cafeteria, Student Union Food Court, and for food items and the Student Union Convenience Store.

## - Room Furnishings

Bronc Village rooms and living room areas are furnished for the convenience and comfort of our residents. Room contents (per resident) include:

- One single bed
- One chest of drawers
- One built-in closet
- One desk and chair
- Individual network connections
- Sofa
- Chair
- Multi-use cube
- End table

- Dishwasher
- Conventional microwave
- Stove/oven
- Full-size refrigerator
- Washer/dryer units
- Bronc Village Services
- Mail delivery
- Garbage collection
- Free on-site student parking


## - Safety and Security

Providing a safe living and learning environment for University residents is our foremost mission. To that end, the Residence Life staff coordinates various safety programs for residents throughout the year, highlighting topics such as securing personal belongings, personal safety on and off campus and the use of University Police escorts. In addition, community assistants, trained in emergency procedures, are available to assist residents when necessary.

How to Apply
To reserve an apartment space, complete a Bronc Village Reservation Agreement (click on the form button) and return it with a deposit to:

The University of Texas-Pan American Office of Residence Life 1201 W. University Drive Edinburg, TX 78539-2999

The deposit is held by UTPA for as long as you are housed in Bronc Village and is transferable from lease term to lease term. Deposits are refunded within two to three weeks upon official check out or cancellation of the Bronc Village Reservation Agreement provided that all deadlines are met, procedures are followed, no damage to the facility is recorded and no extra room/apartment cleaning is required.

## * DEPARTMENT OF COLlEGE ACCESS AND SUPPORT PROGRAMS

The Department of College Access and Support Programs (CASP) serves select populations of students traditionally underrepresented in higher education by promoting the completion of secondary education, facilitating the acquisition of skills for academic success and providing postsecondary education access and
transition services. Emilia Schunior Ramirez Hall, Room 2.207, telephone 956/381-2521. The following programs comprise CASP:

The College Assistance Migrant Program (CAMP) is a federally-funded program designed to meet the special educational needs of migrant and seasonal farmworkers in pursuing higher education. CAMP program provides outreach, recruitment, academic, supportive and financial assistance to migrant and seasonal farmworkers to help them successfully complete the first academic year of college and to continue in postsecondary education. Additional services include academic advising, monthly stipend, tutoring, personal counseling, career development, life management skills development and educational/cultural trips. Learning Assistance Center, Room 156, telephone 956/318-5333.

Educational Talent Search (ETS) is a federally-funded early intervention outreach program which serves first-generation college potential and/or low-income participants in grades six through 12. The program's objective is to assist participants in the acquisition of skills that will prepare them for entry into the college of their choice. Participants receive a variety of services which include, but are not limited to, counseling, academic advisement, assistance with financial aid and admissions, study skills, career exploration, interest inventories, visits to postsecondary institutions and educational/cultural trips. UTPA Annex, Room 182, telephone 956/292-7590.

The High School Equivalency Program (HEP) is a federally-funded program offering preparatory classes, testing and placement in employment or postsecondary education for migrant or seasonal farmworkers who dropped out of high school and wish to acquire a GED. Services include academic advising, monthly stipend, tutoring, personal counseling, career development, life management skills development and educational/ cultural trips. Emilia Schunior Ramirez Hall, Room 2.207, telephone 956/381-2521.

The Mother-Daughter Program recruits seventh-12th grade young women and their mothers to participate in creative pre-collegiate strategies that prepare them for success in a postsecondary setting. UTPA Annex, Room 182C, telephone 956/292-7597.

The Texas Prefreshman Engineering Program (TexPREP) identifies high achieving middle and high school students with the potential and interest in becoming engineers and scientists to guide them toward acquiring the knowledge and skills required for success in their professional aspirations. Math and General Classroom Building, Room 3.218, telephone 956/381-3634.

Upward Bound is a federally-funded academic enhancement program designed to assist first-generation college potential and/or low-income high school
students in developing their potential for success in a postsecondary institution through classroom instruction during the academic year and a five-week summer component on the UTPA campus. Tutoring is offered at host schools and students are also eligible for stipends. Emilia Schunior Ramirez Hall, Room 2.202, telephone 956/381-2596.

The Upward Bound Math and Science (UBMS) Program is a federally funded academic enhancement program designed to encourage first-generation college potential and/or low-income high school students to pursue studies and careers in mathematics, science and engineering through classroom instruction and research mentorships under faculty and graduate students during a five-week summer component on the UTPA campus, supplemented by advisement and college success skills sessions during the academic year. Lamar West Building, telephone 956/380-8703.

## 3 <br> Other Centers, Support Services AND Activities

## * AcADEmic Centers

- Center for Applied Research in Education

The mission of the Center for Applied Research in Education (CARE) in the College of Education at UTPA is to continuously stimulate faculty and doctoral student research in policy and practice which will result in an improved K -16 education in South Texas. CARE was founded in 1994 to serve as the research arm of the College of Education and of the University. CARE was then reorganized in 1997 with a major emphasis on conducting research interests, and disseminating research including dissertations completed in the Rio Grande Valley schools.

Public schools in the Rio Grande Valley are unique and exceptional. These schools, their students and faculty, provide excellent research sites for doctoral students and faculty. The Center for Applied Research in Education serves the dual purpose of providing a research center to study phenomena such as effective
practices found in Rio Grande Valley schools and sharing results of research with local school districts and the research community to improve K-16 student performance. The Center for Applied Research in Education has an advisory council comprised of administrators from Valley schools, personnel from the Region One Educational Service Center and individuals from the business community and private sector.

CARE maintains a site on the Internet (http://care. utpa.edu) to serve as a research and information tool for students, faculty and clients. Education Building, Room 114, telephone 956/381-3437.

## - Center for International Studies

The Center for International Studies facilitates and encourages campus efforts to develop international programs. Among these are research, publications, continuing education, faculty development, community outreach and student experiences abroad. It supports international initiatives among student groups, faculty and agencies in the fields of health, education, government and industry on both sides of the TexasMexico border. In addition, the center promotes studies of other regions of the world and provides assistance in writing proposals and establishing relations with universities all over the world, including institutions in Latin America, Mexico, Asia, Europe and the Caribbean.

The center sponsors multicultural and cross-national research, forming liaisons with community groups and sponsoring presentations on Hispanic and international issues. The center also sponsors two publications, Rio Bravo Journaland Letras Hispanas, and a third, Border Journal of Science and Technology, is now in the planning stage. The Center for International Studies directs the Latin American Studies Center and the Mexican-American Studies Program. Communication Arts and Sciences Building, Room 342, telephone 956/381-3572.

Valley Markets and Tourism Research Center
The Valley Markets and Tourism Research Center in the College of Business Administration addresses social, cultural, environmental and economic issues related to the tourism industry locally, regionally and nationally. Tourism studies targeted by the center include senior travelers or "Winter Texans," Mexican national visitors to the United States, spring breakers at South Padre Island, ecotourism, historic tourism, recreational tourism and local residents' attitudes and reactions toward tourism. Some of the center's publications are Assessing Community Support and Sustainability for Ecotourism Development, a Winter Texan Report that is published every other year and a South Padre Island Spring Break Report. The center promotes tourism to Texas, particularly South Texas, and assesses the economic
impact of tourism on the regions. It also provides an opportunity for students to learn applied research methodologies and to become involved in the research activities of the center. Business Administration Building, Room 124, telephone 956/381-3395.

## - Coastal Studies Laboratory

The Coastal Studies Laboratory (CSL), established as a marine biology laboratory in 1973 in Isla Blanca Park on South Padre Island, was reorganized and expanded in 1985 with a concentration on University education, public education and coastal research. The CSL's public display contains representative species of fauna and flora from the immediate area of the Lower Laguna Madre and South Padre Island. The CSL also supports classes and field trips from the University and other schools; many universities in Texas and surrounding states use the CSL facilities for field trips each year. A number of marineoriented courses are offered at the CSL located at 100 Marine Lab Drive, South Padre Island, Texas 78597 . For information call, 956/761-2644, fax 956/761-2913, e-mail coastal@utpa.edu, or visit http://www.utpa.edu/dept/csl/ csl.html.

## - International Journal of Mathematics and Mathematical Sciences

The main editorial office of the International Journal of Mathematics and Mathematical Sciences (IJMMS) was established at the UTPA Department of Mathematics. This is a refereed weekly journal devoted to publications of original research papers, research notes and research expository and survey articles, with emphasis on unsolved problems and open questions in mathematics and mathematical sciences. All areas listed on the cover of mathematical reviews, such as Pure and Applied Mathematics, Mathematical Physics, Theoretical Mechanics, Probability and Mathematical Statistics and Mathematical Biology, are included within the scope of the journal. Dr. Lokenath Debnath, professor and chair of Mathematics is the founding managing editor of IJMMS. Internationa/ Journa/will always carry out not only research, knowledge and information, but also the name and therefore, the prestige of The University of TexasPan American.

## - Neuhaus Center for Entrepreneurship

 and Economic EducationThe Neuhaus Center for Entrepreneurship and Economic Education is a multifaceted center that aims to propagate the benefits of entrepreneurship and the market system to the Rio Grande Valley community. With regard to economic and entrepreneurship education programs, the center coordinates a set of courses on
entrepreneurship that undergraduate students may take to obtain a minor in entrepreneurship. The center is accredited by the National Council on Economic Education and affiliated with the Texas Council on Economic Education. Through these partnerships, economic and entrepreneurship education programs are offered to elementary and secondary school teachers. The research activities of the center foster basic and applied research on the characteristics and workings of the small firm and economic development with a particular emphasis on the Rio Grande Valley and northern Mexico. One primary research goal of the center is to better understand the forces driving the economy of the local community. Business Administration Building, Room 216B, telephone 956/316-7136.

## - Speech and Hearing Center

The UT Pan American Speech and Hearing Center's Speech-Language and Audiology clinics provide comprehensive evaluations for children, college students and older adults. The Speech-Language Clinic evaluates speech, language, feeding, swallowing and related behaviors. The Audiology Clinic evaluates hearing and provides hearing aid fittings. Clients may be referred to other treatment centers in the area or recommended for therapy in the Speech and Hearing Center. Therapy services are provided in the Speech and Hearing Center on a limited basis.

The clinic treats communication disorders related to aphasia, fluency, developmental delay, voice, dysphagia, hearing impairment and others. Evaluation and therapy services are available in English or Spanish. The center also provides accent reduction classes for individuals learning American-English as a second language. Health Sciences and Human Services West Building, Room 1.112, telephone 956/381-3587.

## - The University of Texas-Pan American Border Health Office

The mission of The University of Texas-Pan American Border Health Office ( BHO ) is to foster collaborative health education, health services and health research leading to improved health for the citizens of Texas living along the Texas-Mexico border. Created in 1990, the office collaborates with community-based agencies to promote health services and education, providing technical assistance to communities and institutions. The BHO sponsors conferences and workshops on such topics as substance abuse prevention, diabetes, children's health, aging issues and other border health issues. The BHO has produced documents on the demographics and health statistics of the 32 Texas-Mexico border counties. The most recent edition of The UT System Inventory of

Texas-Mexico Border Health Services Activity book listed 381 health-related projects.

One of the other major projects the BHO is involved in includes the establishment and operation of an active diabetes registry. The mission of the diabetes registry is to employ a system of surveillance, education and intervention for the prevention and management of diabetes and its complications.

The Acanthosis Nigricans
The Education and Screening (ANTES) Initiative involves screening school children for Acanthosis Nigricans, a skin condition that signals high insulin levels in the body. Acanthosis Nigricans screenings can help identify youth who may be at-risk for developing Type II diabetes.

# $\star$ Office of Center Operations and Community Services (COSERVE) 

http://www.coserve.utpa.edu orhttp://coserve1.utpa.edu Telephone: 956/381-3361

Fax: 956/381-2322
COSERVE is a component of the Division of External Affairs at UTPA. It is an umbrella organization with more than 20 different outreach centers.

COSERVE is a national model for economic development and community development providing education, training and professional expertise to local, state, national and international communities to improve the quality of life and foster innovative solutions to economic challenges. COSERVE's main office is the International Trade and Technology Building. The activities and locations of individual centers are listed below.

- Census Information Center (CIC): provides census data access to local communities that might not have access to data through the Internet. International Trade and Technology Building, telephone 956/381-3361.
- Center for Entrepreneurship and Economic Development (CEED): serves as a catalyst for business and economic development through the development of public and private partnerships. International Trade and Technology Building, telephone 956/381-3361.
- Center for Local Government (CLG): increases the capacity of local governments to more efficiently
manage public resources and to meet problems in a positive, creative and constructive manner. International Trade and Technology Building, telephone 956/381-3361.
- Center for Manufacturing (CFM): provides assistance to manufacturers through academic, industrial, governmental or private sources, facilitating faculty research and training, experience and employment for students. Center for Manufacturing, telephone 956/316-7011.
- Community Outreach Partnership Center (COPC): mobilizes community resources for self-help entrepreneurial activities and micro-enterprises technical assistance in rural communities. UT Pan American Annex, 2412 S. Closner Blvd., Edinburg, telephone 956/381-3361.
- Data and Information System Center (DISC): serves the southernmost 19 counties of Texas by meeting their data and mapping needs. International Trade and Technology Building, telephone 956/381-3361.
- Economic Development Administration (EDA): University center provides technical assistance in strategic management planning and applied research. International Trade and Technology Building, telephone 956/381-3361.
- English Language Institute (ELI): offers a variety of English language programs to meet the diverse needs of its students. The programs include an intensive daytime program and semi-intensive evening and Saturday programs for students 17 years of age and older. Telephone 956/381-2670.
- Industrial Partnership Center (IPC): develops partnerships between manufacturers and suppliers. Center for Manufacturing, telephone 956/316-7011.
- The International Trade and Technology Center (IT): promotes international trade through the use of the latest technology. International Trade and Technology Building, telephone 956/381-3361.
- International and Workforce Development: provides corporate training to employees of companies and helps in enhancing skills of workers in various fields of education, telephone 956/843-6782.
- Mexican Business Information Center (MBIC): provides business clients with comprehensive information on Mexico to enable them to make better decisions and facilitate accurate analysis of opportunities in Mexico. International Trade and Technology Building, telephone 956/381-3361.
- National Center of Excellence (NCE): builds community capacity in the Rio Grande Valley Empowerment Zone by providing leadership-training skills and technology-based community networking. International Trade and Technology Building, telephone 956/381-3361.
- One Stop Capital Shop (OSCS): assists clients to create, retain and develop business within the


Rio Grande Valley Empowerment Zone by providing access to free technical and business assistance. UT Pan American Annex, 2412 S. Closner Blvd., Edinburg, telephone 956/316-2610.

- Project FORGE: provides business training and technical assistance to agricultural and other business located in the rural areas and communities of the Rio Grande Valley. UT Pan American Annex, 2412 S. Closner Blvd., Edinburg, telephone 956/316-2610.
- Small Business Development Center (SBDC): provides managerial and technical assistance through free one-on-one business counseling to small business owners and entrepreneurs as well as workshops and seminars. UT Pan American Annex, 2412 S. Closner Blvd., Edinburg, telephone 956/316-2610.
- South Texas Minority Business Opportunity Committee (MBOC): provides procurement and international business opportunities to minority entrepreneurs in South Texas. UT Pan American Annex, 2412 S. Closner Blvd., Edinburg, telephone 956/316-2610.
- Southwest Border Nonprofit Resource Center (SBNRC): Builds capacity for sustainable, long-term development of nonprofit organizations through technical skills training, funding sources research and philanthropic organizations' network. UT Pan American Annex, 2412 S. Closner Blvd., Edinburg, telephone 956/316-2610.
- Texas Manufacturing Assistance Center (TMAC):
assists small manufacturers with increasing productivity and quality, finding new markets and ensuring their future on the global stage. Center for Manufacturing, telephone 956/316-7011.
- Veterans Business Outreach Center (VBOC): creates, retains and develops business across Texas, Arkansas, Louisiana, New Mexico and Oklahoma by coupling veterans with local SBA-sponsored technical and managerial assistance. UT Pan American Annex, 2412 S. Closner Blvd., Edinburg, telephone 956/316-2610.
- Women's Empowerment Business Center (WEBC): assists women entrepreneurs by providing quality business and technical assistance. UT Pan American Annex, 2412 S. Closner Blvd., Edinburg, telephone 956/316-2610.


## n Cultural ACTIVITIES

## $\mathcal{Z}$ Art Department Exhibits

The Charles and Dorothy Clark Gallery, located in the Fine Arts Complex, and the University Gallery, located in the Communication Arts and Sciences Building (COAS), feature art exhibitions that are free and open to the public throughout the year. Works by The University of Texas-Pan American faculty and students as well as professional artists are exhibited. Located in the Lamar School complex, the Lamar Galleryexhibits work from the University's permanent collection. The art galleries are administered through the Department of Art. The office for the University Art Galleries is adjacent to the Clark Gallery in the Fine Arts Complex. The gallery director may be reached at 956/381-2655 or by e-mail at galleries@ utpa.edu.

## $\mathcal{Z}$ DANCE COMPANIES

- UT Pan American Dance Ensemble: Founded in 1984, the Dance Ensemble is the only modern/contemporary dance company in the Rio Grande Valley. Membership in the company is open to all UT Pan American students and is determined by audition. The Dance Ensemble focuses on producing formal theatrical dance performances that maintain high artistic and production standards. Health and Physical Education Building II, Room 110, telephone 956/381-2315.
- UT Pan American Folkloric Dance Company:The UT Pan American Folkloric Dance Company, organized in 1970, has as its purpose the preservation and performance
of the dance art of Mexico and Spain. During the performing season, the company presents numerous concerts for school children, the general public and private affairs throughout the University, community and state. Membership in the company is available through class audition. Health and Physical Education Building I, Room 110F, telephone 956/381-2230.


## Faculty Artist Series

During the school year, the Department of Music presents a series of performances by faculty members in addition to student recitals. Included in these recitals are vocal and instrumental performances. Fine Arts Complex, Room 132, telephone 956/381-3471.

## Living Author Series

Through its Living Author Series program, the Department of English brings prominent literary authors - novelists, poets, dramatists - to campus to address the student body and the public. Communication Arts and Sciences Building, Room 265, telephone 956/381-3421.

## Musical Performances

Performing for students and the public are the University Choir, Men's and Women's Choruses, the Concert Band, the Jazz Ensemble, the South Texas Chamber Orchestra, the Mariachi and the Valley Symphony Orchestra and Chorale. Telephone 956/3813471 for more information.

## Albert L. Jeffers Theatre

The Albert L. Jeffers Theatre produces seven to 10 full-length plays each year, including three to four plays in the summer during Pan American Summer Stock (PASS), four to five plays in the fall and spring. The community can purchase individual tickets to each performance; season subscriptions are also available.

University ID cardholders are permitted two free admissions per ID and as space permits. Actors include University students, faculty and staff, along with community members. The Albert L. Jeffers Theatre seeks to present, within a four-year cycle, quality productions featuring examples from every major genre of dramatic literature. Performances for children and children's theater classes are frequently offered. Funding for the Albert L. Jeffers Theatre is provided by Student Activity Fees, donations, grants and other sources. Communication Arts and Sciences Building (COAS), first floor, telephone 956/381-3581.

## Public Use of Facilities

The property, buildings or facilities owned or controlled by The University of Texas-Pan American are not open for assembly, speech or other activities as are the public streets, sidewalks and parks. The responsibility of the UT System Board of Regents to operate and maintain an effective and efficient system of institutions of higher education requires that the time, place and manner of assembly, speech and other activities on the grounds and in the buildings and facilities of the UT System or component institutions be regulated.

No person, organization, group, association or corporation may use property, buildings or facilities owned or controlled by UT Pan American for any purpose other than in the course of the regular programs or activities related to the role and mission of the University, unless authorized by the Regents' Rules and Regulations. Any authorized use must be conducted in compliance with the provisions of the Regents' Rules and Regulations, the University's Handbook of Operating Procedures, and applicable federal, state and local laws and regulations.

Anyone from outside the University who is seeking information about scheduling and use of University Special Use Facilities should contact the Office of the Director of Auxiliary Services.

For more information, consult the Regents' Rules and Regulations and the University's Handbook of Operating Procedures.


## UNDERGRADUATE ACADEMIC Programs

A Liberal Arts Education

Your education at The University of Texas-Pan American will be better measured by the skills you learn and the knowledge you gain than by the number of credit hours you take. We want you to improve your abilities to analyze, synthesize, determine values, use and understand mathematics and communicate. No matter

what subject you choose to major in, you will be required to complete courses in fields that reinforce those skills.

To understand the University college and core curriculum requirements, you should understand the established goals. These are the characteristics you will be given the opportunity to attain from your work and study here.

## * The GOALS OF A Liberal ARTS EDUCATION

- An inquiring attitude which acknowledges the manysided nature of most important questions, recognizes the need to examine inherited judgments, and reveals a desire for continued learning and creative expression.
- Competence in the processes of learning, including the abilities to read, write, listen and speak, a knowledge of logic and scientific method, and the mental selfdiscipline needed for rigorous critical analysis and synthesis of facts and ideas.
- The ability to use words and numbers accurately and effectively, and communicate clearly through the spoken and written word as well as through the symbols of mathematics.
- A historical perspective provided by familiarity with the most significant events, people and achievements of the past; an understanding of the most enduring ideas and values in human history; and a knowledge of the many ways these are expressed in world cultures and in social, political and economic institutions.
- A general knowledge and appreciation of nature, science and technology.
- A general knowledge and appreciation of the fine and performing arts and of literature.
- An understanding of self, along with empathy for the strengths, weaknesses, rights and needs of others, as well as the ability to relate to others with human understanding.
- An appreciation for the responsibilities of the individual to family and society; skill in serving as a constructive member in groups and organizations; and sensitivity to the need for informed, independent, moral and ethical decisions.
- Knowledge of the economic and geographical inter-relationships of regions and nations and their resources.

These are the goals of a liberal arts education and the qualities that distinguish a liberally educated person. They are the skills and characteristics that we hope to nurture in our students through the college and core curriculum requirements.

# 3 CORE CURRICULUM REQUIREMENTS 

Mission Statement

The purpose of the general education core curriculum is to provide knowledge and skills and encourage attitudes that will serve undergraduate students with a foundation for lifelong learning, will improve their quality of life and will broaden their perspective about constructive participation in a global human community. The mission will be accomplished through an interdisciplinary core curriculum that reflects convergences among disciplines and promotes the growth and development of each student.

## $\star$ GOALS

The goals of the University core curriculum are to prepare students to:

1. Acquire basic intellectual competence in reading, writing, speaking, listening, critical thinking and computer literacy.
2. Develop competence in the tools and principles of mathematics and logical reasoning in problem solving.
3. Develop an inquiring attitude and demonstrate a desire for continued learning and creative expression.
4. Develop the capacity to discuss and reflect upon individual, political, economic and social aspects of life so as to be responsible members of society in a culturally and ethnically diverse world.
5. Recognize the importance of maintaining health and wellness.
6. Use knowledge of how nature, technology and science affect their lives.
7. Develop personal values for ethical behavior to enhance their potential to make constructive contributions to society.
8. Develop the ability to appreciate, and make informed aesthetic judgments in, disciplines such as the fine and performing arts and literature.
9. Understand the interrelationships of the scholarly disciplines.

The core curriculum requirements apply to all
students who enter The University of Texas-Pan American to pursue a bachelor's degree. Core curriculum requirements total 48 hours of work, primarily in the humanities, social sciences and natural sciences. These 48 hours must be completed before graduation with at least a 2.0 grade point average. All undergraduate students must complete the requirements.

## Summary of Core CURRICULUM REQUIREMENTS

Communication<br>9 hours

- six hours of freshman English
- three hours in a language other than English

Science and Mathematics
11 hours

- eight hours of a laboratory science
- three hours of college algebra or higher-level mathematics

Humanities
9 hours

- three hours of sophomore literature
- three hours from the arts.
- three hours of philosophy, modern or classical language literature, honors or anthropology

Social Science
15 hours

- six hours of American history
- six hours of American and Texas government.
- three hours from any one of these areas: anthropology, criminal justice, economics, psychology or sociology

Institutionally Designated Options:
Computer Literacy
2 hours
Kinesiology and Wellness
2 hours
two hours of kinesiology wellness, health wellness or appropriate ROTC courses.

Courses that may be used to satisfy these requirements are outlined later in this section.

## SPECIAL CONSIDERATIONS FOR TRANSFER STUDENTS

Transfer students with 30 or more hours but without the core curriculum-approved courses, or courses deemed comparable by The University of Texas-Pan


American, may take upper-division courses if otherwise qualified, but they too must complete all University core curriculum requirements before graduation. Transfer students who lack six hours of freshman English and/or three hours of mathematics or their equivalent with grades of at least "C" in each course must complete these requirements within their first two semesters at The University of Texas-Pan American.

## i State Core Curriculum AND TRANSFERABILITY

In fall 1999, a new core curriculum went into effect pursuant to the Texas Education Code. Beginning with the 1999 fall semester, Texas institutions honor the block transfer of completed core curricula and individual transfer of core courses, as specified in statute (Texas Education Code 61.821-829) and the Texas Higher Education Coordinating Board rules (Chapter 5, Subchapter S). Students who transfer will have their satisfactorily completed core courses transferred and applied as specified in the rules.

## Specific COURSES THAT MEET Core Curriculum Requirements

Individual degree programs may require specified courses be completed to meet these requirements rather than allowing the full range of selections shown here. Students should check degree requirements in this catalog for the degree they are pursuing to determine what specific courses, if any, are recommended or required to fulfill these requirements.
A. Communication

9 hours

Group 1. Freshman English
6 hours
Complete one of the following:
ENG 1301 Composition
or
ENG 1387 Rhetoric and Composition
(Honors Plan)
Complete one of the following:
ENG 1302 Rhetoric
or
ENG 1388 Rhetoric and Literature
(Honors Plan)
Group 2. Language Other Than English 3 hours
An upper-level course in one of the languages listed below will also meet this requirement.

French

| FREN | 1321 | Beginning French I |
| :--- | :--- | :--- |
| FREN | 1322 | Beginning French II |

German
GERM 1331 Beginning German

Spanish
SPAN 1301 Beginning Spanish
(Non-native Speaker)
SPAN 1302 Beginning Spanish
(Non-native Speaker)
or
SPAN 1303 Beginning Spanish
(Native Speaker)
SPAN 1304 Beginning Spanish
(Native Speaker)
or
SPAN 1387 Beginning Spanish
(Honors Plan)
SPAN 1388 Beginning Spanish
(Honors Plan)


backgrounds.

- Honors classes provide cultural enrichment.
- Honors classes afford students the opportunities to conduct independent research under the guidance of experienced faculty mentors.
- Honors classes offer students the opportunity to study abroad.

NOTE: Students who have not yet been accepted to the program must have a cumulative GPA of 3.3 or higher and permission from UHP prior to registering for an Honors class. Permission from UHP is granted on a space-available basis.

## UNIVERSITY HONORS PROGRAM ADMISSION REQUIREMENTS

Students may be admitted to the program at any time during the year; however, they are not considered active until they are enrolled at UTPA. Students who meet the following criteria are eligible to apply:

## Entering Freshmen:

- ACT Composite of 24 or higher.
- SAT of 1110 or higher.
- Graduate in the upper 10 percent of high school class.
- A 90 or above average in high school academic courses.


## Currently Enrolled/Transfer Students:

- Have a minimum cumulative GPA of 3.3 at UTPA.
- Have 12 credit hours at UTPA.

Program eligibility is monitored by UHP each semester. Once admitted to the program, students must maintain a minimum GPA of 3.3.

## UnIVERSITY HONORS PROGRAM SCHOLARSHIPS

The University Honors Program offers its students the chance to apply for merit scholarships each spring semester for the following academic year. For more information, please contact the UHP Office.

## Gamma Beta Phi National HONOR SOCIETY

University Honors Program students are eligible for membership in the Gamma Beta Phi National Honor

Society. This student organization prides itself in its participation in service projects and its focus on making a difference on campus and in the local community.

## Graduating from the Program

In order to fulfill the requirements of the University Honors Program, students are encouraged to take as many Honors courses as their schedule and/or degree plan allows each semester. Most importantly, students must have a cumulative GPA of 3.3 or higher and must complete the following courses prior to graduation:

- HONR 2387 Humanities I
- HONR 2388 Humanities II
- HONR 3187

Honors Seminar - Problems in Independent Studies

- HONR 3387

Honors Seminar Independent Studies

- HONR 4387

Honors Seminar Independent Studies

## University Honors program Degree

Students who graduate under the University Honors Program will have this designation recorded on their diplomas as well as their permanent records. They will also have the distinction of wearing an Honors Medallion at graduation. Gamma Beta Phi members who participate and remain active in the organization will also receive a black and gold Honors stole.

## INQUIRIES

For an application or additional information about the University Honors Program, please contact:

University Honors Program 1201 W. University Drive, SBSC 104

Edinburg, TX 78539-2999
Telephone: 956/381-3461
Fax: 956/381-2484
E-mail: honors@utpa.edu
Web site: www.utpa.edu/orgs/honorspro


## COLLEGE OF ARTS AND HUMANITIES



## $\star$ General Overview

The College of Arts and Humanities includes the Departments of Art, Communication, English, History and Philosophy, Modern Languages and Literature and Music.

The goals of the College of Arts and Humanities are based upon the recognition that a liberal arts education is the foundation for all University studies. Consequently, the college endorses the "Goals of a Liberal Arts Education" found on page 102 of this catalog.

## $\star$ AcAdemic Programs

The college offers the Bachelor of Arts in art, English, history, Latin American studies, journalism, Mexican-American studies, music, philosophy, Spanish, communication and theatre. Students also may earn a Bachelor of Fine Arts in art and may choose a further specialization in graphic design.

Students may minor in art, communication, Latin American studies, English, French, history, journalism,

Mexican-American studies, music, philosophy, Spanish and theatre/TV/film.

Secondary teacher certification is available in art, English, French, history, journalism, music, Spanish, communication and theatre arts. Elementary teacher specialization or certification is available in art, history, music, social studies and Spanish, and all-level teacher certification is available in music.

At the graduate level, students may earn master's degrees in art, English, English as a Second Language, history, Spanish, communication, music, and theatre. More information on master's degrees is available in the Graduate Catalog.

The College of Arts and Humanities provides several options to satisfy the University core curriculum requirements for the humanities and for the history portion of the social science requirement.

Dr. Dahlia Guerra, Dean
Communication Arts and Sciences Building, Room 334
1201 W. University Drive
Edinburg, TX 78539-2999
Telephone: 956/381-2175
Fax: 956/381-2177
E-mail: guerrad@utpa.edu
Web site: http://www.utpa.edu/colleges/coah.cfm

Anthony Crisafulli, Department Chair
Fine Arts Building B, Room 225
1201 W. University Drive
Edinburg, TX 78539-2999
Telephone: 956/381-3480
Fax: 956/384-5072
E-mail: acrisafulli@utpa.edu
Full-time Faculty
Crisafulli, Anthony, Professor
Field, Philip S., Professor
Hernandez, Leila, Assistant Professor Hyslin, Richard P., Professor
Phillips, Richard, Associate Professor
Santiago, Reynaldo I., Professor

## * GENERAL OVERVIEW

MISSION
It is the mission of the department to develop individual directions among its students. Personal expression in art is encouraged through the use of technical skills combined with creative and critical thinking. In order to achieve this goal, the following objectives are stressed in each art area:

- Increased visual perception.
- Maximum creative thought potential.
- Knowledge of technical skills.
- Knowledge of current art trends.
- Multicultural art knowledge.
- A positive work ethic.



## GENERAL DEPARTMENTAL <br> REQUIREMENTS

Students transferring into the department who have more than 15 hours of art courses must present a portfolio to the department chair for advisement into the Bachelor of Fine Arts (BFA) programs. BFA candidates will be expected to participate in a senior exhibit during their last semester of study.

## DEGREE REQUIREMENTS

Bachelor of Arts in Art
Core Curriculum Requirements 48 hours
Core Courses 39 hours

| ART | 1311 | Drawing I |
| :--- | :--- | :--- |
| ART | 1331 | Design I |
| ART | 2303 | Jewelry/Metalworking I |
| ART | 2312 | Drawing II |
| ART | 2322 | Painting II |
| ART | 2332 | Design II |
| ART | 2351 | Art Survey I |
| ART | 2352 | Art Survey II |
| ART | 2371 | Ceramics I |
| ART | 3381 | Perception and Expression in Art I |
| ART | 3382 | Perception and Expression in Art II |
| ART | 3383 | Creative and Critical Thinking |
| ART | 4383 | Art Curriculum |

Designated Electives 12 hours
Advanced Art History 3 hours
Advanced Studio Art 9 hours
Other Course Requirements 27 hours
COMM1313 Fundamentals of Speech
Communication

Advanced Electives 6 hours
Approved Minor 18-21 hours

TOTAL 126-129 hours

Bachelor of Arts with All-Level
(EC-12) Certification
Admission to the College of Education (COE) teacher education programs is required for all undergraduate students seeking teacher certification. Students following all-level certification degree plans (grades EC12) should consult with their advisor in the department in which their degree is offered. They should also seek admission requirements and information from the COE Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302 for admission
requirements. Students may call the office at 956/3813420 or log on to the Web site for more information http://www.utpa.edu/colleges/coe/studentservices.

The professional education courses for all-level certification include the following: EDAL 3301, EDAL 3302, EDAL 3303, EDAL 4303, READ 4351, EDAL 4398, EDAL 4395 (art only), EDAL 4396 (music only), EDAL 4397 (special education only). Kinesiology majors are also required to take EDAK 3370 and EDAK 3380.

- Bachelor of Fine Arts with a Major in Art
- BFA - Studio

Core Curriculum Requirements 48 hours
Complete the requirements shown in the University core curriculum requirements section of this catalog on page 103.

Core Courses
37 hours
ART 1311
ART
ART 2303 Jewelry/Metalworking I
ART 2312 Drawing II
ART 2332 Design II
ART 2351 Art Survey I
ART 2352 Art Survey II
ART 2371 Ceramics I
ART 3311 Drawing III
ART 2322 Painting II
ART 2341 Sculpture I
ART 2361 Printmaking I
ART 4193 Senior Exhibit
Designated Electives
24 hours
Art History
Select 12 advanced hours.
Studio Art
Select 12 advanced hours.
Art-Undesignated
Select 12 advanced hours.

Other Electives
12 hours
Select 12 hours in any field.
Other Major Requirements

1. A grade of " $C$ " will be the minimum prerequisite grade for continuing studio courses in sequence.
2. A grade of "C" or better in ART 4193, as determined by a studio panel, is required for the BFA degree.

TOTAL
130-134 hours

- BFA - Studio with Specialization in Graphic Design

Core Curriculum Requirements
48 hours

Core Courses 55 hours

| ART | 1311 | Drawing I |
| :--- | :--- | :--- |
| ART | 1331 | Design I |
| ART | 1332 | Digital Typography |
| ART | 2312 | Drawing II |
| ART | 2332 | Design II |
| ART | 2351 | Art Survey I |
| ART | 2352 | Art Survey II |
| ART | 3330 | Digital Illustration |
| ART | 3331 | Visual Communication I |
| ART | 3333 | Design and Production |
| ART | 3334 | Photography as an Art Form |
| ART | 3335 | Computer Graphics I |
| ART | 3336 | Computer Graphics II |
| ART | 3337 | Graphic Design I |
| ART | 4334 | Graphic Design II |
| ART | 4337 | Digital Photography |
| ART | 4193 | Senior Exhibit |
| ART | 4338 | Web Page Design |
| ART | 4339 | Portfolio |

Designated Electives
9 hours
Art Studio
Select three advanced hours.
Art History
Select six advanced hours.

Other Course Requirements
3 hours
COMM1313 Fundamentals of Speech Communication

Other Electives
9 hours
Select nine advanced hours in any field.
Other Major Requirements
A grade of " $C$ " will be the minimum prerequisite grade for continuing studio courses in sequence.

A grade of "C" or better in ART 4193, as determined by a studio panel, is required for the BFA degree.

TOTAL 124 hours

- BFA

Core Curriculum Requirements
48 hours
Core Courses 28 hours

| ART | 1311 | Drawing I |
| :--- | :--- | :--- |
| ART | 1331 | Design I |


| ART | 2312 | Drawing II |  |
| :---: | :---: | :---: | :---: |
| ART | 2332 | Design II |  |
| ART | 2351 | Art Survey I |  |
| ART | 2352 | Art Survey II |  |
| ART | 2361 | Printmaking I |  |
| ART | 3383 | Creative and Critical Thin | king |
| ART | 4193 | Senior Exhibit |  |
| ART | 4383 | Art Curriculum |  |
| Designat | Elect | ives | 30 hours |
| Select | nine h | ours from the following: |  |
| ART | 2303 | Jewelry/Metalworking I |  |
| ART | 2322 | Painting II |  |
| ART | 2341 | Sculpture I |  |
| ART | 2371 | Ceramics I |  |
| Art Histi | story |  |  |
| Select | nine ad | dvanced hours. |  |
| Studio | Art |  |  |
| Select | nine ad | dvanced hours. |  |
| Art El | lective |  |  |
| Select | six adv | anced hours. |  |
| Other Cours | urse Req | quirements | 3 hours |
| COM | $11313$ | Fundamentals of Speech Communication |  |
| Professiso | nal Edu | cation | 21 hours |
| Other Maj | or Req | uirements |  |
| A grade of | "C" wil | Il be the minimum prerequis | isite |
| grade for con | inuing | studio courses in sequence |  |
| A grade | "C" or | better in ART 4193, as dete | rmined |

TOTAL
133 hours

## - Minor in Art

Eighteen hours in art, of which nine hours must be advanced.

```
* General Art Minor
Required courses
\begin{tabular}{ll} 
ART & 1311 \\
ART & Drawing I \\
& 1331 \\
Designl
\end{tabular}
Choose one course from:
\begin{tabular}{lll} 
ART & 2303 & Jewelry/Metalworking I \\
ART & 2322 & Painting II \\
ART & 2341 & Sculpture I \\
ART & 2371 & Ceramics I
\end{tabular}
Designated Electives
Nine hours of upper-division art history or studio.
```

- Art Minor in Two-Dimensional Art 18 hours

ART 1311 Drawing I
ART 1331 Design I
ART 2322 Painting II
ART 3335 Computer Graphics I
Choose two courses from:
ART 3311, 3321, 4321, 3336, 4391

- Art Minor in Three-Dimensional Art 18 hours

ART 2332 Design II
Choose two courses from:
ART 2303 Jewelry/Metalworking I
ART 2341 Sculpture I
ART 2371 Ceramics I
Choose three courses from:
ART $3302,3303,4303,3341,4341,3371,3372,4371$

- Art Minor in Ceramics 21 hours

Student must select ART 1301 under core curriculum requirements.

| ART | 1311 | Drawing I |
| :--- | :--- | :--- |
| ART | 1331 | Design I |
| ART | 2322 | Painting II |
| ART | 3321 | Painting III |
| ART | 4321 | Painting IV |
| ART | 3352 | Contemporary Art |

- Art Minor in Jewelry/Metalsmithing 21 hours

Student must select ART 1301 under core curriculum requirements.

| ART | 1311 | Drawing I |
| :--- | :--- | :--- |
| ART | 1331 | Design I |
| ART | 2303 | Jewelry/Metalsmithing I |
| ART | 3302 | Jewelry/Metalsmithing II |
| ART | 3303 | Jewelry/Metalsmithing III |
| Advanced Art History |  |  |

- Art Minor in Sculpture

21 hours
Student must select ART 1301 under core curriculum requirements.

| ART | 1311 | Drawing I |
| :--- | :--- | :--- |
| ART | 2332 | Design II |
| ART | 2341 | Sculpture I |
| ART | 3341 | Sculpture II |
| ART | 4341 | Sculpture III |
| ART | 3352 | Contemporary Art |

- Art Minor in Art History 18 hours

Student must select ART 1301 under core curriculum requirements.

| ART | 2351 | Art Survey I |
| :--- | :--- | :--- |
| ART | 2352 | Art Survey II |
| ART | 4351 | Pre-Conquest |

ART 4352 Post-Conquest
Advanced Art History
Advanced History

| - Art Minor in Computer Graphics | 18 hours |  |  |
| :--- | :--- | :--- | :--- |
| ART | 1311 | Drawing I |  |
| ART | 1331 | Design I |  |
| ART | 1332 | Typography |  |
| ART | 3335 | Computer Graphics I |  |
| ART | 3336 | Computer Graphics II |  |
| ART | 4337 | Digital Photography |  |

## CoUrse Descriptions

A listing of courses offered by the Department of Art can be found on page 251.

## COMMUNICATION

Dr. Salma I. Ghanem, Department Chair Communication Arts and Sciences Building, Room 165 1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/381-3583<br>Fax: 956/381-2685<br>E-mail: ghanem@utpa.edu<br>Full-time Faculty<br>Agbese, Aje-Ori, Assistant Professor, Journalism<br>Carren, David B., Associate Professor, Theatre/TV/Film Chang, Yanrong, Assistant Professor,<br>Communication Studies<br>Ghanem, Salma I., Associate Professor, Journalism Grabowski, Thomas E., Associate Professor, Theatre/TV/Film<br>Guerra, Petra, Assistant Professor, Journalism<br>Hawks, Stephanie, Assistant Professosr, Theatre/TV/Film<br>Johnson, Aaron, Assistant Professor,<br>Communication Studies<br>Lemanski, Jennifer, Assistant Professor, Journalism<br>McQuillen, Jeffrey, Associate Professor,<br>Communication Studies<br>Mann, Fred, Lecturer, Journalism

Mikolasky, Trey, Lecturer, Communication Studies and Theatre/TV/Film
Mottet, Timothy, Professor, Communication Studies
Pazdera, Donna, Lecturer, Journalism
Rieke, R. Neal, Assistant Professor, Communication Studies
Saavedra, Dora E., Associate Professor, Communication Studies
Selber, Gregory, Assistant Professor, Journalism
Selber, Kimberly, Assistant Professor, Journalism
Stanley, Jack R., Professor, Theatre/TV/Film
Warren, Brian, Lecturer, Theatre/TV/Film Wiley, Eric, Associate Professor, Theatre/TV/Film

Professor Emeritus
Monta, Marian F.

## * General Overview

The primary aim of the Department of Communication is to advance the discovery and application of humanistic, behavioral and linguistic knowledge of human symbolic interaction. As such, communication is examined in its various forms, verbal/ nonverbal; in its media occurrences - conference, platform, theatre, print, radio, film, television; in its interpersonal/organizational environments; in its cultural contexts; and in its influence on the course and quality of public policy and societal change.

To help satisfy the fine arts requirement in humanities, the department offers a theatre course (COMM 2312) in the University core curriculum.

The department hosts a University chapter of the American Advertising Federation and a chapter of the Public Relations Student Society of America.

The theatre program is accredited by the National Association of Schools of Theatre and the Texas Educational Theatre Association.

The department offers the following degree programs:

- Bachelor of Arts in Communication
- Option in Communication Studies
- Option in Journalism
- Option in Theatre/TV/Film
- Master of Arts in Communication
- Master of Arts in Theatre

Career Potential: Broad career areas in communication disciplines include international communication, sales and marketing, public relations and advertising, training
and organizational development, mass communication - broadcast and print journalism, communication education/instruction, electronic educational materials, government-politics-religious-social services, educational theatre, community theatre, design and directing, acting, arts management, and TV direction and production.

## $\because$ BACHELOR OF ARTS IN Communication

Students may choose from three options. The student will select a single option area from either the communication studies, journalism or theatre/TV/film program areas. Theatre majors must take a one-hour communication practicum course each fall and spring semester of enrollment. Within each concentration area are specialized career tracks. The student must work closely with a curriculum advisor in selecting an appropriate career track for the student's degree plan.

Career Tracks (non-certification) available under each option area are as follows:

> Journalism option
> Advertising/Public Relations track Broadcast Journalism track
> Print Journalism track

Communication Studies option
Theatre/TV/Film option
Design track Performance track Television, Film track

- Public School Teacher Certification

Career tracks are available under each option area. Students should consult with the College of Education for the required education courses needed for certification.

## Minor in Communication

Students can select an 18-hour general minor in communication, of which nine hours must be advanced coursework. They must take COMM 1303 or COMM 1313 and COMM 3316. Internship hours and practicum hours cannot be counted toward the minor. All courses must be completed with a grade of "C" or better.

## $\approx$ Option in Communication Studies

The option in communication studies offers students the opportunity to specialize in one of two tracks - communication studies or certification.

Core Curriculum Requirements
48 hours
Complete the requirements shown in the University core curriculum requirements section of this catalog on pages 103-107.

| Core Courses |  | 21 Hours |  |
| :---: | :---: | :---: | :---: |
| Communication |  |  |  |
| COMM | 1313 | Applied Oral Communication |  |
| COMM | 2315 | Interpersonal Communication |  |
| COMM | 3314 | Persuasive Communication |  |
| COMM | 3316 | Intercultural Communication |  |
| COMM | 3333 | Communication Theory |  |
| COMM | 3334 | Communication Through Group Process |  |
| COMM | 3350 | Research in Communication |  |
| Communication Studies Electives |  |  | 18 Hours Adv |
| Approved Electives or Minor |  |  | 18 Hours/9 Adv |
| Recommended Electives |  |  | 7 Hours/3 Adv |
| Other Electives |  |  | 12 Hours/6 Adv |

## - Teacher Certification (8-12)

Students seeking state certification in speech communication should consult the COE Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302, for admission requirements and information. Students will complete the following 37 hours:

| COMM | 1303 | Presentational Speaking or |
| :---: | :---: | :---: |
| COMM | 1313 | Applied Oral Communication |
| COMM | 1310 | Oral Interpretation |
| COMM | 1315 | Survey of the Media |
| COMM | 2315 | Interpersonal Communication |
| COMM | 3308 | Creative Drama |
| COMM | 3314 | Persuasive Communication |
| COMM | 3316 | Intercultural Communication |
| COMM | 3317 | Speech for the Classroom Teacher |
| COMM | 3330 | Argumentation and Debate |
| COMM | 3334 | Communication Through Group Process |
| COMM | 3335 | Advanced Public Speaking |
| COMM | 3350 | Research in Communication |
| COMM | 4103 | Practicum |

- Teacher Certification Programs and Requirements Admission to COE teacher education programs is required for all undergraduate students seeking teacher certification. Students following high school certification degree plans (grades 8-12) should consult with their advisor in the department in which their degree is offered. They should also seek information from the

College of Education Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302, for admission requirements. Students may call the office at 956/381-3420 or log on to the Web site for more information http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for high school (8-12) certification include the following: EDHS 4301, EDHS 4302, EDHS 4303, EDHS 3305, READ 4351, EDHS 4398 and EDHS 4399.

## - Minor in Communication Studies

(non-certification)
A minor in communication studies (non-certification) requires a total of 18 semester hours of communication studies courses. All courses must be completed with a course grade of "C" or better. Students should consult with a departmental advisor for guidance with course selection.

## $\underset{\sim}{i}$ OPTION IN JOURNALISM

The Department of Communication stresses a broad background in liberal arts and sciences for journalism students. The student spends about three-fourths of his or her time on general background courses. The remaining one-fourth involves the development of professional journalism techniques in relation to this general background knowledge.

To enroll in upper-level journalism courses, a student must have a University GPA of 2.25. Students who do not fulfill this requirement will be dropped from journalism courses. (This requirement is waived for transfer students during their first semester while establishing a University GPA.)

In addition to completing the 48 hours of the University core curriculum requirements, journalism students must complete COMM 1303 or COMM 1313.

## Degree Requirements

A. Core Courses 21 hours

Journalism students must take the following 21 hours of core courses:
COMM 1315 Survey of the Media
COMM 3303 Writing for the Mass Media
COMM 3327 Reporting
COMM 3350 Research in Communication
COMM 4313 Media Law and Ethics
COMM 4327 Mass Communication and Society COMM 4332 Media Publishing
B. Concentration Requirements

Concentration Areas:

Print Track
18 hours
"C"Minimum

| COMM | 3305 | Copy Editing |
| :--- | :--- | :--- |
| COMM | 3306 | Feature Writing |
| COMM | 3328 | Writing for Publication |
| COMM | 3329 | Specialized Reporting |
| COMM | 4326 | Photojournalism |

Three hours advanced journalism elective
Advertising/Public Relations Track 21 hours
"C" Minimum

| COMM | 2304 | Television Production |
| :--- | :--- | :--- |
| COMM | 3304 | Advertising |
| COMM | 3305 | Copy Editing |
| COMM | 4321 | Public Relations |
| COMM | 4322 | Public Relations Writing |
| COMM | 4334 | Communication Campaigns <br> COMM 4335 |
|  |  | Creative Strategies and Media <br> Planning |

Broadcast Journalism Track 21 Hours
"C" Minimum
COMM 2304 Television Production
COMM 3401 Broadcast News Writing
COMM 3403 Television News Production and Reporting
COMM 4312 Video and Film Editing Three hours from below may be substituted from another track:

| COMM | 4314 | Advanced Television/Film <br> Production |
| :---: | :---: | :---: |
| COMM | 4417 | Radio/TV and Television <br> Advertising Production |

Other Requirements
A portion of the journalism student's coursework must be chosen outside the journalism area. The outside concentration requirement may be elected as:

1. Eighteen hours in one academic department, or
2. Eighteen hours in an area of study to meet specific career goals or to satisfy a minor.

In either option, nine of the 18 hours must be at the 3000-level or above, and all 18 hours must be completed with a course grade of "C" or better. A journalism student must have a grade of at least "C" in each journalism course counted toward the degree.

## Other Electives

13-16 Hours

Journalism with
Teacher Certification (8-12) 36 Hours
Students seeking state certification in journalism will complete the following 36 hours:

| COMM | 1315 | Survey of the Media |
| :--- | :--- | :--- |
| COMM | 3303 | Writing for the Mass Media |
| COMM | 3304 | Advertising |
| COMM | 3305 | Copy Editing |
| COMM | 3306 | Feature Writing |
| COMM | 3327 | Reporting |
| COMM | 3328 | Writing for Publication |
| COMM | 3350 | Research in Communication |
| COMM | 4313 | Media Law and Ethics |
| COMM | 4326 | Photojournalism |
| COMM | 4327 | Mass Communication and Society |
| COMM | 4332 | Media Publishing |

- Teacher Certification Programs and Requirements

Admission to COE teacher education programs is required for all undergraduate students seeking teacher certification. Students following high school certification degree plans (grades 8-12) should consult with their advisor in the department in which their degree is offered. They should also seek information and admission requirements from the College of Education Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302. Students may call the office at 956/381-3420 or log on to the Web site for more information at http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for high school (8-12) certification include the following: EDHS 4301, EDHS 4302, EDHS 4303, EDHS 3305, READ 4351, EDHS 4398 and EDHS 4399.

## - Minor in Journalism

Applicants must complete 18 hours of journalism courses, of which nine hours must be advanced coursework. All courses must be completed with a grade of "C" or better.

## OPTION IN THEATRE/TV/FILM

The option in theatre/TV/film supports three major educational objectives:

1. Preparation for entry into the work force as a theatre/TV/film pre-professional.
2. Preparation for entry into a graduate degree program in theatre/TV/film.
3. Preparation as a theatre teacher.

Students pursuing the third objective should select one of the curriculum tracks that leads to certification.

Curriculum Tracks in Theatre/TV/Film
Core Curriculum Requirements 48 hours
Complete the core curriculum requirements as shown on pages 103-107 of this catalog EXCEPT as shown below:

Section A.
It is recommended that students select ENG 2313/ COMM 2313 as one of the courses.

| Core Courses |  |  |
| :--- | :--- | :--- |
| COMM | 1305 | Acting I |
| COMM | 2304 | Television Production |
| COMM | 4301 | Directing I |
| COMM | 4302 | Directing II |
| COMM | 4315 | History of Theatre I |
| COMM | 4316 | History of Theatre II |

18 hours

Technical Electives
28-33 hours
See individual requirements below.
Other Electives 12-17 hours
TOTAL 124 hours

- Specific Requirements: Performance Track Technical Electives 34 hours

| COMM | 2101 | Practicum-Theatre TV Film (must be taken three times) |
| :---: | :---: | :---: |
| COMM | 2306 | Acting II |
| COMM | 2319 | Makeup |
| COMM | 3302 | Speech for Stage and Screen |
| COMM | 3341 | Acting III or |
| COMM | 3342 | Acting IV |
| COMM | 3311 | Contemporary Drama |
| COMM | 3323 | World Drama |
| COMM | 4101 | Practicum-Theatre TV Film (must be taken three times) |
| COMM | 4314 | Advanced TV/Film Production |
| COMM | 4318 | Theory and Styles of Acting or |
| COMM | 4319 | Problems in Acting |

Other Electives
28 hours
The following are recommended:
COMM 3324 Cinematography/Videography
COMM 4304 Scriptwriting for Stage and Screen
COMM 4615 Summer Theatre Workshop
or
COMM 3623 Professional InternshipCooperative Education-Theatre

- Specific Requirements: Design Track Technical Electives

36 hours

| MM | 1311 | Technical Production I |
| :---: | :---: | :---: |
| COMM | 1312 | Technical Production II |
| COMM | 2320 | Costume Technology |
| COMM | 2321 | Drawing and Rendering for the Theatre |
| COMM | 3309 | Scene Design |
| COMM | 3312 | Costume Design |
| COMM | 3310 | Lighting for the Stage, Film and TV |
| COMM | 3311 | Contemporary Drama or |
| COMM | 23 | World Drama |
| COMM | 3324 | Cinematography/ Videography |
| COMM | 4101 | Practicum-Theatre-TV-Film (must be taken three times) |
| COMM | 4314 | Advanced TV/Film Production |

Other Electives
The following are recommended:

| COMM | 2101 | Practicum-Theatre/TV/Film <br> (should be taken four times) |
| :---: | :---: | :---: |
| COMM | 2319 | Makeup |

Specific Requirements: Television, Film Track Technical Electives

33 hours

| COMM | 1312 | Technical Production II |
| :---: | :---: | :---: |
| COMM | 2101 | Practicum-Theatre TV Film (must be taken three times) |
| COMM | 3302 | Speech for Stage and Screen or |
| COMM | 4304 | Scriptwriting for Stage and Screen |
| COMM | 3309 | Scene Design |
| COMM | 3310 | Lighting for the Stage, Film and TV |
| COMM | 3324 | Cinematography/Videography |
| COMM | 3325 | Motion Picture History and Significance |
| COMM | 3623 | Professional InternshipCooperative EducationTheatre or |
| COMM | 4616 | Summer Television Workshop |
| COMM | 4312 | Video and Film Editing |
| COMM | 4314 | Advanced TV/Film Production |

Other Electives
17 hours
The following is recommended:
COMM 3302 Speech for Stage and Screen or
COMM 4304 Scriptwriting for Stage and Screen (whichever is not taken as a technical elective)

## Theatre EC-12 Teacher

Certification Program
Admission to COE teacher education programs is required for all undergraduate students seeking teacher certification. Students following all-level certification degree plans (grades EC-12) should consult with their advisor in the department in which their degree is offered. They should also seek information and admission requirements from the College of Education Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302. Students may call the office at 956/381-3420 or log on to the Web site for more information http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for all-level certification include the following: EDAL 3301, EDAL 3302, EDAL 3303, EDAL 4303, READ 4351, EDAL 4398, EDAL 4395 (art only), EDAL 4396 (music only), EDAL 4397 (special education only). Kinesiology majors are also required to take EDAK 3370 and EDAK 3380.

Core Courses
18 hours

| COMM | 1305 | Acting I |
| :--- | :--- | :--- |
| COMM | 1311 | Technical Production I |
| COMM | 4301 | Directing I |
| COMM | 4302 | Directing II |
| COMM | 4315 | History of the Theatre I |
| COMM | 4316 | History of the Theatre II |

Technical Electives 19 hours

| COMM | 2101 | Practicum <br> COMM 2320 |
| :--- | :--- | :--- |
| Costume Technology |  |  |
| COMM | 3309 | Scene Design <br> or |
| COMM | 3312 | Costume Design <br> Contemporary Drama <br> or |
| COMM | 3311 | COMM 3323 | | World Drama |
| :--- |
| COMM | 4101 | Practicum-Theatre/TV/Film |
| :---: | :--- |
| (must be taken three times) |

Minor in High School Education
Eighteen hours of core courses.
Electives 18 hours
The following are recommended:

| COMM | 2306 | Acting II <br> or |
| :---: | :---: | :---: |
| COMM | 3341 | Acting III <br> or |
| COMM | 3342 | Acting IV |

124 hours

Minor in Theatre/TV/Film
Applicants must complete the 18 core hours of the theatre/TV/film program.

Minor in Leadership Studies
The student, with advisement from the leadership studies academic coordinator, will complete 18 hours, of which nine must be advanced coursework, from the following:

| A. Required Courses |  |
| :--- | :--- |
| LEAD 1310 | Introduction to Leadership Theory |
| LEAD 2310 | Ethics in Leadership |

B. Elective Courses

6 hours
Choose no more than one from any given area.
Students cannot choose more than one lowerdivision course in order to meet the minimum requirement of nine advanced hours in the minor.

| Anthropology |  |  |
| :---: | :---: | :---: |
| ANTH | 3333 | United States and Other World Cultures |
| ANTH | 3380 | Social Anthropology |
| Communication |  |  |
| COMM | 2315 | Interpersonal Communication |
| COMM | 3314 | Persuasive Communication |
| COMM | 3316 | Intercultural Communication |
| COMM | 3330 | Argumentation and Debate |
| COMM | 3332 | Organizational Communication |
| COMM | 3334 | Communication through Group Process |
| COMM | 4321 | Public Relations |
| Management |  |  |
| MANA | 3335 | Communication Policy and Strategy |
| MANA | 4361 | Organizational Behavior |
| MANA | 4363 | Production Management |
| Philosophy |  |  |
| PHIL | 1320 | Introduction to Logic |
| PHIL | 2350 | Social Philosophy |

Political Science

| POLS | 3333 | Classical Political Theory |
| :--- | :--- | :--- |
| POLS | 3334 | Modern Political Theory |
| POLS | 4360 | American Executive Process |

Psychology

| PSY | 3324 | Social Psychology |
| :--- | :--- | :--- |
| PSY | 3340 | Stress Management |

Sociology
SOCI 4380 Social Protest and Social Movements

## $\star$ Course Descriptions

A listing of courses offered by the Department of Communication can be found on page 274.

Communication Arts and Sciences Building Room 213
1201 W. University Drive Edinburg, TX 78539-2999
Telephone: 956/381-3421
Fax: 956/381-3423
E-mail: guerrad@utpa.edu

Full-time Faculty
Affeldt, Robert, Assistant Professor
Anderson-Mejias, Pamela, Associate Professor
Anshen, David, Assistant Professor Belau, Linda, Associate Professor Braithwaite, Jean, Assistant Professor Brown, Danika, Assistant Professor Cameron, Ed, Assistant Professor Charlton, Colin, Assistant Professor Charlton, Jonikka, Assistant Professor Christensen, Matt, Assistant Professor Cole, Deborah, Assistant Professor Daniel, Clay L., Associate Professor Eom, Min-hee, Assistant Professor Hamilton, Lee, Associate Professor Hamilton, Rebekah, Associate Professor Haule, James M., Professor
Heckler, Edward, Associate Professor

Huang, Su-ching, Assistant Professor Johnson, Robert, Associate Professor Keller, Christopher, Assistant Professor Lang, Yong, Associate Professor LaPrade, Douglas E., Associate Professor Mery, Adelle, Lecturer Miles, Caroline S., Assistant Professor Mitchell, Rebecca, Assistant Professor Newman, Beatrice, Professor<br>Newman, Donald, Associate Professor Noe, Mark, Assistant Professor Nuss, Melynda, Assistant Professor Pérez, Emmy, Assistant Professor<br>Reed, Michael D., Professor<br>Schneider, Gary, Assistant Professor Schneider, Steven P., Professor<br>Skinner, Jose, Assistant Professor<br>Taylor, Karen, Lecturer Thompson, Frieda, Lecturer<br>Thomson, Shawn, Assistant Professor Vielma, Barbara, Lecturer Von Ende, Frederick, Professor<br>West, Thomas, Lecturer<br>Williamson, Eric, Associate Professor Wittman, John, Assistant Professor

## $\star$ General OVERVIEW

The Department of English offers undergraduate major and minor programs with specializations in literature, writing and discourse studies, creative writing, linguistics and language, applied linguistics, cultural studies, border studies and English as a Second Language. Teacher certification plans are also available at both the high school (8-12) and middle school (4-8) levels.

In addition, the department offers graduate programs leading to the Master of Arts in English (with tracks in literature and cultural studies and rhetoric, composition and literacy studies), the Master of Fine Arts in creative writing, the Master of Arts in English as a Second Language, and the Master of Arts in interdisciplinary studies with concentrations in English and writing. More information is available in the Graduate Catalog.

Major and minor programs in English offer students an opportunity to discover more about the world in which they live, to learn to appreciate the artistic works of fellow human beings and to develop literary and language aptitudes of their own.

To students who view education primarily as career training, English programs provide excellent preparation
for any profession requiring a high degree of skill and comprehension in oral and written communication.

## * MAJOR IN ENGLISH

The Bachelor of Arts degree with a major in English requires 39 semester hours of English, of which 36 hours must be advanced. Three of those hours will be satisfied by the core curriculum requirement that all students take an English $23 \times X$ course of their choosing.

All students must complete nine hours of English credits - including 1301, 1302 and one 2300-level course from Area A - as prerequisites for advanced (3000- and 4000-level) courses. Additional prerequisites are listed in the Course Descriptions section of the catalog.

Students may consider the offerings below in order to develop an individual degree plan in consultation with an advisor from the English department. (View Course Descriptions for more information about individual courses.)

## Offerings in Literature:

ENG 2300, 2303, 2305, 2307, 2308 (when special topic is literary), 2313, 2387, 2388, 3301, 3304, 3305, 3306, $3307,3309,3310,3312,3313,3317,3320$ (when special topic is literary), 3322, 3324, 3331, 3332, 3350, 4301, 4306, 4309, 4310, 4312, 4316, 4318 and 4319.

Offerings in Literary Theory:
ENG 4305 and 4306.

Offerings in Writing and Discourse Studies:
ENG 1301, 1302, 1310, 1320, 1387, 1388, 1406, 2308 (when topic is writing), 2309, 3320 (when topic is writing), $3326,3338,4307,4322,4323,4324,4330$ and 4325.

Offerings in Creative Writing:
ENG 3336, 3337, 4336, 4337 and 4340.

## Offerings in Linguistics and Language:

ENG 3300, 3319, 3320 (when topic is linguistic), 3321, $3330,4302,4308,4314,4326,4330$ and 4331.

Offerings in Applied Linguistics:
ENG 3321, 4326 and 4328.

## Offerings in Cultural Studies:

ENG 4304, 4306 and 4307.

- Offerings in Border Studies:

ENG 4319, 4320 and 4331.

- Offerings in English as a Second Language:

ENG $3319^{* *}, 3321^{*}, 4326,4328^{*}, 4329,4330$ and 4331.
"Denotes courses that (in addition to EDBE 3324) are required by the state of Texas for ESL endorsement. Students getting this endorsement must have a 2.25 GPA in the required four courses.

## * DeGree Requirements

Core Curriculum Requirements
48 hours
Complete the requirements shown in the University core curriculum requirements section of this catalog on pages 103-107.

Required Courses
39 hours
Area A: Sophomore Literature (Survey Courses)

- three credits to be chosen from the following: 2300, 2303, 2305, 2307, 2308, 2313, 2387, 2388

Area B: Literature Survey - six credits to be chosen from the following: $3312,3313,3331,3332$

Area C: Period/Genre/Theme/Single Author Courses - three credits to be chosen from the following: 3301, 3304, 3305, 3306, 3307, 3309, 3310, 3311, 3314, 3317, 3322, 3324, 3325, 4301, 4309, 4310, 4312, 4319

Area D: World/Multicultural Literature - three credits to be chosen from the following: 3321, 3323, 3342, 3343,3350, 4316

Area E: Writing - six credits to be chosen from the following: $3326,3333,3334,3336,3337,3338,4325$

Area F: English Language/Linguistics - three credits to be chosen from the following: 3300, 3319, 3330

Area G: Literary or Rhetorical Theory Survey - three (3) credits to be chosen from the following: 4305,4324


Area H: Electives - 12 credits to be chosen from 3000- and 4000-level courses (3320 may be repeated for elective credit when the topic varies).

In addition to the core curriculum and English major requirements, students will be required to choose an academic minor (usually 18 hours), take the UNIV 1301 Learning Framework course and take a number of electives to satisfy University and college degree requirements. Students must take at least 124 hours to graduate. For specifics about all these requirements, please see an English advisor.

## N AREAS OF EMPHASIS IN MAJOR

Students may also opt to take an additional nine to 12 hours to get an "emphasis" in one of the following areas: literature, writing and discourse studies, creative writing, linguistics and language, applied linguistics, cultural studies and border studies.

- Emphasis Requirements

Literature Emphasis
Required courses: English 3312, 3313, 3331, 3332 and 3350
Writing and Discourse Studies
Required courses: English 3326, 4323 and 4324 Creative Writing
Required courses: English 3337, 4337, 4340 and 4436 Linguistics and Language
Required courses: English 3330, 4302 and 4308 Applied Linguistics
Required courses: English 3321, 4326 and 4328
Cultural Studies
Required courses: English 4304, 4306 and 4307
Border Studies
Required courses: English 4319, 4320 and 4331

- Bachelor of Arts in English: Certification in 4-8 English Language Arts/Reading - Teacher Certification Programs and Requirements Admission to COE teacher education programs is required for all undergraduate students seeking teacher certification. Students following middle school certification degree plans (grades 4-8) should consult with their advisor in the department in which their degree is offered. They should also seek information and admission requirements from the College of Education Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302. Students may call the office at 956/381-3420 or log on to the Web site for more information at http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for middle school
(4-8) certification include the following: EDMS 3353, EDMS 3354, READ 3325, EDMS 3305, EDMS 3355, READ 3326, EDMS 4398 and EDMS 4399.

| A. Core Curriculum Requirements | 48 hours |
| :--- | :--- | :--- |
| B. English Major |  |

D. Professional Development 18 hours

EDMS 3353 Young Adolescent Development and Learning
EDMS 3354 Middle School Curriculum Development and Assessment
EDMS 3305 Instructional Methods for English Language Learners and Learners with Exceptionalities in Middle Schools
EDMS 3355 Instructional Technology Methods and Classroom Management for Middle School Classrooms
EDMS 4398 Integrated Internship II: Middle School
EDMS 4399 Supervised Internship II: Middle School
E. Miscellaneous Requirements

PSY 4319 Cognitive Processes or
SOCI 4360 Sociology of Education

COMM 3308 Creative Drama
COMM 1313 Fundamentals of Speech
Communication or
COMM 3317 Speech for the Classroom Teacher
EMAT 2306 Foundations of Mathematics I
EMAT 2307 Foundations of Mathematics II
UNIV 1301 Learning Framework
SCIENCE Any additional six hours

- Bachelor of Arts in English: Certification in 8-12 English Language Arts/Reading
- Teacher Certification Programs and Requirements

Admission to COE teacher education programs is required for all undergraduate students seeking teacher certification. Students following high school certification degree plans (grades 8-12) should consult with their advisor in the department in which their degree is offered. They should also seek information and admission requirements from the College of Education Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302. Students may call the office at 956/381-3420 or log on to the Web site for more information at http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for high school (8-12) certification include the following: EDHS 4301, EDHS 4302, EDHS 4303, EDHS 3305, READ 4351, EDHS 4398 and EDHS 4399.
$\begin{array}{lr}\text { A. Core Curriculum Requirements } & 48 \text { hours } \\ \text { B. English Major } & 27 \text { hours }\end{array}$ Any three of the following four surveys:

| ENG | 3312 | Survey of American Literature <br> and/or |
| :--- | :---: | :--- |
| ENG | 3313 | Survey of American Literature <br> Survey of English Literature <br> and/or |
| ENG | 3331 | Survey of English Literature <br> ENG 3332 |
| ENG | 3319 | Introduction to Descriptive Linguistics <br> ENG 4318 |
| Teaching Secondary School |  |  |
| ENG | 4322 | Creative Wrature |
| ENG | 4325 | Composition Techniques |
| ENG $33 \times \times / 43 \times x$ | Any Advanced English Course |  |
| ENG $33 \times \times / 43 \times x$ Any Advanced English Course |  |  |

C. Choice of Minor

18 hours Can include core courses.
D. Professional Development 18 hours EDHS 4301 Foundations of Education

| EDHS 4302 | Instructional Planning <br> and Assessment |
| :---: | :---: |
| EDHS 4303 | Instructional Strategies and <br> Classroom Management |
| EDHS 3305 | Instructional Methods for English <br> Learners and Learners with <br> Exceptionalities in High School |
| EDHS 4398 | Integrated Internship II: 8-12 <br> Supervised Internship II: <br> High School 8-12 |

E. Miscellaneous Requirements 21 hours

| PSY | 4319 | Cognitive Processes or |
| :---: | :---: | :---: |
| SOCI | 4360 | Sociology of Education |
| COMM | 3317 | Speech for the Classroom Teacher |
| COMM | 3301 | Rhetoric of Television |
| READ | 3325 | Cognitive Development and Reading Comprehension |
| READ | 3327 | Assessment/Diagnosis of Special Needs Students |
| READ | 4351 | Developmental Reading in Secondary Schools |
| UNIV | 1301 | Learning Framework |

- Bachelor of Arts in English: Certification
in 8-12 English Language Arts/Reading with ESL Endorsement
- Teacher Certification Programs and Requirements

Admission to COE teacher education programs is required for all undergraduate students seeking teacher certification. Students following high school certification degree plans (grades 8-12) should consult with their advisor in the department in which their degree is offered. They should also seek information and admission requirements from the College of Education Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302. Students may call the office at 956/381-3420 or log on to the Web site for more information http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for high school (8-12) certification include the following: EDHS 4301, EDHS 4302, EDHS 4303, EDHS 3305, READ 4351, EDHS 4398 and EDHS 4399.
A. Core Curriculum Requirements

48 hours
B. English Major 30 hours in addition to core
Any three of the following surveys:
ENG 3312 Survey of American Literature and/or
ENG 3313 Survey of American Literature
and/or
ENG
3331
ENG
ENG
ENG
ENG
ENG
ENG
ENG 4328
Survey of English Literature and/or
Survey of English Literature Introduction to Descriptive Linguistics Language and Culture
Teaching Secondary School Literature Creative Writing I Composition Techniques Introduction to English as a Second Language
ENG 33xx/43xx Any Advanced ESL Course
C. Choice of Minor
(foreign language recommended) 18 hours
D. Professional Development Hours 18 hours

EDHS 4301 Foundations of Education
EDHS 4302 Instructional Planning and Assessment
EDHS 4303 Instructional Strategies and Classroom Management
EDHS 3305 Instructional Methods for English Learners and Learners with Exceptionalities in High School
EDHS 4398 Integrated Internship II: 8-12
EDHS 4399 Supervised Internship II: High School 8-12
E. Miscellaneous Requirements

21 hours
PSY 4319 Cognitive Processes
or
SOCI 4360 Sociology of Education
COMM 3317 Speech for the Classroom Teacher
READ 3325 Cognitive Development and Reading Comprehension
READ 3327 Assessment/Diagnosis of Special Needs Students
READ 4351 Developmental Reading in Secondary Schools
EDBE 3324 English as a Second Language
UNIV 1301 Learning Framework

- GPA Requirement for Certification Students

Students seeking certification or an ESL endorsement must have at least a 2.5 GPA in the content area courses.

## Additional Information:

- Requirements for taking the TExES Exam

To receive clearance, English Language Arts/Reading Certification candidates must arrange a conference with a Department of English TExES advisor to review course completions, GPA requirements and review session attendance. TExES candidates will take the

Representative Form of the ELA/Reading 4-8 or ELA/ Reading 8-12 exam. To take the Representative Form, candidates should be enrolled in or have completed English 4318 or English 4325 . Candidates should check the Department of English home page for links to updates on TExES information.

## MINOR IN ENGLISH

Eighteen hours of English, of which six must be advanced.

## $\star$ Course Descriptions

A listing of courses offered by the Department of English can be found on page 306.


## $\boldsymbol{u}_{\text {History nind }}$ PHILOSOPHY

## Dr. Michael Faubion, Department Chair

 Communication Arts and Sciences Building, Room 342 1201 W. University Drive Edinburg, TX 78539-2999Telephone: 956/381-3561
Fax: 956/384-5096
E-mail: mfc83b@utpa.edu

## * General Overview

The Department of History and Philosophy offers majors in history, social studies composite and philosophy, as well as minors in history and philosophy.

In addition, it offers courses for students seeking a second teaching field for teacher certification.

On the graduate level, the department offers a Master of Arts in history and a Master of Arts in interdisciplinary studies with a concentration in history. More information is available in the Graduate Catalog.

Full-time Faculty
Adair, Penelope A., Associate Professor
Faubion, Michael L., Associate Professor
Finck, James, Lecturer
Garza, Juanita, Lecturer Hay, Amy, Assistant Professor
Hernandez, Sonia, Assistant Professor
Knight, Dan, Assistant Professor Mata, Jennifer, Assistant Professor Miller, Christopher L., Associate Professor Waite, Charles, Assistant Professor

Wallace, Ned, Lecturer
Weaver, Michael K., Associate Professor Wirts, Kristine, Assistant Professor

Zarate, Arnold, Lecturer

## * General Overview: History

Students majoring or minoring in history may become teachers or seek employment in business or government. History is an excellent background for those who wish to go to law school or enter journalism. The Department of History and Philosophy, in conjunction with the Departments of Modern Languages and Literature, Sociology and Social Work, also offers a Bachelor of Arts degree in Latin American Studies and Mexican-American Studies.

Beginning history majors are urged to take Civilization Through the Centuries, American Heritage and Historiography and Methodology early in their academic careers. Well-prepared students are encouraged to establish credit in some of these beginning courses by passing advanced standing examinations.

The department also welcomes non-history majors who may wish to take courses in Mexican-American heritage, Russian history or a wide assortment of courses in Latin American, American and European history.

## * Degree Requirements

## MAJOR IN HISTORY

## Core Curriculum Requirements <br> 48 hours

Complete the core curriculum requirements as shown on pages 103-107 of this catalog.

```
Core Courses
    HIST 2313 American Heritage I*
    HIST 2314 American Heritage II*
    HIST 2331 Civilization Through the Centuries
    HIST 2332 Civilization Through the Centuries
    HIST 3332 Historiography and Methods
    *Honors HIST 2387 and HIST 2388 may be
substituted for HIST 2313 and HIST }2314
Designated Electives
21 hours
Six advanced hours from American history.
Six advanced hours from European history.
Six advanced hours from Latin American history.
Three advanced hours of history from any area
Forty-six hours free electives/minor.
```

TOTAL
124 hours
MINOR IN HISTORY
Core Courses
9 hours

HIST 2313 American Heritage I*
HIST 2314 American Heritage II*
HIST 2331 Civilization Through the Centuries or
HIST 2332 Civilization Through the Centuries
*Honors HIST 2387 and HIST 2388 may be
substituted for HIST 2313 and HIST 2314.

- Other Requirements

Minors must take nine additional hours, including six advanced hours.

## MAJOR IN SOCIAL STUDIES COMPOSITE

The following criteria are required of all history majors and minors seeking teacher certification:

- Students must have a 3.0 cumulative GPA in their history or social studies classes.
- Students must have a "C" or better in each of their history courses.

Students will take the Representative Form for the TExES once after completing HIST 2313 and 2314 and again after completing HIST 2331, 2332 and 3332. Students will take the benchmark the final time while taking HIST 3303. HIST 3303 should will be the last history class the student takes.

The social studies composite major is a broad-field major requiring 48 hours in social studies. Students with a social studies composite major do not require a minor. This curriculum is recommended for students seeking social studies certification for grades 8-12.

## - Teacher Certification Programs

and Requirements
Admission to COE teacher education programs is required for all undergraduate students seeking teacher certification. Students following high school certification degree plans (grades 8-12) should consult with their advisor in the department in which their degree is offered. They should also seek information and admission requirements from the College of Education Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302. Students may call the office at 956/381-3420 or log on to the Web site for more information http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for high school (8-12) certification include the following: EDHS 4301, EDHS 4302, EDHS 4303, EDHS 3305, READ 4351, EDHS 4398 and EDHS 4399.

Core Curriculum Requirements 48 hours
Complete the core curriculum requirements as shown on pages 103-107 of this catalog.

Social Studies Courses
Students take 36 hours of required social studies classes and 39 hours of designated social studies electives.


Designated Electives
Select six hours from the following:

| HIST | 3313 | American Colonial Era to 1783 <br> HIST |
| :--- | :---: | :--- |
| 3324 | Formative Period of the American <br> Nation, 1783-1840 |  |
| HIST | 3350 | American Military Experience |
| HIST | 3373 | Mexican-American Heritage |
| HIST | 4322 | Spanish Southwest to 1821 |
| HIST | 4343 | Era of Sectional Conflict, |
| HIST | 4363 | U.S.-Latin American Relations <br> SIST |
| HIST | $4397^{*}$ | Special Topics in U.S. History |

Select six hours from the following:

| HIST | 3350 | American Military Experience |
| :--- | :---: | :--- |
| HIST | 3373 | Mexican-American Heritage |
| HIST | 4303 | Emergence of Modern America, |
| HIST | 4373 | $1877-1917$ <br> Twentieth Century America, <br> 1917 to Present |
| HIST | 4363 | U.S.-Latin American Relations <br> HPecial Topics in U.S. History |
| HIST | $4397^{*}$ | Sper |
| Select six hours from the following: |  |  |
| HIST | 3335 | History of Spain |
| HIST | 3341 | History of England I to 1686 |
| HIST | 3342 | History of England II After 1686 |


| HIST | 4370 | Renaissance and the Reformation, <br> $1300-1650$ |
| :--- | :---: | :--- |
| HIST | 4371 | Russia since 1905 <br> Absolutism and Enlightenment <br> in Europe, 1650-1789 |
| HIST | 4375 | Revolutionary Europe, 1780-1850 |
| HIST | 4376 | Europe's Age of Imperialism, |
| HIST | 4383 | $1850-1919$ |
| HIST | 4393 | Contemporary Europe, <br> 1919 to Present |
| HIST | $4396^{*}$ | Special Topics in European History |

Select three hours from the following:
HIST 3333 Colonial Mexico, Central and South America
HIST 4322 The Spanish Southwest to 1821
HIST 4352 Brazil After Independence
HIST 4345 Mexico's First Century as an Independent Republic
HIST 4353 History of Mexican Culture
HIST 4354 Contemporary Mexico
HIST 4355 Spanish South America Since Independence
HIST 4363 U.S.-Latin American Relations
HIST 4374 Caribbean and Central America
HIST 4398* Special Topics in Latin American History

Select three hours from the following:
HIST 3302 World History Studies
HIST 3333 Colonial Mexico, Central and South America
HIST 4322 The Spanish Southwest to 1821
HIST 4352 Brazil After Independence
HIST 4345 Mexico's First Century as an Independent Republic
HIST 4353 History of Mexican Culture
HIST 4354 Contemporary Mexico
HIST 4355 Spanish South America Since Independence
HIST 4363 U.S.-Latin American Relations
HIST 4374 Caribbean and Central America
HIST $4398^{*}$ Special Topics in Latin American History

Select six hours from the following:
POLS 3316 American Public Policy
POLS 4320** American Constitutional Law: Federalism
POLS $4321^{* *}$ American Constitutional Law: Liberties
POLS 4332 American Political Theory
POLS 4360 American Executive Process
POLS 4363 American Legislative Process
POLS $4367^{* *}$ American Judicial Process

| POLS | 4373 | American Political Parties <br> and Politics |
| :--- | :--- | :--- |
| Select three hours from the following: |  |  |
| ECON | 3351 | Macroeconomic Theory |
| ECON | 3353 | International Trade |
| ECON | 3355 | Economic Development |
| ECON | 3357 | Economics of Poverty |
| ECON | 3358 | Labor History |
| ECON | 4359 | History of Economic Thought |
| FINA | 3381 | Money and Banking |

High School (8-12) School Certification

- Semester I

| EDHS | 4301 | Foundations of Education <br> Instructional Planning |
| :---: | :---: | :---: |
| RDHS | 4302 | and Assessment |
| READ | 4351 | Developmental Reading in <br> Secondary Schools |

- Semester II

EDHS 3305 Instructional Methods for English Learners and Learners with Exceptionalities in High School
EDHS 4303 Instructional Strategies and Classroom Management for High School

- Internship/Semester III

EDHS 4398 Integrated Internship II High School
EDHS 4399 Supervised Internship II: High School

Total Hours for students seeking certification 132 hours
*Requires departmental approval.
"Students may choose only one of these options. Students may not apply the same course in two elective areas.

## $\star$ COURSE DESCRIPTIONS

A listing of history courses offered by the Department of History and Philosophy can be found on page 317.


# $\downarrow$ PHILOSOPHY 

Full-time Faculty<br>Buckman, Kenneth L., Associate Professor<br>Cole, Julian, Assistant Professor Gilson, Greg, Assistant Professor Leach, Stephen, Assistant Professor McWilliams, Cynthia, Assistant Professor Nuccetelli, Susana, Associate Professor Oliver, Stephen, Lecturer<br>Pearson, Thomas D., Associate Professor<br>Seay, Gary, Assistant Professor<br>Wimberly, Cory, Assistant Professor Zents, Jeff, Lecturer

## Overview

The Department of History and Philosophy offers a major in philosophy within the Bachelor of Arts degree, as well as a minor in philosophy. The study of philosophy can serve many useful purposes, but perhaps the most important are:

- Training in philosophy helps one to think more clearly, more perceptively and more effectively. Regardless of one's personal and occupational goals, and regardless of the projects in which one is interested, being able to think clearly and well about them is an essential tool.
- Study of philosophy uniquely helps one to better understand and appreciate oneself, the world outside and how the two are related. One of the deepest human needs is to make sense of life and one's place in it, and the satisfaction of that need is the central concern of philosophy.

A major in philosophy provides strong preparation for a variety of careers, particularly in business, law, public policy and the ministry, as well as college teaching. A minor in philosophy provides excellent support for majors in numerous fields, particularly history, government, English, psychology, sociology, math and certain areas in science and business administration.

## * Degree Requirements

## MAJOR IN PHILOSOPHY

Core Curriculum Requirements

Complete the core curriculum requirements as shown on pages 103-107 of this catalog.

Core Courses
$\begin{array}{lll}\text { PHIL } & 1310 & \text { Introduction to Philosophy } \\ \text { PHIL } & 1320 & \text { Introduction to Logic }\end{array}$
PHIL 2330 Introduction to Ethics or
PHIL 2350

PHIL 3320

PHIL 4320
PHIL 4310

PHIL 4340
PHIL 3360
Introduction to Social and Political Philosophy
Symbolic Logic
or
Philosophy of Science
Epistemology
or
Philosophy of Mind History of Philosophy: Medieval
PHIL 3361 History of Philosophy: Modern History of Philosophy: Contemporary

Designated Electives
12 hours
Select 12 additional hours of philosophy, at least nine of which must be advanced.

TOTAL
124 hours

## MINOR IN PHILOSOPHY

Eighteen hours in philosophy, of which six hours must be advanced.

Required Courses

| PHIL | 1310 | Introduction to Philosophy <br> or |
| :--- | :---: | :--- |
| PHIL | 2330 | Ethics |
| PHIL | 1320 | Introduction to Logic |

## $\star$ COURSE DESCRIPTIONS

A listing of philosophy courses offered by the Department of History and Philosophy can be found on page 353 of this catalog.

## 3 MEXICANAMERICAN Heritage Program

Dr. Michael Faubion, Director<br>Communication Arts and Sciences Building, Room 342 1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/381-3561<br>Fax: 956/384-5096<br>E-mail: mfc83b@utpa.edu

Students who want to major or minor in MexicanAmerican Heritage should consult with the director.

## $\star$ MAJOR IN MEXICAN-AMERICAN Heritage

The Bachelor of Arts degree in Mexican-American Heritage is an interdisciplinary program taught by the faculty of the Departments of History and Philosophy, Psychology and Anthropology, Sociology, and Modern Languages and Literature. The program is designed as a broad field major.

| Major Requirements |  |  |
| :---: | :---: | :---: |
| HIST | 3373 | Mexican-American Heritage |
| Spanis | Require | Courses 18 hours |
| SPAN | 2307 | Intermediate Spanish for Native Speakers (or equivalent course) |
| SPAN | 2308 | Intermediate Spanish for Native Speakers (or equivalent course) |
| SPAN | 3303 | Advanced Spanish Composition |
| SPAN | 3330 | Spanish Grammar |
| SPAN | 3306 | Basic Concepts of Spanish Phonetics and Phonology |
| SPAN | 4316 | Problems and Issues Related to Language |
| History Require |  | Courses 18 hours |
| HIST | 2331 | Civilization Through the Centuries (or equivalent) |


| HIST | 2332 | Civilization Through the Centuries <br> (or equivalent) |
| :--- | :---: | :---: |
| HIST | 3330 | A General Survey of the <br> History of Texas |
| Choose two from these Latin American courses: |  |  |
| HIST | 3333 | Colonial Mexico, Central and <br> South America |
| HIST | 4345 | Mexico's First Century as an <br> Independent Republic |
| HIST | 4353 | History of Mexican Culture <br> HIST |
| 4354 | Contemporary Mexico |  |

Choose one from these American History courses:
HIST 4322 The Spanish Southwest to 1821
HIST 4325 The American Southwest After 1821

Choose one from these European History courses:
HIST 3341 History of England I to 1686
HIST 3342 History of England II After 1686
HIST 4370 The Renaissance and the Reformation, 1300-1650
HIST 4376 Revolutionary Europe, 1789-1850
Sociology and Anthropology
Required Courses 24 hours
SOCI 1313 Principles of Sociology
SOCI 1323 Current Social Issues
ANTH 3375 Mexican-American Folklore
SOCI 4323 The Mexican-American People
Choose one from the following:
SOCI 3301 Methods of Social Research
SOCI 4333 Social Theory
Choose three from the following:
ANTH 1353 Introduction to Folklore
ANTH 4353 Folklore of the Lower Rio Grande Valley
SOCI 4313 American Minorities
SOCI 4373 Latin American Society
Additional recommended courses include:
ANTH 1323 Introduction to Cultural Anthropology
ENG 3321 Language and Culture
ENG 4316 Mexican-American Literature
SPAN 3310 Masterpieces in Spanish-American Literature I
SPAN 3311 Masterpieces in Spanish-American Literature II
SPAN 3316 The Mexican Novel

## MINOR IN MEXICAN-AMERICAN Heritage

This is an interdisciplinary program, taught by the faculty of the Departments of History and Philosophy, Modern Languages and Literature, English, Psychology and Anthropology and Political Science, that is aimed at giving students a more appreciable understanding of the heritage of the Mexican-American ancestry and its contributions to the present environment.

The minor in Mexican-American Heritage offers excellent support for majors in Spanish and history and students in the College of Social and Behavioral Sciences. It also provides support for students wishing to teach, particularly those at the high school level or specializing in bilingual education.

The curriculum for this program is divided into two classifications: impact courses, which deal specifically and directly with the Mexican-American, and support courses, which, for the most part, are concerned with Mexico, aspects of its culture and the Spanish language. Programs of study will be influenced by the student's major. Any course may be taken as an elective.

## - Minor Requirements <br> 18 hours

Twelve of those hours must be from core courses.

| Core courses |  |  |
| :--- | :---: | :--- |
| Select from the following: |  |  |
| ANTH | 2323 | Mexican-American Culture |
| ANTH | 3375 | Mexican-American Folklore |
| ANTH | 4353 | Folklore of Lower Rio Grande <br> Valley |
| ENG | 4316 | Mexican-American Literature |
| HIST | 3373 | Mexican-American Heritage |
| HIST | 4322 | The Spanish Southwest to 1821 |
| POLS | 3363 | American Hispanic Politics |
| SOCI | 4323 | The Mexican-American People |

## * COURSE DESCRIPTIONS

Courses offered by the Department of Modern Languages and Literature can be found under their respective headings in the Course Descriptions section beginning on page 248.

## MODERN LANGUAGES AND LITERATURE

Dr. Glenn A. Martinez, Department Chair Communication Arts and Sciences Building, Room 329<br>1201 W. University Drive<br>Edinburg, TX 79539-2999<br>Telephone: 956/381-3441<br>Fax: 956/318-5381<br>E-mail: martinezg@utpa.edu<br>Full-time Faculty<br>Alvarez Martinez, Stephanie, Lecturer, Spanish, Literature Ardalani, Elvia G., Assistant Professor, Spanish, Literature and Creative Writing Behar, Stella, Associate Professor, French, Literature Browne, Peter E., Associate Professor, Spanish, Literature and Creative Writing Calarge, Carla, Assistant Professor, French, Literature Contreras, Victoria, Professor, Spanish, Foreign Language Teaching Cortina, Guadalupe M., Associate Professor, Spanish, Literature Diaz de Sharp, Monica, Assistant Professor, Spanish, Literature<br>Flores, Maria E., Lecturer, Spanish, Language<br>Garcia, Carmela, Lecturer, Spanish, Language<br>Hernandez, Jose E., Assistant Professor, Spanish, Linguistics Loera, Francisco, Lecturer, Spanish, Music and Popular Culture Martin-Ochoa, Luz Maria, Assistant Professor, Spanish, Literature and Creative Writing Martinez, Glenn A., Associate Professor, Spanish, Linguistics<br>Martinez, Jose Maria, Associate Professor, Spanish, Literature

Mejias, Hugo, Associate Professor, Spanish, Linguistics Rea, Ramiro R., Associate Professor, Spanish, Literature and Creative Writing
Romero, Hector R., Professor, Spanish, Literature Romero, Zoila, Lecturer, Spanish, Language Sharp, Ethan P., Assistant Professor, Latin American Studies

Emeritus Professors
Dominguez, Sylvia M., Spanish
Garcia, Lino, Spanish
Vassberg, Lilliane, French

## $\star$ General Overview

The Department of Modern Languages and Literature consists of the subject areas of Spanish and French. A major, leading to a Bachelor of Arts degree, is offered in Spanish and a minor is offered in Spanish and in French. Teacher certification plans in Spanish are available at both the elementary and secondary levels.

The department also offers a graduate program with a major in Spanish leading to the Master of Music and the Master of Arts degree. More information is available in the Graduate Catalog.

## BACHELOR OF ARTS IN Latin American Studies

The undergraduate major in Latin American Studies offers students a unique opportunity to combine concentrated work in more than one academic field in preparation for careers in a wide variety of areas. These include government and industry, banking and international commerce, international organizations and agencies, private foundations, journalism and teaching. In addition, the Latin American Studies major provides excellent preparation for advanced study in graduate or professional schools where degree programs are related to Latin American issues.

## Degree Requirements

## Major in Latin American Studies

Core Curriculum Requirements
48 hours
Complete the University core curriculum requirements as described in this catalog. It is
recommended that students take six hours of beginning Spanish to fulfill their core curriculum language requirement and to prepare them for the core courses in Spanish. These Spanish courses are either:

| SPAN | 1301 | Beginning Spanish <br> and |
| :---: | :---: | :---: |
| SPAN | 1302 | Beginning Spanish <br> or |
| SPAN | 1303 | Beginning Spanish <br> and |
| SPAN | 1304 | Beginning Spanish |

Core Courses 15 hours
SPAN 2307 Intermediate Spanish for Native Speakers
SPAN 2308 Intermediate Spanish for Native Speakers
LAMS 2301 Introduction to Inter-American Studies
LAMS 4301 Seminar in Latin American Studies

- Concentration in Culture,

Society and Health 15 hours
Choose five courses from the following group:
ANTH 3310 Medical Anthropology
ANTH 4350 Mexican-American Folk Medicine
LAMS 33xx Narrative, Ritual and Healing*
PSY 4326 Cross-Cultural Psychology
SOCI 3324 Sociology of Health
SOCI 3393 Sociology of Aging
SOCW 4311 Research for the Social Services
SPAN 2351 Spanish for the Health Professions*
SPAN 4351 Applied Linguistics of Spanish in Health Care*
"Subject to approval.

Concentration in International Relations 15 hours Choose five courses from the following group:
ECON 3336 Political Economy of Mexico
HIST 4352 Brazil After Independence
HIST 4354 Contemporary Mexico
HIST 4355 Spanish South America
Since Independence
HIST 4363 U.S.-Latin American Relations
HIST 4374 Caribbean and Central America
INTB 3330 International Business
POLS 3364 U.S.-Mexico Border Relations
POLS 4383 Politics of Central America
and the Caribbean
POLS 4386 South American Politics
POLS 4387 Politics of Mexico

PORT $33 x x \quad$ Portuguese for Spanish Speakers*
"Subject to approval.

- Concentration in Mexican
and Border Studies
15 hours
Choose five courses from the following group:
ANTH 3375 Mexican-American Folklore
ANTH 4348 Peoples and Cultures of Mexico
ANTH 4350 Mexican-American Folk Medicine
ANTH 4353 Folklore of the Lower Rio Grande Valley
HIST 3333 Colonial Mexico, Central America and South America
HIST 3373 Mexican-American Heritage
HIST 4322 Spanish Southwest to 1821
HIST 4345 Mexico's First Century as an Independent Republic
HIST 4353 History of Mexican Culture
HIST 4354 Contemporary Mexico
MUS 43xx Music of the Border*
POLS 3364 U.S.-Mexico Border Relations
SPAN 3316 The Mexican Novel
SPAN 4311 Mexican Literature I
SPAN 4329 Mexico's Contemporary Literature
SPAN $43 x x$ Latino/a Literature in the U.S.*
SPAN $43 x x \quad$ Spanish in the U.S.*


## *Subject to approval.

- Concentration in Independent Study 15 hours

With the approval of the Latin American Studies advisor, students will choose five courses that have thematic coherence from at least two separate disciplines.

Designated Electives
9 hours
Choose one course in language training beyond
SPAN 2308 or one course in Spanish American Literature at the 3000-level or above orone course in Latin American art or music.

Choose one course in Latin American history or philosophy at the 3000-level or above.

Choose one course in the social sciences (anthropology, political science or sociology) on Latin America at the 3000level or above.

Electives
36 hours

Total
120 hours

## MinOR IN LATIN AMERICAN STUDIES

Required Courses 15 hours
SPAN 2307 Intermediate Spanish for Native Speakers
SPAN 2308 Intermediate Spanish for Native Speakers

Choose one course from the following: 3 hours
HIST 3333 Colonial Mexico, Central America and South America
HIST 4374 Caribbean and Central America
Choose one course from the following: 3 hours
SPAN 3310 Masterpieces of Spanish-American Literature I
SPAN 3311 Masterpieces of Spanish-American Literature II

Choose one course from the following: 3 hours
POLS 4383 Politics of Central America and the Caribbean
POLS 4387 Politics of Mexico
ANTH 4348 Peoples and Cultures of Mexico
Other Electives
3 hours

| ANTH | 2323 | Mexican-American Culture |
| :---: | :---: | :---: |
| ANTH | 3368 | Peoples of South America |
| ANTH | 3375 | Mexican-American Folklore |
| ANTH | 4348 | Peoples and Cultures of Mexico |
| ANTH | 4353 | Folklore of the Lower Rio Grande Valley |
| ANTH | 4365 | Archaeology of South America |
| ANTH | 4369 | Archaeology of Mexico and Central America |
| ART | 4351 | Latin American Art: Pre-Conquest |
| ART | 4352 | Latin American Art: Post-Conquest |
| ECON | 3336 | The Political Economy of Mexico |
| ENG | 3320 | Special Topics: Latino Literature |
| ENG | 4316 | Mexican-American Literature |
| HIST | 3373 | Mexican-American Heritage |
| HIST | 3333 | Colonial Mexico, Central America and South America |
| HIST | 3335 | History of Spain |
| HIST | 4322 | Spanish Southwest to 1821 |
| HIST | 4345 | Mexico's First Century as an Independent Republic |
| HIST | 4352 | Brazil After Independence |
| HIST | 4353 | History of Mexican Culture |
| HIST | 4354 | Contemporary Mexico |
| HIST | 4355 | Spanish South America since Independence |
| HIST | 4363 | U.S.-Latin American Relations |


| HIST | 4374 | Caribbean and Central America |
| :--- | :---: | :--- |
| KIN | 2235 | Mexican Folkloric Dance |
| MUS | $1208 / 3210$ | Mariachi Ensemble |
| MUS | 1308 | Mexican Folk Music |
| PHIL | 3380 | Latin American Thought |
| POLS | 3363 | American Hispanic Politics |
| POLS | 3364 | U.S.-Mexico Border Relations |
| POLS | 4383 | Politics of Central America and <br> the Caribbean |
| POLS | 4386 | South American Politics |
| POLS | 4387 | Politics of Mexico |
| PSY | 4328 | Psychological Issues in the |
|  |  | Mexican-American |
| SOCI | 4323 | The Mexmunity |
| SPAN | 3301 | Spanish Literature, 1100-1750 <br> SPAN |
| Spanish Literature, 1750-present |  |  |

## MAJOR IN SPANISH <br> (WITH CERTIFICATION)

## - Teacher Certification Programs

and Requirements
Admission to COE teacher education programs is required for all undergraduate students seeking teacher certification. Students following high school certification degree plans (grades 8-12) should consult with their advisor in the department in which their
degree is offered. They should also seek information and admission requirements from the College of Education Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302. Students may call the office at 956/381-3420 or log on to the Web site for more information http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for high school (8-12) certification include the following: EDHS 4301, EDHS 4302, EDHS 4303, EDHS 3305, READ 4351, EDHS 4398 and EDHS 4399.

Core Curriculum Requirements
48 hours
Complete the requirements shown in the University core curriculum requirements section of this catalog on pages 103-107 EXCEPT for the sections, groups or areas listed here, which must be satisfied only as shown below.

Section A. Humanities
Group 4. Other Humanities
Students must select courses from Area 1 and Area 2.

Area 1. The Arts
Choose one from the following:
ART 1301 Art Appreciation
or
MUS 1307 Music Appreciation

Core Courses
30 hours
Complete the following:

| Language  <br> SPAN 2307 | Intermediate Spanish <br> for Native Speakers I |  |
| :--- | :---: | :--- |
| SPAN hours |  |  |
| SPAN | 2308 | Intermediate Spanish <br> for Native Speakers II |
| Literature   <br> SPAN 3303 Advanced Spanish Composition <br> SPAN 3340 Techniques of Literary Analysis <br> Introduction to Latin American <br> Literatures <br> SPAN 3341 Introduction to Spanish Literatures |  |  |

Linguistics 12 hours

| SPAN | 3319 | Introduction to Hispanic <br> Linguistics |
| :--- | :---: | :---: |
| SPAN | 3306 | Spanish Phonetics and Phonology <br> SPAN 3330 |
| Advanced Spanish Grammar |  |  |
| SPAN | 4316 | Problems and Issues Related <br> to Language |

Designated Electives
6 hours
Choose six hours from the following:

\(\left.$$
\begin{array}{lcl}\text { SPAN } & 3301 & \begin{array}{l}\text { Spanish Literature, 1100-1750 } \\
\text { SPAN }\end{array} \\
3302 & \begin{array}{l}\text { Spanish Literature, 1750-present } \\
\text { Masterpieces of Spanish-American } \\
\text { Literature I }\end{array} \\
\text { SPAN } & 3310 & 3311\end{array}
$$ \begin{array}{c}Masterpieces of Spanish-American <br>

Literature II\end{array}\right]\)| SPAN |
| :--- |

$i \sim$ MAJOR IN SPANISH
(without certification)
Same as above excluding SPAN 4316, which may be taken as an elective.
$\Sigma$ MAJOR IN FRENCH STUDIES
Core Courses
30 hours
Complete the following:
FREN 1321 Beginning French I
FREN 1322 Beginning French II
FREN 2321 Intermediate French I
FREN 2322 Intermediate French II
Choose 18 hours from the following:
FREN 3321 French Composition I
FREN 3322 French Composition II
FREN 3323 Business French
FREN 4320 French Civilization on Location
FREN 4322 Survey of French Literature
FREN 4324 French Civilization I
FREN 4325 French Civilization II
FREN 4339 Special Topics in French Literature

Concentration
6 hours
Choose six hours from one concentration.

| Literature |  |  |
| :---: | :---: | :---: |
| ENG | 4318 | Approaches to Literature |
| SPAN | 3309 | Techniques of Literary Analysis |
| Linguistics |  |  |
| ENG | 3319 | Introduction to Descriptive Linguistics |
| SPAN | 3306 | Basic Concepts of Spanish Phonetics and Phonology |
| History |  |  |
| HIST | 4370 | The Renaissance and Reformation, $1300-1650$ |
| HIST | 4375 | Absolutism and Enlightenment in Europe, 1650-1789 |
| HIST | 4376 | Revolutionary Europe, 1789-1850 |
| HIST | 4383 | Europe's Age of Imperialism, 1850-1919 |
| HIST | 4393 | Contemporary Europe, 1919-Present |
| Art History |  |  |
| ART | 3352 | Contemporary Art |
| ART | 4301 | Philosophies of Art |
| Philosophy |  |  |
| PHIL | 3360 | History of Philosophy: Ancient and Medieval |
| PHIL | 3361 | History of Philosophy: Modern |
| PHIL | 3362 | History of Philosophy: Contemporary |
| PHIL | 4310 | Theories of Knowledge |
| PHIL | 4320 | Philosophy of Science |
| Sociology |  |  |
| SOCI | 4333 | Social Theory |
| SOCI | 4352 | Social Inequality |
| SOCI | 4360 | Sociology of Education |
| SOCI | 4380 | Social Protest and Social Movements |
| Communication |  |  |
| COMM | 4315 | History of the Theatre I |
| COMM | 4316 | History of the Theatre II |
| International Affairs |  |  |
| POLS | 3334 | Modern Political Theory |
| POLS | 3343 | International Politics |
| International Business |  |  |
| INTB | 3330 | International Business |
| ECON | 3353 | International Trade |
| ECON | 4362 | Global Entrepreneurship |

## MINOR IN SPANISH <br> (without certification)

Eighteen hours in Spanish, of which six hours must be advanced.

## MINOR IN FRENCH (without certification)

Eighteen hours, of which six must be advanced and among the following: FREN 3321, FREN 3322, FREN 3323 and FREN 4322, FREN 4324, FREN 4325 or FREN 4339.

## MINOR IN FRENCH <br> (with teacher certification)

Twenty-four hours, of which 12 must be advanced and among the following: FREN 3321, FREN 3322, FREN 3323 and FREN 4120, FREN 4322, FREN 4324, FREN 4325 or FREN 4339.

## - Teacher Certification Programs

 and RequirementsAdmission to COE teacher education programs is required for all undergraduate students seeking teacher certification. Students following high school certification degree plans (grades 8-12) should consult with their advisor in the department in which their degree is offered. They should also seek information from the College of Education Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302, for admission requirements. Students may call the office at 956/381-3420 or log on to the Web site for more information http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for high school (8-12) certification include the following: EDHS 4301, EDHS 4302, EDHS 4303, EDHS 3305, READ 4351, EDHS 4398 and EDHS 4399.

## $\star$ Course Descriptions

Courses offered by the Department of Modern Languages and Literature can be found under their respective headings in the course descriptions section beginning on page 314 (French), page 326 (Latin American Studies, and page 378 (Spanish).
$\boldsymbol{d}_{\text {Music }}$

Dr. Pedro Martinez, Department Chair Fine Arts Building, Room 133 1201 W. University Drive Edinburg, TX 78539-2999 Telephone: 956/381-3471<br>Fax: 956/381-3472<br>E-mail: martinezp@utpa.edu

Full-time Faculty
Canty, Dean R., Associate Professor Crews, Ruth, Associate Professor
Dabrowski, Peter, Assistant Professor Davis, Richard, Assistant Professor Grossman, Morley K., Associate Professor Guerra, Dahlia, Associate Professor
Mizener, Charlotte, Associate Professor Munn, Christopher, Professor Munn, Vivian, Associate Professor
O'Neil, Lorne William, Associate Professor Raimo, John, Professor

## General Overview

The Department of Music offers a major within the Bachelor of Arts degree. In addition, it offers teaching fields for majors in all-level music teacher certification.

All students majoring in music, in addition to taking courses in general education, theory and literature of music, pursue excellence in performance in their areas of major interest. Instruction is offered in voice, guitar, piano and all of the instruments of the band and orchestra.

Graduate music courses are offered leading to the Master of Music degree, and Master of Arts in interdisciplinary studies degree with a concentration in music (MAIS-Music). More information is available in the Graduate Catalog.

## Degree Requirements

## DEPARTMENTAL REQUIREMENTS

A grade of "C" or higher in each required course in music is necessary for that course to apply toward a
degree with a major in music.
Transfer students may be required to validate (by examination) credits earned in applied music and music theory at other institutions. Failure to pass validation will result in the repetition of courses required to reach proper standards.

Precise definition of standards is provided by the department, and examination in applied music is before a faculty jury.

Music majors and music minors must enroll in piano until the piano proficiency examination has been passed. The piano proficiency examination must be passed as a prerequisite to enrolling in upper-level music courses. Transfer students are required to pass the department's piano proficiency examination, regardless of the number of transfer hours.

Each full-time music major must be a member of the large ensemble of his/her area of concentration each semester during which he/she is enrolled, or a minimum of seven semesters. These assignments are as follows: Wind and Percussion-Band; Strings-Orchestra; Voice, Piano-Choir; Guitar-Guitar Ensemble. Pianists and others who play appropriate instruments with sufficient proficiency may use band or orchestra for their ensemble requirements. Participation in smaller ensembles is strongly encouraged.

A music major who selects the performance curriculum will perform a 30-minute public recital during the junior year and an hour-long public recital during the senior year. A music major who selects the teacher preparation curriculum will prepare one-half of a music

recital during the senior year and, at the discretion of a faculty committee, perform it in public.

Music majors will study privately in their areas of concentration during each semester they are enrolled full time ( 12 hours or more). Music majors enrolled in applied music will enroll in applied music lab and attend University concerts and recitals as a part of the course requirement. Examinations in applied music are given at the end of each semester before a jury of music faculty members. Students enrolled in applied music will appear in recitals at the discretion of their instructor.

## MAJOR IN MUSIC (APPLIED MUSIC)

Core Curriculum Requirements 48 hours
Complete the University core curriculum requirements as shown on pages 103-107 of this catalog.

## Core Courses

30 hours
MUS 1313 First-Year Music Theory I
MUS 1314 First-Year Music Theory II
MUS 2301 Music Literature I
MUS 2302 Music Literature II
MUS 2313 Second-Year Music Theory I
MUS 2314 Second-Year Music Theory II
MUS 3301 History of Music
MUS 3302 History of Music
MUS 3207 Conducting I
MUS 4201 Form and Analysis
MUS 4203 Orchestration and Arranging
Select 13 hours of additional advanced music courses.
Designated Electives
Applied Music 24 hours
Eight semesters minimum, of which four semesters
must be advanced.
Music Ensemble 8 hours
Eight semesters minimum, of which four semesters must be advanced.

Other Requirements

- Proficiency in piano.
- One 30-minute junior recital.
- An hour-long senior recital.
- A total of 81 hours in music, of which 51 must be advanced.

NOTE: A minor is not required.
TOTAL
129 hours
~REQUIREMENTS FOR ALL-LEVEL

## Teacher Certification

Admission to COE teacher education programs is required for all undergraduate students seeking teacher certification. Students following all-level certification degree plans (grades EC-12) should consult with their advisor in the department in which their degree is offered. They should also seek information and admission requirements from the College of Education Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302. Students may call the office at 956/381-3420 or log on to the Web site for more information http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for all-level certification include the following: EDAL 3301, EDAL 3302, EDAL 3303, EDAL 4303, READ 4351, EDAL 4398, EDAL 4395 (art only), EDAL 4396 (music only), EDAL 4397 (special education only). Kinesiology majors are also required to take EDAK 3370 and EDAK 3380.

Core Curriculum Requirements
8 hours
Complete the University core curriculum
requirements as shown on pages 103-107 of this catalog.

Core Courses
35 hours

| MUS | 1313 | First Year Music Theory I |
| :--- | :--- | :--- |
| MUS | 1314 | First Year Music Theory II |
| MUS | 2301 | Music Literature I |
| MUS | 2302 | Music Literature II |
| MUS | 2313 | Second Year Music Theory I |
| MUS | 2314 | Second Year Music Theory II |
| MUS | 3301 | History of Music |
| MUS | 3302 | History of Music |
| MUS | 3207 | Conducting I |
| MUS | 3312 | Essential Elements of Music II |
| MUS | 4201 | Form and Analysis |
| MUS | 4203 | Orchestration and Arranging |
| MUS | 4208 | Conducting II |

Designated Electives
Instrumental
Select three of the following:
MUS 2122 Class Percussion
MUS 2123 Class Brass
MUS 2124 Class Woodwinds
MUS 2125 Class Strings
Vocal/Keyboard
Select three of the following:
MUS 2120 Vocal Diction
MUS 2127 Song Literature
MUS 3121 Vocal Diagnosis*
MUS 3122 Choral Repertoire
"Required for students with a major instrument of voice or piano.

Applied Music
Seven semesters minimum, of which three semesters must be advanced.

Music Ensemble
Seven semesters minimum, of which three semesters must be advanced.

Block I:

| EDAL | 3301 | Foundations of All-Level <br> Education |
| :---: | :---: | :---: |
| EDAL | 3302 | Human Development, Learning <br> Theory and Assessment |
| EDAL | 3303 | Instructional Methods for English <br> Learners and Learners with <br> Exceptionalities at <br> All Levels |

Block II:
EDAL 430
Internship I: Planning and Curriculum Development for Grades 8-12
READ 4351 Developmental Reading in
Secondary Schools
Block III (Student Teaching):
EDAL 4396 Supervised Internship II:
All-Level in Music
EDAL 4398 Integrated Internshsip II:
Seminar All-Level
Other Requirements
Proficiency in piano.
Senior Recital
A total of 60 hours in music, of which 30 hours must be advanced.

NOTE: A second teaching field is not required.
TOTAL
130 hours

## $\star$ Course Descriptions

A listing of courses offered by the Department of Music can be found on page 341.

INTERDISCIPLINARY MINOR IN WOMEN'S STUDIES

A minor in women's studies requires 18 semester hours of coursework, nine that are required and nine selected from women's studies cross-listed courses. Twelve semester hours must be at the advanced level.

| Required |  |  |
| :---: | :---: | :---: |
| WMST | 1301 | Introduction to Women's Studies |
| WMST | 2301 | Women's Studies Theory, <br> Method and Practice |
| WMST | 4301 | Capstone Seminar in <br> Women's Studies |

Cross-Listed Courses
9 hours
The student must take nine hours or three courses altogether. Selected courses must be from three disciplines that reside in at least two departments. The courses must be selected from the following approved menu of advanced courses cross-listed between the academic department and the women's studies interdisciplinary program.

| Music <br> WMST | 3307 | Women Composers <br> or |
| :--- | :---: | :---: |
| MUS | 3307 | Women Composers |
| Modern Languages and Literature |  |  |
| WMST | 3308 | Female Identity in Women's <br> Literature of the South <br> and Southwest <br> or |
| MCLL | $33 \times x$ | Female Identity in Women's <br> Literature of the South <br> and Southwest |
| Nursing |  |  |
| WMST | 3309 | Special Topics in Women's <br> Health Issues <br> or |
| NURS | 3309 | Special Topics in Women's <br> Health Issues |

COLLEGE OF ARTS AND HUMANITIES


## COLLEGE OF BUSINESS ADMINISTRATION



## $\star$ General Overview

All degree programs in the College of Business Administration are fully accredited by the Association to Advance Collegiate Schools of Business (AACSB International).

The college is organized into four departments: Accounting and Business Law, Computer Information Systems and Quantitative Methods, Economics and Finance, and Management, Marketing and International Business. The associate dean, four department chairpersons and the directors of undergraduate studies, MBA program and doctoral program, assist the dean in coordinating the academic activities of the college.
"Business After Five" is designed to meet the educational needs of a wide variety of students. By taking a combination of evening and online distance learning classes, it is now possible for a student to complete the requirements for a Bachelor of Business Administration (BBA) degree at UTPA. Information on this program can be obtained by contacting the director of Undergraduate Programs.


Dr. Teofilo Ozuna, Interim Dean Business Administration Building, Room 114 1201 W. University Drive Edinburg, TX 78539-2999 Telephone: 956/381-3311

Fax: 956/381-3312 E-mail: ozuna@utpa.edu Web site: http://www.coba.utpa.edu/

Dr. Penny Simpson, Associate Dean Business Administration Building, Room 114 Telephone: 956/381-3311

Fax: 956/381-3312
E-mail: pmsimpson@utpa.edu

## MISSION

The mission of the UTPA College of Business Administration is to:

- develop business and academic leaders who are qualified and committed to the improvement of society;
- produce scholarly research relevant to domestic and global businesses; and
- support professional, community and university activities that contribute to economic progress, social improvement and intellectual development.


## * AcAdemic Programs

The College of Business Administration offers a Bachelor of Business Administration with majors in accounting, economics, finance, computer information systems, and management, marketing and international business. The college also offers a Bachelor of Arts (BA) degree with a major in economics. Students working toward non-business (BBA) degrees may pursue a minors in business administration, human resource management, economics, computer information systems, economics, entrepreneurship, and human resource management. Graduate programs include the Master of Business Administration (MBA), Master of Science in accounting (MSA), Master of Accountancy (MACC) and Doctor of Philosophy (Ph.D.) in business administration.

## BACHELOR OF BUSINESS ADMINISTRATION

## DEGREE REQUIREMENTS

To graduate from UTPA with a BBA degree, students must successfully complete the 124 hours included in the core curriculum, the business foundation courses, business core courses, and the major coursework with an overall GPA of at least 2.0.

## Core Curriculum Requirements

48 hours
Students must complete the requirements described in the core curriculum requirements section of this catalog, EXCEPT as indicated below:

## Section A. Humanities

Group 4. Other Humanities
PHIL 1320 Introduction to Logic
(required of CIS majors)

Section B. Science and Mathematics
Group 2. Mathematics
MATH 1340 College Algebra
or
MATH 1341 Business Algebra orhigher level math
Section C. Computer Literacy
CIS 1301 Computer Information Systems
(fulfills the core curriculum
requirement for computer literacy
[CIS 1201] and the business foundation requirement [CIS 1101]).

Business Foundation Courses 19 hours
ACC 2301 Introduction to Financial Accounting
ACC 2302 Fundamentals of
Managerial Accounting
CIS 1101 Introduction to Office Software
(Business majors who have
previously completed two hours
of computer literacy MUST take
CIS 1101, otherwise completion
of CIS 1301 fulfills both this
requirement and the core
curriculum computer literacy requirement.)
COMM 1303 Presentation Speaking
or
COMM 1313 Fundamentals of Speech Communication
ECON 2301 Principles of Macroeconomics
ECON 2302 Principles of Microeconomics
MATH 1342 Business Calculus
or
QUMT 2340 Introduction to Quantitative Methods in Business

Business Core Courses
30 hours
BLAW 3337 Business Law I
FINA 3383 Managerial Finance
MANA 3361 Principles of Management and
Organizational Behavior
MANA 4369 Strategic Management
MARK 3371 Principles of Marketing
QUMT 3343 Statistical Methods for Business
Economic Policy (select one):
ECON 3360 Managerial Economics
ECON 3381 Money and Banking
Information Systems (select one):
ACC 3326 Accounting Information Systems
CIS 3390 Management Information Systems
(required of CIS majors)

International Business (select one):
ACC 3350 International Accounting
BLAW 3340 Legal Considerations of
International Business
CIS $3380 \quad$ Global Information Systems
ECON 3353 International Trade
FINA 4381 International Finance
INTB 3330 International Business
MARK 4330 International Marketing
Analytical Methods (select one):
ACC 3328 Quantitative Methods in Accounting
ECON 3341 Econometrics
ECON 3342 Business and Economics
Forecasting
MANA 4363 Production Management
MARK 4382 Marketing Research Analysis
QUMT 4343 Quantitative Methods for
Decision Making in Business

## Major Coursework

27 hours
The specific combination of required and elective courses to be completed by students undertaking the various majors within the BBA degree (accounting, computer information systems, economics, finance, international business, and management and marketing, and international business) are described in detail under the following departmental pages of the catalog.

## * Pre-Business Major

Lower-division (freshman and sophomore) students who plan to pursue a BBA degree are classified as prebusiness majors. Pre-business majors focus their studies on the UTPA core curriculum courses and the business foundation courses that must be completed before admission into the College of Business Administration. Students must complete their general education courses with at least a 2.0 cumulative GPA, and must receive a grade of " $C$ " or higher in each of the six business foundation courses (listed below). While enrollment in upper-division (junior and senior) business courses for students pursuing a BBA degree is generally limited to those who have officially been admitted into the College of Business Administration, pre-business majors may take up to six hours of junior-level coursework in the College of Business Administration if they have completed at least 54 hours of coursework with at least a 2.0 cumulative GPA and have completed all six business foundation courses with grades of " $C$ " or higher.

To become a business major, pre-business majors should apply for admission into the College of Business

Administration during the semester in which they will complete the admission requirements listed below - generally the second semester of their sophomore year. Students transferring to The University of TexasPan American from another accredited institution of higher education will be considered for admission into the College of Business Administration if they meet all the admission requirements.

Current UTPA students who are planning to pursue a BBA degree, but are not currently pre-business majors, are encouraged to request a change of major to prebusiness. In addition, all prospective business majors are encouraged to attend a BBA basics information session to find out more about the College of Business Administration programs and services.

## $\star$ ADMISSION TO THE COLLEGE OF BUSINESS ADMINISTRATION

Students pursuing a BBA degree must be admitted into the College of Business Administration before they are allowed to complete their upper-division coursework. Admission into the College of Business Administration is restricted to those students who have successfully met the admission requirements listed below. As noted above, pre-business majors are generally eligible to apply for admission into the College of Business Administration during the second semester of their sophomore year. Students accepted into the College of Business Administration may have to meet additional requirements for specific majors within the college. Please read the requirements for each major in the catalog.

Students majoring in economics through the BA degree program, as well as non-business majors with degree plans requiring particular upper-division business courses, are not required to apply for admission into the College of Business Administration, nor do they need special permission to take those specified courses as long as the degree plans have been approved by the college, and the students have completed the appropriate prerequisites. However, such students will only be allowed to take those upper-division courses that are designated to fulfill the degree requirements.

## i ADMISSION REQUIREMENTS

- Complete the UTPA core curriculum with at least a 2.0 cumulative GPA.
- Complete a total of 65 hours of coursework with at least a 2.0 cumulative GPA.
- Complete each of the following business foundation and core curriculum courses with "C" or better:

| ACC | 2301 | Introduction to Financial Accounting <br> ACC |
| :---: | :---: | :---: |
| 2302 | Fundamentals of Managerial <br> Accounting |  |
| CIS | 1301 | Computer Information Systems <br> orequivalent |
| ECON | 2301 | Principles of Macroeconomics |
| ECON 2302 | Principles of Microeconomics <br> MATH <br> College Algebra <br> or |  |
| MATH 1340 | Business Algebra <br> orhigher level of mathematics |  |

## Application to the College of BUSINESS ADMINISTRATION

Applications for admission into the College of Business Administration are available in the Office of Admissions and New Student Services, on the College of Business Administration Web site or at the office of the director of undergraduate programs in the College of Business Administration. Although you may submit your application for admission as soon as you believe you have met the application requirements, it is important to send any new or updated transcript to the University's Office of Admissions and New Student Services and wait for an official transfer evaluation BEFORE submitting your application to ensure that its consideration is based on current information. The deadline for submitting an application for admission to the College of Business Administration is 4:30 p.m. on the last business day prior to the beginning of the semester for which admission is desired. Applications should be submitted to the director of Undergraduate Programs in the College of Business Administration.

## $\underset{\sim}{i}$ TRANSFER STUDENTS AND TRANSFER WORK

The College of Business Administration welcomes graduates of Texas community colleges and transfer students from other schools. Through careful planning, full-time students can earn a BBA degree in four years. By adhering to the Transfer Curricula and Transfer of Credit guidelines of the Texas Higher Education Coordinating Board, students attending community colleges and other Texas schools can transfer to The University of Texas-Pan American without loss of credit. Students who plan to transfer to the UTPA College of Business Administration should develop their program of academic coursework in consultation with their academic advisors.

Degree applicability of all coursework completed under business programs that are not accredited by the Association to Advance Collegiate Schools of Business (AACSB International) must be determined through
appropriate validation procedures and/or examination. Final approval of non-AACSB accredited coursework will be made by the applicable department chair or the dean of the College of Business Administration.

Any upper-division business course taken at a non-AACSB accredited school must be validated before it can be used to satisfy graduation requirements for BBA degrees at The University of Texas-Pan American. Validation may be accomplished either by taking a higher-level course in the same subject area and making a grade of at least a "C" or by retaking the course.

Contact the director of Undergraduate Programs in the College of Business Administration for further information.

## - Core Curriculum Requirements

By completing the transfer core curriculum recommendations for business majors, transfer students will be considered to have satisfied the UTPA lowerdivision core curriculum requirements. Only those transfer courses with grades of at least a "C" will be accepted for credit toward the BBA degree. Courses taken at two-year institutions or in fulfillment of the requirements for two-year degrees are accepted by the College of Business Administration as transfer credits for lower-division courses only.

## - Business Courses

If you are transferring to UTPA to pursue a BBA degree, you will still need to apply to the College of Business Administration and follow all University admission requirements. Admission into the College of Business Administration does not ensure admittance

to the University. Questions regarding the University requirements should be directed to the Office of Undergraduate Admissions at 956/381-2481, located at SSB 3.104.

If you do not meet the criteria required for admission to the college when you apply, you will be classified as a pre-business major if you are admitted to the University. You may apply for admission to the College of Business Administration at a later date when you meet the admission criteria.

## BACHELOR OF ARTS WITH A MAJOR IN ECONOMICS

The College of Business Administration also offers a BA degree with a major in economics. There is not a formal application process into the College of Business Administration for UTPA students majoring in economics who are pursuing the BA degree. (Economics majors pursuing the BBA degree must follow the formal application process described above.) However, prerequisites will be enforced, and students will be monitored to ensure that they complete the UTPA core curriculum requirements with a GPA of 2.0 or higher before taking upper-division economics courses. Students pursuing the BA degree while majoring in economics should contact the Department of Economics and Finance for the specific degree requirements, or refer to the economics major - BA degree requirements listed under the Department of Economics and Finance in this catalog.

Economics majors in the BA degree program do not need special permission to take courses in the College of Business Administration as long as they are included in their degree plans and all prerequisites have been completed.

## $\star$ BUSINESS MINORS

The College of Business Administration offers business minors in business administration, computer information systems, economics, entrepreneurship, human resources management and marketing for students pursuing non-BBA degrees. Students seeking a business minor must successfully complete the 18 hours of coursework required under the chosen minor (along with any applicable prerequisites). Students who are pursuing or considering pursuing a business minor are encouraged to meet with an academic advisor in the Center for Advisement, Recruitment, Internships and Retention (CARIR) of the College of Business Administration, the director for Undergraduate Programs, or the chair of the
appropriate department.

## MINOR IN BUSINESS ADMINISTRATION

A minor in business administration is designed to enhance the marketability of students pursuing non-BBA degrees. This minor complements such degree programs as engineering, health care, nursing, counseling and communication. The minor in business administration consists of the following 18 hours of coursework:*

| ACC | 2301 | Fundamentals of Managerial <br> Accounting |
| :--- | :---: | :---: |
| ACC | 2302 | Introduction to Financial <br> Accounting |
| ECON | 2301 | Principles of Economics I <br> FINA <br> MANA 3383 |
| Managerial Finance |  |  |

*Consult the Undergraduate Course Descriptions or contact the Directory of Undergraduate Studies in the College of Business Administration for prerequisites to specific courses.

## MINOR IN COMPUTER InFORMATION SYSTEMS

A minor in computer information systems is available to all students pursuing non-BBA degrees and is designed to prepare students for entry-level positions in the computer field. The minor in computer information systems consists of 18 hours of coursework as specified below:*

Business Programming (select one)

| CIS | 2308 | Introduction to Programming <br> with Visual Basic |
| :---: | :---: | :--- |
| CIS | 2310 | COBOL Programming |
| CIS | 3380 | Global Information Systems |
| CIS | 3390 | Management Information Systems |
| CIS | Electives | (Select an additional nine |
| upper division CIS hours.) |  |  |
| "Consult the Undergraduate Course Descriptions |  |  |

MINOR IN ECONOMICS


A minor in economics is designed to enhance the marketability of students pursuing non-BBA degrees, particularly those seeking careers in law, public administration/government, health care, social work and engineering. This minor complements such majors as political science, engineering, health care, and other social/behavioral sciences. The minor in economics consists of 18 hours of coursework as specified below:*

| ECON | 2301 | Principles of Macroeconomics |
| :--- | :---: | :--- |
| ECON | 2302 | Principles of Microeconomics |
| ECON | 3351 | Macroeconomic Theory |
| ECON | 3352 | Microeconomic Theory |

"Consult the Undergraduate Course Descriptions or contact the Department of Economics and Finance for prerequisites to specific courses.

MINOR IN ENTREPRENEURSHIP
A minor in entrepreneurship serves as an ideal complement for students pursuing non-BBA degrees, who plan to start and successfully operate a small business upon graduation. This program specifically
focuses on small business operations in the Lower Rio Grande Valley. The minor in entrepreneurship consists of 18 hours of coursework selected from the following:*

| CIS | 3380 | Small Business Technology |
| :--- | :--- | :--- |
| ECON | 3360 | Managerial Economics |
| FINA | 3391 | Small Business Financial <br> Management |
| FINA | 3393 | Entrepreneurial Finance |
| INTB | 4362 | International Entrepreneurship |
| MANA | 4352 | Family and the Small Business |
| MANA | 4366 | Small Business Management |

*Consult the Undergraduate Course Descriptions or contact the Directory of Undergraduate Studies in the College of Business Administration for prerequisites to specific courses.

## Minor in Human Resource MANAGEMENT

A minor in human resource management is designed to complement many students' majors, enhancing their marketability upon graduation. Students majoring in such fields as psychology, communication, nursing, counseling, engineering and political science may be especially interested in this minor. The minor in human resources management consists of 18 hours of coursework as specified below:*

| MANA | 3362 | Human Resource Management <br> MANA |
| :--- | :---: | :---: |
| Compensation |  |  |
| MANA | 3365 | 3366 |
| MANA | 3367 | Recruitment and Selection <br> Organizational Training and <br> Development |
| MANA 4361 | Organization Behavior |  |
| Electives (select one): |  |  |
| MANA 3300 | Internship in Management* <br> (must involve a position <br> in HRM) |  |
| MANA 3335 | Communication Policy and <br> Strategy |  |
| MANA 4368 | Industrial Relations |  |

*Consult the Undergraduate Course Descriptions or contact the Department of Management, Marketing and International Business for prerequisites to specific courses.

## Minors, Graduate Programs, Service Organizations

## MINOR IN MARKETING

A minor in marketing will provide students pursuing non-BBA degrees with an opportunity to develop knowledge, skills, and practices essential for the successful marketing of all types of organizations, products and services, including nonprofit organizations. and In addition it may enhance the marketability of students seeking careers that interface with consumers. The minor in marketing consists of 18 hours of coursework as specified below:*

| ECON | 2302 | Principles of Microeconomics |
| :--- | :--- | :--- |
| MARK | 3371 | Principles of Marketing |
| MARK | $3372 \quad$ Consumer Behavior |  |
| Electives | Select an additional nine upper-division |  |
|  |  | MARK hours |

*Consult the Undergraduate Course Descriptions or contact the Department of Management, Marketing and International Business for prerequisites to specific courses.

Contact Dr. William Thompson, director of Undergraduate Programs, College of Business Administration, Room 120C, 956/381-2827, or Dr. Linda Matthews, associate professor of management, Room 222 F, 956/381-3382, for further information.

## $\star$ NON-BUSINESS MAJORS

Non-business students with degree plans requiring upper-division business courses do not need special permission to take courses in the College of Business Administration if those degree plans have been reviewed by the College of Business Administration and if the students have completed all appropriate prerequisites. However, such students are only allowed to take those upper-division business courses that have been specifically designated to fulfill their degree requirements.

## Graduate Programs

The College of Business Administration offers the opportunity for advanced study leading to the Master of Business Administration (MBA) degree, the Master of Science in Accounting (MSA), the Master of Accountancy (MACC) and a Doctor of Philosophy (Ph.D.) in business administration.

The MBA program is designed for those who
wish to pursue advanced studies in a multicultural environment as a means of enhancing their business and administrative careers. Both full-time and part-time students can enroll in the MBA program. The MSA and the MACC prepare students for a profession in public accounting and meet the educational requirements of the Texas State Board of Public Accountancy and the Texas Society of Certified Public Accountants.

The Ph.D. in business administration, with an emphasis in international business, offers graduates the opportunity to prepare for faculty positions in state, national and international universities, or to fill management roles in the private sector or in government service.

## $\star$ Service Organizations

A total university experience includes providing students with the opportunity to develop leadership skills, to become part of the decision-making process and to create linkages with the business community. To that end, the following fraternities and student chapters of professional organizations are sponsored:

- Alpha Kappa Psi, a professional business fraternity
- Beta Gamma Sigma, a national honor society for business administration majors
- Accounting Society
- American Marketing Association - Student Chapter
- Association for Information Technology Professionals
- Financial Management Association
- Forum for International Relations and Business
- Hispanic Business Students Association
- International Business Association
- MBA Association
- National Hispanic Professionals Organization
- Rotaract Club
- Society for Human Resource Management
- Students In Free Enterprise


## $\star$ Business Advisory Groups乞 COBA ADVISORY COUNCIL

Advice and guidance from civic and business leaders are provided through the College of Business Administration Advisory Council. The council serves as a liaison to the business community, helps provide financial support for the college, and provides job opportunities for graduates.


## STUDENT ADVISEMENT, INTERNSHIPS AND PLACEMENT

The Center for Advisement, Recruitment, Internships and Retention (CARIR) offers guidance to students on programs of study, provides information on scholarships for business students, and assists in matching students with available internship opportunities. Internships are available as electives for all majors in business. Additional information on internships, scholarships, course selections and programs of study may be obtained by contacting the CARIR office or the director of Undergraduate Programs. Placement information may be obtained from the Career Services office. In addition, the University Retention and Advisement Program (URAP) maintains an office in the College of Business Administration to advise students who have not declared a major. The college also has two professional academic guidance counselors who are available to provide academic advisement to business students. A Career Services specialist assigned to the college by University Career Services has an office in the college.

# $\boldsymbol{d}_{\text {accounting }}$ and Business Law 

Dr. Keith W. Lantz, Department Chair<br>Business Administration Building, Room 220<br>1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/381-2406<br>Fax: 956/381-2407<br>E-mail:kwlantz@utpa.edu<br>Full-time Faculty<br>Accounting<br>Atamian, Rubik, Associate Professor<br>Darcy, John, Assistant Professor<br>Du, Hui, Assistant Professor<br>Ganguli, Gouranga, Professor<br>Lantz, Keith W., Professor<br>McKee, A. James, Visiting Associate Professor<br>Moyes, Glen, Associate Professor<br>Owusu-Ansah, Stephen, Associate Professor<br>Zhou, Haiyan, Assistant Professor<br>Business Law<br>Cohen, Nigel, Visiting Professor

## * MISSION

The mission of the Department of Accounting and Business Law is to achieve excellence in accounting education by providing high quality instruction and curricula in its academic programs, relevant intellectual contributions and professional service.

## $\star$ Academic Programs

The department provides a learning environment in which students develop a diverse set of skills including technical competence, critical thinking, strong communication abilities, and the ability to use technology to prepare them for professional careers in a dynamic world. To accomplish these objectives, the department maintains an environment that encourages outstanding teaching, continuous improvement and innovation in the delivery of instruction.

## * INTELLECTUAL GUIDELINES

The department provides an environment that fosters intellectual contribution by the faculty to the body of knowledge of accounting, business law and related fields. The results of faculty involvement in basic, applied and pedagogical research are integrated into the curriculum where appropriate.

## $\star$ Service

Our faculty members are encouraged to provide educational and professional service to the University community, to the accounting profession and to the public.

## * General Overview

The Department of Accounting and Business Law offers the Bachelor of Business Administration (BBA) degree with a major in accounting, the Master of Science degree (MSA) in accounting, and a Master of Accountancy (MACC). A major in accounting with electives outside the accounting area is not designed to prepare graduates for entry-level positions in private and public accounting. The student who wishes to pursue a career as an accounting professional should use their electives to take additional accounting courses. The MSA degree provides the educational requirements necessary for a graduate to sit for the Uniform CPA examination. Since professional examinations are structured to test the candidates over a broad range of accounting topics, students should seek advice from the accounting faculty to select elective courses that will help them in their satisfactory completion of certification requirements. Information on the MSA and MACC degrees can be found in the UTPA Graduate Catalog.

## $\star$ MAJOR IN ACCOUNTING

## DEGREE REQUIREMENTS

Every candidate for the BBA degree with a major in accounting must fulfill the following requirements in addition to the core curriculum, business foundation and business core requirements described in pages 128-129 of the above College of Business Administration section.

- Accounting Major

27 hours

## 15 hours

| ACC | 3320 | Cost Accounting |
| :--- | :---: | :--- |
| ACC | 3321 | Intermediate Accounting I |
| ACC | 3322 | Intermediate Accounting II |
| ACC | 3323 | Individual Income Tax |
| Select | one course |  |
| ACC from: |  |  |
| ACC | 3325 | Fund Accounting |
| ACC | 3327 | Fundamentals of Auditing |
|  | 3329 | Intermediate Accounting III |

Elective Courses (with approval of advisor) 12 hours
Twelve hours of upper-level courses.

## ir COMBINED BBA/MSA IN ACCOUNTING

The combined BBA/MSA allows students to receive simultaneously a BBA in accounting and a MSA degree. The program has been designed to meet the Texas State Board of Public Accountancy's requirements to sit for the CPA exam in Texas and is available only to accounting majors. In order to be provisionally admitted to the MSA program, a student must meet all of the following criteria:
a. Have completed 75 hours of undergraduate work with an overall GPA of 2.5 or higher.
b. Have a GPA of 3.0 or better in ACC 2301, ACC 2302 and the first accounting course numbered in the 3000 range.

Students with provisional admission to the MSA program will apply for unconditiona/admittance to the MSA program during the last semester of their senior year. At that time, they must meet the following criteria:
a. Have no more than 15 hours of undergraduate work remaining.
b. Have an overall GPA of 2.5 or higher.
c. Have a GPA in accounting courses of 3.0 or higher.
d. Provide a letter of intent explaining why they wish to obtain the MSA degree.

Unconditional admittance to the program allows the student to begin to take graduate-level courses while completing the remaining undergraduate work. Students who have been provisionally admitted to the MSA program but who fail to be unconditionally admitted during the last semester of their senior year will be expected to meet the BBA in accounting degree requirements in order to receive a bachelor's degree.

The program of study for the combined BBA/ MSA program includes the following requirements in addition to the core curriculum and business foundation
requirements described on pages 128-129 in the above College of Business Administration section.

| Business Core |  | 30 hours |
| :---: | :---: | :---: |
| BLAW | 3337 | Business Law I |
| FINA | 3383 | Managerial Finance |
| MANA | 3361 | Principles of Management and Organizational Behavior |
| MANA | 4369 | Strategic Management |
| MARK | 3371 | Principles of Marketing |
| QUMT | 3343 | Statistical Methods for Business |
| ECON | 3360 | Managerial Economics or |
| ECON | 3381 | Money and Banking |
| ACC | 3326 | Accounting Information Systems |
| INTB | 3330 | International Business |
| ACC | 3328 | Quantitative Methods in Accounting |

Accounting Specialization
(undergraduate level) 21 hours
ACC 3320 Cost Accounting
ACC 3321 Intermediate Accounting I
ACC 3322 Intermediate Accounting II
ACC 3323 Individual Income Tax
ACC 3327 Fundamentals of Auditing
ACC 3329 Intermediate Accounting III
ACC 4330 Advanced Accounting
(Consolidations)
Master's Level Requirements
24-27 hours
For course descriptions for master's-level courses, please see the Graduate Catalog.

| MACC | 6310 | Auditing |
| :--- | :---: | :--- |
| MACC | 6320 | Tax Topics |
| MACC | 6330 | Accounting Theory |
| MACC | 6340 | Managerial Accounting |
| MACC | 6350 | Information Technology |
| MACC | 6360 | Tax Research Methodology |
| MACC | 6370 | Internal Auditing and |
|  |  | Assurance Services |
| MACC | 6333 | Business Law for Accountants |
| FINA | 6340 | Financial Administration** |

Graduate Accounting Elective
3 hours
MACC 6380 Professional Ethics
ACC 6320 Financial and Managerial Accounting

Graduate Course Electives
6 hours
(Elect two courses from the MBA program that are not included in this program.)

TOTAL HOURS
for simultaneous

## BBA and MSA degrees <br> 151-154 hours

$\cdots A$ student making an " $A$ "in FINA 3383 is exempt from FINA 6340.

Accounting courses in the 2000-, 3000- and 4000levels are described in this catalog; those in the 6000level are described in the Graduate Catalog.

# 3 Computer INFORMATION SYSTEMS AND QUANTITATIVE METHODS 

Dr. Lester M. RydI, Department Chair<br>Math and General Purpose Classroom Building MAGC, Room 3.302<br>1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/339-3353<br>Fax: 956/381-3367<br>E-mail: Irydl@utpa.edu<br>Web site: http://www.coba.utpa.edu/cis<br>Full-time Faculty<br>Computer Information Systems<br>Ahluwalia, Punit, Assistant Professor<br>Crews, Raymond, Associate Professor<br>Headrick, R. Wayne, Associate Professor<br>Hughes, Jerald, Assistant Professor<br>Koong, Kai, Professor<br>Liu, Lai, Associate Professor<br>Rao, Mohan, Associate Professor<br>Rogé, Joseph, Associate Professor Simpson, Claude, Associate Professor<br>Wang, Bin, Assistant Professor<br>Quantitative Methods<br>Feinberg, Martin, Associate Professor<br>Rydl, Lester M., Associate Professor

Computer Information Systems and Quantitative Methods<br>Tanguma, Jesus, Assistant Professor Sun, Jun, Assistant Professor

## $\star$ General OVERVIEW

The Department of Computer Information Systems and Quantitative Methods offers a BBA with a major in computer information systems based on the curricula recommended by the Association of Information Technology Professionals. This major is designed to prepare students with the broad business and computerrelated knowledge necessary to enter the information systems field. A minor in computer information systems is available to students from all non-business disciplines and is designed to prepare the student for entry-level positions in the computer field.

The department provides Computer Information Systems (CIS) courses for CIS majors, CIS minors and other majors. It offers Quantitative Methods (QUMT), Management Information Systems (MIS) and Information Systems and Quantitative Methods (ISQM) courses. Also, the department provides computer literacy courses for all majors to satisfy the computer literacy requirement of the University core curriculum.

It is recommended that students receiving a degree from the College of Business Administration certify their communication skills by taking the appropriate test.

## MISSION

Through a process of continuous improvement, the Department of Computer Information Systems and Quantitative Methods seeks to provide a high quality, future-oriented education program that prepares its graduates with the necessary analytical, technical and managerial background to function effectively in complex, culturally diverse and technologically-oriented professional environments. The department values and encourages a balance of teaching; together with basic, applied and pedagogical research; and service at a level consistent with both the University and college goals and objectives.

## * Degree Requirements

Every candidate for the Bachelor of Business

Administration degree with a major in computer information systems must fulfill the following requirements in addition to the core curriculum, business foundation and business core requirements described on pages 128-129 in the above College of Business Administration section.

- Computer Information Systems Major 27 hours

| Required Courses |  |  |
| :---: | :---: | :---: |
| CIS | 2308 | Introduction to Programming <br> with Visual Basic |
| CIS | 2310 | COBOL Programming <br> Advanced Programming <br> with Visual Basic |
| CIS | 3308 | or <br> or |
| CIS | 3310 | Advanced Programming <br> Techniques |
| CIS | 3335 | Database Management <br> CIS <br> CIS |
|  | 3336 | 4336 |
| Systems Analysis |  |  |
| Systems Design and |  |  |
| Development |  |  |

Elective Courses 9 hours
CIS 3300 Internship in CIS
CIS 3308 Advanced Programming with Visual Basic (if not selected above)
CIS 3310 Advanced Programming Techniques (if not selected above)
CIS 3312 Introduction to Web Programming
Networking
IT Project Management
Application Development for E-Commerce

## $\star$ Course Descriptions

A listing of the undergraduate courses offered by the Department of Computer Information Systems and Quantitative Methods can be found beginning on page 263 (CIS) and 366 (QUMT).


Dr. Alberto Dávila, Department Chair
Business Administration Building, Room 216
1201 W. University Drive
Edinburg, TX 78539-2999
Telephone: 956/381-3354
Fax: 956/384-5020
E-mail: adavila@utpa.edu
Full-time Faculty Economics
Damianov, Damian, Assistant Professor Dávila, Alberto, Professor Faria, Joao, Associate Professor
Mollick, Andre V., Associate Professor Mora, Marie T., Professor
Ozuna Jr., Teofilo, Associate Professor Pagán, José A., Professor
Simpson, Geok H., Assistant Professor
Sutter, Daniel, Associate Professor
Finance
Brown, Cynthia, Associate Professor Emery, John T., Professor Jackson, Dave O., Assistant Professor simpson, Marc W., Associate Professor Soydemir, Gokce, Associate Professor
Sutter, Natalie, Assistant Professor

## * GENERAL OVERVIEW

The Department of Economics and Finance offers degree opportunities in two areas: economics and finance. Students interested in economics may pursue either a Bachelor of Business Administration or a Bachelor of Arts degree. The Bachelor of Business Administration is also available in finance.

## $\star$ Degree Requirements

Economics Major
(BA degree - minor required) 120 total hours
Every candidate for the Bachelor of Arts degree with a major in economics must fulfill the 48 -hour core curriculum, three hours of which should be MATH 1340 (College Algebra or higher), with the grade of "C" or higher. ECON 2301 (Principles of Macroeconomics), with the grade of "C" or higher, is recommended to fulfill the social/behavioral sciences component of the core. Students who do not take ECON 2301 (passing with the grade of "(" or higher) as part of the core requirement must take this course as part of their elective courses listed below.

Every candidate must also fulfill the following requirements:

Required Courses 45 hours

Foundations Courses

| ECON | 2302 | Principles of Microeconomics <br> (with grade of "C" or higher) |  |
| :--- | :---: | :---: | :---: |
| COMM | 1303 | Presentational Speaking <br> or |  |
| COMM | 1313 | Fundamentals of Speech <br> Communication |  |
| POLS | 2334 | Political Economy <br> QUMT 2341 | Elementary Business and <br> Economic Statistics |
| MATH/STAT | or <br> Elementary Statistics and <br> Probability |  |  |
| SOCI | 2301 | or <br> Statistics for Behavioral Sciences |  |

Plus six hours from the following (i.e., select two of these five options):

| ACC | 2301 | Introduction to Financial <br> Accounting |
| :--- | :---: | :--- |
| SOCI | 1323 | Current Social Issues |
| PSY | 1313 | Introduction to Psychology |

ANTH $1323 \quad$| Introduction to Cultural |
| :---: |
| Anthropology |

Any one upper-level POLS course. Upper Level Economics Courses \begin{tabular}{cc}

ECON $3341 \quad$| Econometrics (with grade of "C" |
| :---: |
| or higher) | <br>

ECON $3351 \quad$| Macroeconomic Theory (with |
| :---: |
| grade of "C" or higher) | <br>

ECON $3352 \quad$| Microeconomic Theory (with |
| :---: |
| grade of "C" or higher) |

\end{tabular}

Plus 18 additional hours of $3000 / 4000$ level ECON courses, each with the grade of " $C$ " or higher.

Note: Three hours of $3000 / 4000$ FINA courses can be substituted for one ECON course upon approval of department chair.

## Elective Courses

 (with approval of advisor)27 hours
These electives include the courses required for a minor. At least 24 hours must be in upper-level coursework that is not being used to meet the above requirements.

Note: Students who do not take ECON 2301 (passing with the grade of "C" or higher) to fulfill the social/ behavioral sciences core curriculum requirement must take this course as part of these electives, and earn a grade of "C" or higher.

## - Economics Major

(BBA degree)
Every candidate for the BBA degree with a major in economics must fulfill the core curriculum, business foundation, and business core requirements described above on pages 128-129 in the College of Business Administration Section. In addition, every candidate must fulfill the following requirements:

| Required and Elective Courses | 27 hours |  |
| :--- | :--- | ---: |
| Required Courses |  | 9 hours |
| ECON 3341 | Econometrics |  |
| ECON 3351 | Macroeconomic Theory |  |
| ECON 3352 | Microeconomic Theory |  |
| Elective Courses |  | 18 hours |
| (with approval of advisor) |  |  |
| Six hours of upper-level ECON courses |  |  |
| Twelve hours of upper-level courses |  |  |

[^3]Every candidate for the Bachelor of Business
Administration degree with a major in finance must fulfill the core curriculum, business foundation, and business core requirements described above on pages 128-129 in the College of Business Administration Section. In addition, every candidate must fulfill the following requirements.

Required and Elective Courses 27 hours
Required Courses 9 hours

| FINA $\quad 3382$ | Investment Principles <br> FINA <br> Financial Institutions <br> and Markets |  |
| :--- | :--- | :--- |
| FINA $\quad 4386$ | 4383 | Advanced Managerial Finance |
| Elective Courses | 18 hours |  |
| (with approval of advisor) <br> Six hours of upper-level FINA courses |  |  |
| Twelve hours of upper-level courses |  |  |

## $\star$ COURSE Descriptions

A listing of courses offered by the Department of Economics and Finance can be found on pages 293 (ECON) and 313 (FINA).


## COLLEGE OF BUSINESS ADMINISTRATION

# MANAGEMENT, MARKETING AND INTERNATIONAL BUSINESS 

Dr. A. Fuat Firat, Department Chair<br>Business Administration Building, Room 222 C 1201 W. University Drive Edinburg, TX 78539-2999<br>Telephone: 956/381-3351<br>Fax: 956/384-5065<br>E-mail:mmib@utpa.edu<br>Full-time Faculty<br>Management<br>Brewerton, F.J., Professor<br>Joardar, Arpita, Assistant Professor<br>Jung, Joo, Assistant Professor<br>Kaynak, Hale, Associate Professor LeMaster, Jane, Professor<br>Matthews, Linda, Associate Professor Montiel, Ivan, Assistant Professor Nasif, Ercan, Associate Professor<br>Sargent, John, Associate Professor<br>Stevens, Michael, Associate Professor<br>Sturges, David L., Associate Professor<br>Wang, Lei, Assistant Professor<br>Wu, Sibin, Assistant Professor<br>Marketing<br>Avellano, George, Professor<br>Cortes, Angelica, Associate Professor<br>De los Santos, Gilberto, Professor<br>Firat, A. Fuat, Professor<br>Guo, Chiquan, Assistant Professor<br>Minor, Michael, Professor<br>Simpson, Penny, Associate Professor<br>Thompson, William W., Professor<br>Vasquez-Parraga, Arturo, Professor<br>Zolfagharian, Mohammadli, Assistant Professor

## General Overview

The Department of Management, Marketing and International Business offers the Bachelor of Business Administration (BBA) in three areas: management, marketing or international business.

## * Degree Requirements

Every candidate for the BBA degree with a major in management, marketing or international business must fulfill the following requirements in addition to the core curriculum, business foundation and business core requirements described on pages 103-107 in the above College of Business Administration section:
$\begin{array}{lr}\text { Management Major } & 27 \text { hours } \\ \text { Required Courses } & 15 \text { hours }\end{array}$

| MANA | 3362 | Human Resource Management |
| :---: | :---: | :---: |
| MANA | 4361 | Organizational Behavior |
| MANA | 4366 | Small Business Management |
| Select two courses from: |  |  |
| INTB | 4364 | International Management |
| INTB | 4368 | Cross-Cultural Behavioral Management |
| MANA | 3300 | Internship in Management |
| MANA | 3333 | Digital Media for Management and Marketing |
| MANA | 3335 | Communication Policy and Strategy |
| MANA | 3364 | Organizational Theory |
| MANA | 3365 | Compensation |
| MANA | 3366 | Recruitment and Selection |
| MANA | 3367 | Organizational Training and Development |
| MANA | 4300 | Topics in Management |
| MANA | 4363 | Production Management* |
| MANA | 4364 | Business and Society |
| MANA | 4365 | Quality Management |
| MANA | 4367 | Purchasing and Supply Management |
| MANA | 4370 | Project Management |

*Must be selected if not taken to fulfill the analytical course requirement within the business core.

Elective Courses (with approval of advisor) 12 hours Twelve hours of upper-level courses
$\begin{array}{lr}\text { Marketing Major } & 27 \text { hours } \\ \text { Required Courses } & 9 \text { hours }\end{array}$

| MARK | 3372 | Consumer Behavior |
| :--- | :--- | :--- |
| MARK | 4382 | Marketing Research Analysis |
| MARK | 4389 | Marketing Management |

Career Path Option Courses
18 hours
(with approval of advisor)
Eighteen hours of upper-level MARK courses
(See department for options.)

International Business Major Required Courses

27 hours 15 hours

BLAW $3340 \quad$| Legal Considerations of |
| ---: |
| International Business |

INTB 4360 International Logistics

INTB 4364 International Management MARK 4330 International Marketing Select one course from:

| ECON | 3353 | International Trade |
| :--- | :--- | :--- |
| FINA | 4381 | International Finance |

INTB
INTB 4365 International Competitiveness
INTB 4367 International Transportation
and Logistics
INTB 4368 Cross-Cultural Behavioral Management

Career Path Option Courses
12 hours (with approval of advisor)
Twelve hours of upper-level courses (See department for options.)

## $\star$ Course Descriptions

A listing of courses offered by the Department of Management, Marketing and International Business can be found on page 327 (MANA), 331 (MARK) and 323 (INTB).



## COLLEGE OF EDUCATION



## General Overview

The College of Education has 80 full-time tenured/ tenured track faculty members and 10 full-time lecturers. Our faculty and staff serve approximately 2,500 undergraduate/post-baccalaureate students, 1,000 graduate (master's) students, and 50 doctoral students.

The college is comprised of four academic departments: Curriculum and Instruction, Educational Leadership, Educational Psychology, and Health and Kinesiology.

## $\star$ AcAdemic Programs

At the undergraduate level, the college offers a Bachelor of Science degree with majors in kinesiology and health, a Bachelor of Arts degree in dance, and Bachelor of Interdisciplinary Studies with undergraduate certification in EC-4 generalist with a specialization in special education, early childhood education and bilingual education. The College of Education also offers a Bachelor of Interdisciplinary Studies in English language arts/ reading for grades 4-8. At the graduate level, the College of Education offers a Master of Education (M.ED.) with specializations in elementary education, secondary education, early childhood education, bilingual education, special education, reading, guidance and counseling, educational diagnostician and educational
leadership.
The College of Education offers a Master of Arts degree in school psychology, a Master of Science degree in kinesiology and a Doctor of Education (Ed.D.) in educational leadership.

Although the graduate programs in education are intended primarily for personnel in public/private schools, the knowledge and skills taught are applicable to other agencies. A student may complete some M.Ed. programs at The University of Texas-Pan American without meeting all the teacher certification requirements. Please consult with the director of each program for more specific guidelines and information.

Credit for 5000-level courses may not be given to a student with previous undergraduate credit in similar courses.

All programs in the College of Education are fully accredited by the State Board for Educator Certification (SBEC).

## Dr. Salvador Hector Ochoa, Dean

Education Complex, Room 3.102 1201 W. University Drive Edinburg, TX 78539-2999 Telephone: 956/381-2943

Fax: 956/381-2184 E-mail: shochoa@utpa.edu
Web site: http://www.utpa.edu/colleges/coe.cfm

## Mission Statement

The mission of the College of Education at The University of Texas-Pan American is to continuously improve the educational process as it is implemented in the college and the community through teaching, research and service. The college values the rich cultural and linguistic history of the international border area and directs its programs and course offerings toward the preparation of professionals for an increasingly diverse population of learners.

## $\star$ General Information

## UNDERGRADUATE ADMISSION TO TEACHER CERTIFICATION

Teachers in the state of Texas are required by law to hold a valid Texas teacher's certificate at the appropriate level in the teaching field and specialization to which they are assigned. UTPA is approved by the SBEC to recommend students for teaching certificates in numerous baccalaureate degree fields. Students seeking a degree with certification must first apply for admission to the appropriate COE teacher preparation program at the Office of Teacher Certification and Admission Services located at the Education Complex, Room 1.302.

Students should be aware that certification requirements in the state of Texas are established and enforced by SBEC, therefore, certification policies and requirements have the potential to change during the course of students' academic preparations at UTPA.
Students are encouraged to stay in close contact with the Office of Teacher Certification and Admission Services to keep abreast of changes in the college. Students may call the office at 956/381-3420 or log on to http://www.utpa. edu/colleges/coe/studentservices for more information.

## - General Requirements for

Texas Teaching Credentials
State Board for Educator Certification rules require an individual to have the following qualifications in order to receive a standard certificate.

An applicant for a Texas educator certificate must:
A. Be at least 18 years of age.
B. Not be disqualified or the subject of pending proceeding under Chapter 249 of this title, relating to Disciplinary Proceedings, Sanctions and Contested Cases, including enforcement of the Educator's Code of Ethics.
C. Not be disqualified by federal law.
D. Be willing to support and defend the constitutions of the United States and Texas.
E. Be able to speak and understand the English
language sufficiently to use it easily and readily in conversation and teaching.
F. Successfully complete all appropriate examinations (relating to Educator Assessment) for the educator certificate sought.

- Texas Testing Requirements for Certification

To be approved for a Standard Texas Teacher's Certificate, persons, including those holding a valid out-of-state certificate, shall be required to achieve a satisfactory level of performance on an examination prescribed by the State Board for Educator Certification.

The test is called TExES - Texas Examinations of Educator Standards. TExES must be taken and passed for the appropriate level, specialization, certificate and supplement in order to be recommended for certification.

Students who enroll only in a certification program are expected to meet or exceed the admission requirements of students in the regular program that corresponds to that certificate.

## - Criminal Records

In accordance with Article 6252-13C, Texas Civil Statutes, the Texas Commissioner of Education may suspend or revoke a teaching certificate, or refuse to issue a teaching certificate, to a person who has been convicted of a felony or misdemeanor for a crime that directly relates to the duties and responsibilities of the teaching profession.

## $\star$ ADMISSION TO <br> TEACHER EDUCATION AND INTERNSHIP II PROGRAMS

## - Admission to Teacher Education

Admission to Teacher Education is required for all undergraduate students seeking teacher certification and enrolling in courses designated as EDCI, EDBE, EDEC, EDMS, EDHS, EDAL, EDAK, READ and SPED. Admission requirements include minimum THEA/ TASP/ACCUPLACER scores and minimum credit hour requirements, as well as GPA and specific grade requirements for entrance to the program. Applicants should receive early advisement and follow application and degree plan requirements closely.

Application takes place during the sophomore/junior year if all requirements specified on the application have been completed or will be in place by the end of the semester prior to admission to the program.

Students must meet the following requirements prior to admission to the College of Education:

1. Pass all three subtest areas of the Texas Higher


Education Assessment (THEA) or Accuplacer with the following minimum scores in each area:

- Reading
- Math 240 or ACCUPLACER 82
- Writing 240 or $80 \mathrm{w} / 5$ or any score w/6

2. Successfully complete a minimum of 60 hours for elementary, middle school, high school and all-level certification which must include the following:

- ENG 1301 and ENG 1302 with a " $C$ " or better
- MATH 1340 or higher, with a "C" or better
- EMAT 2306 and EMAT 2307
(EC-4 and ELA/Reading 4-8)
- Activated UTPA e-mail
- Criminal background check

3. Meet 2.5 minimum GPA in the core curriculum. For EC-4, 4-8, 8-12 and EC-12 certification program students must have a 2.5 cumulative GPA on degree plan.
4. Submit an official degree plan seeking 4-8, 8-12 or EC-12 certification. For those students seeking EC-4 program certification, a working copy of degree plan is required.

NOTE: Students must pay an application fee of \$40 at Payments and Collections, SSB 1.145. This is a onetime, non-refundable service fee.

All applicants must meet current admission requirements in effect at the time of application, regardless of catalog year. Applicants previously denied admission must reapply with all required documents, except receipt, in order to be considered for admission.

Application packets and related information are available at http.//www.utpa.edu/colleges/coe/ studentservices and at the Office of Teacher Certification and Admission Services, Room 1.302, 956/381-3420.

- Admission to Internship II:

Regular Undergraduates
Students in the undergraduate teacher education program must make a separate application to be admitted to Internship II as they near the completion of their professional coursework. Applicants must have achieved a GPA of 2.5 both overall and in their interdisciplinary area (major) and academic specialization on the degree plan they are following. This requirement applies to all students regardless of their admission date to the University. For more information on Internship II, see page 156.

## Degreed Students Seeking CERTIFICATION (NON-TRADITIONAL)

## - Alternative Certification Program

The Alternative Certification Program (ACP) is designed for prospective public school teachers with degrees in disciplines other than education. The program offers a fast, efficient path to the classroom as the teacher of record.

Certification is offered in the following areas: elementary, elementary/bilingual, elementary/ESL, middle school (all specializations), middle bilingual, middle generalist, high school (all specializations), high school/ESL and special education. Pre-assignment courses provide the academic foundation to enter the classroom in a specific area. The assignment (internship) phase consists of two six-hour courses (one fall, one spring). Internship and employment is at the discretion of the employing school district. Internship courses require a special fee. A criminal records check will be conducted by employing districts; a felony conviction may be disqualifying.

Program prerequisites include: admission to ACP, a baccalaureate degree from an accredited institution, overall GPA of 2.5, passing score on THEA and credit for college algebra (or higher) with a "C" or better.

## $\star$ POLICY AND ADVISORY GROUPS

The primary purpose of the University Teacher Education Committee is to recommend policies and procedures related to teacher education.

The Teacher Education Committee is composed of two voting members from each of the six academic colleges, the associate vice president for undergraduate studies (ex-officio) and the executive director of Region I Education Service Center (ex-officio).

In all regards, the Teacher Education Committee will conform to the rules for standing academic committees as per HOP 3.4.4.

The State Board of Educator Certifification Rules (19 Texas Administrative Code, Section 228.20) states that the preparation of educators shall be a "collaborative effort among accredited pubic schools and/or private schools, regional education service centers, institutions of higher education, and business and community interests" and "shall be delivered in cooperation with accredited public schools and/or private schools." It further states that "an advisory committee with members representing each of the above shall assist in the design, delivery, evaluation and major policy decisions of the prepared program."

In accordance with this rule, the Teacher Education Committee has the responsibility for:
a. Establishing a committee composed of personnel from public/private schools, Region I Education Service Center, and business and community representatives to advise the Teacher Education Committee in the
design, delivery, evaluation and major policy decisions of educator preparation programs.
b. Initiating designing, approving, recommending, implementing and evaluating teacher education programs.
c. Developing and recommending policies in regard to admission and retention of students in the teacher education program.
d. Reviewing and recommending course offerings in the teaching fields and in the professional certification programs.
e. Recommending and coordinating staff development activities.
f. Reviewing data and making recommendations regarding TExES scores.
g. Discussing issues related to educator certification and TExES.

- The South Texas Center for Professional Development of Teachers
The South Texas Center for Professional Development (CPDT) of Teachers is a collaborative composed of University faculty and administrators, public school teachers and teacher education students. Its purpose is to collaboratively design, implement and assess the field-based teacher preparation program offered in the College of Education at UT Pan American. The South Texas CPDT Governance Board advises on and/or approves changes regarding admission and certification requirements, course offerings, program changes, field experiences and the internship II semester.



# . <br> Curriculum AND INSTRUCTION 

Dr. Maria Elena Reyes, Interim Department Chair<br>Education Complex, 2.510C<br>1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/381-3401 or 381-3402<br>Fax: 956/381-2434<br>E-mail: jwm1303@utpa.edu

Full-time Faculty
Almaguer, Isela, Assistant Professor Curts, Jaime, Associate Professor
De Leon, Leticia, Assistant Professor Esquierdo, Jennifer J., Assistant Professor
Estrada, Veronica L., Associate Professor
Farruggio, Pete, Assistant Professor
Garcia, Criselda, Assistant Professor
Gómez, Leo, Professor
Gonzalez, Irasema, Lecturer
Guerrero, Michael, Associate Professor
Guajardo, Maritoni, Assistant Professor
McBride, John, Professor
Medrano, Hilda, Professor
Ostorga, Alcione, Assistant Professor
Peña, Carmen, Assistant Professor
Perez, Alma, Assistant Professor
Reyes, Maria Elena, Associate Professor
Ruiz-Escalante, Jose, Professor
Sarmiento, Matilde, Assistant Professor
Schall, Janine, Assistant Professor
Tevis, Martha, Professor
Yanes, Jeanne, Assistant Professor

## BACHELOR OF <br> InTERDISCIPLINARY STUDIES

## FOR ELEMENTARY TEACHERS (EC-4)

In compliance with the Texas Education Code, a Bachelor of Interdisciplinary Studies is offered with certification in the following undergraduate academic specializations:

- Bilingual Generalist EC-4
- Generalist EC-4
$\underset{\sim}{\imath}$ FOR MIDDLE SCHOOL TEACHERS (4-8)
A Bachelor of Interdisciplinary Studies is offered with undergraduate certification in English language arts/ reading 4-8.


## Teacher Certification PROGRAMS

## CORE CURRICULUM REQUIREMENTS FOR TEACHER EDUCATION CERTIFICATION

Students pursuing teacher certification must complete an academic major prescribed by the standards for teacher education. Prospective teacher certification students should consult with their major advisors and with the appropriate department in the College of Education.

Students pursuing teacher certification at all certification levels are required to satisfy the University's core curriculum requirements as specified by the State Board of Education, the Texas Education Agency and the Texas Higher Education Coordinating Board.

Summary of University
Core Curriculum Requirements
Communication
9 hours

- Six hours of freshman English (ENG 1301 and ENG 1302)
- Three hours in a language other than English (SPAN 1301 or SPAN 1303)

Science and Mathematics
11 hours

- Eight hours of a laboratory science (PHYS 1421 and PHYS 1422)
- Three hours of college algebra or higher-level mathematics (MATH 1340)

Humanities
9 hours

- Three hours of sophomore literature (ENG $2 X X X$ )
- Three hours from the arts (ART 1301 or MUS 1307)
- Three hours of philosophy (PHIL 1320)

Social Science
15 hours

- Six hours of American history
(HIST 2313 and HIST 2314)
- Six hours of American and Texas government (POLS 2313 and POLS 23214)
- Three hours from any one of these areas: Anthropology
(ANTH 1323, 1324, 1342, 1353, 2323)
Criminal Justice
(CRIJ 1302, 1307)
Economics
(ECON 1301, 2301, 2302)
Psychology
(PSY 1310)
Sociology
(SOCI 1313, 1323, 1387, 2333)
Institutionally Designated Options:
Computer Literacy 2 hours
- Two hours of computer literacy (CSCl 1201 or CIS 1201)

Kinesiology and Wellness 2 hours

- Two hours of kinesiology wellness, health wellness or appropriate ROTC courses


## STANDARD ELEMENTARY CERTIFICATION WITHIN THE BACCALAUREATE INTERDISCIPLINARY DEGREE

In addition to completing the University core curriculum requirements noted above, students must complete the following:

> Minimum Academic Specialization (including nine advanced)
> Interdisciplinary Area $\quad$ (combination of subjects)


## ACADEMIC SpECIALIZATIONS FOR ELEMENTARY CERTIFICATION

- Elementary (Grades EC-4) Certification The following specializations are available; they require a minimum of 18-21 hours.
- Bilingual Education
- Early Childhood Education


## REQUIREMENTS FOR ACADEMIC SPECIALIZATIONS IN BILINGUAL, EARLY CHILDHOOD AND SPECIAL EDUCATION

The requirements for the specializations for elementary certification that are offered through the College of Education are shown below.

- Specialization: Bilingual Education (EC-4) EDBE 3315 The Bilingual Curriculum in the Content Areas EDBE 3316 The Development of Biliteracy EDBE 3322 Foundations of Bilingual Education EDBE 3324 English as a Second Language EDBE 4304 The Development of Bilingualism ENG 3325 Children/Adolescent Literature
- Specialization: Early Childhood (EC-4) EDEC 4314 Research in Early Childhood EDEC 4391 Foundations of Early Childhood EDEC 4392 Acquisition and Conceptualization Processes in Early Childhood
EDEC 4394 Cognitive and Psychomotor Development in Early Childhood
EDBE 4304 Development of Bilingualism ENG 3325 Children/Adolescent Literature
- Specialization: Special Education (EC-12) SPED 1305 Introduction to the Exceptionalities SPED 4301 Strategies, Methods and Materials for Teaching Individuals with Mild to Moderate Disabilities
SPED 3302 Theories of Learning Disabilities
SPED 4300 Testing and Assessment of Exceptional Individuals
SPED 4303 Theories of Social Competence and
SPED 4309 Program Planning for Secondary
Special Education
EDBE 4304 Development of Bilingualism
- Elementary Certification: Academic Specialization Bilingual Education Interdisciplinary Area 49 hours
- Language Arts:

| READ | 3323 | Reading Acquisition |
| :--- | :--- | :--- |
| READ | 3325 | Cognitive Development and |

ENG 4321 Fundamentals of Language Development
ENG 4325 Composition Techniques
ENG 4326 Language Acquisition
or
READ 3329 Language Arts Curriculum
SPAN 2307 Intermediate Spanish for Native Speakers
SPAN 2308 Intermediate Spanish for Native Speakers or
SPAN 1302 Beginning Spanish
SPAN 1304 Beginning Spanish

- Math/Science:

EMAT 2306 Foundations of Mathematics I
EMAT 2307 Foundations of Mathematics II
BIOL 1402 General Biology II
BIOL 2305 Environmental Biology

- Social Studies/Other Humanities:

HIST 3373 Mexican-American Heritage
HIST 3330 A General Survey of the History of Texas
ANTH 3333 United States and Other World Cultures
MUS 3311 Essential Elements of Music I
HLTH 2352 Personal Health and Wellness
Specialization: Bilingual Education
EDBE 3315 The Bilingual Curriculum in the Content Areas
EDBE 3316 The Development of Biliteracy
EDBE 3322 Foundations of Bilingual Education
EDBE 3324 English as a Second Language
EDBE 4304 The Development of Bilingualism
ENG 3325 Children/Adolescent Literature
Elementary Certification: Academic Specialization Special Education Interdisciplinary Area 34 hours

| - Reading: |  |  |
| :---: | :---: | :---: |
| READ | 3323 | Reading Acquisition |
| READ | 3325 | Cognitive Development and Reading Comprehension |

- Language Arts/Communication:

| ENG | 4321 | Fundamentals of Language Learning |
| :---: | :---: | :---: |
| ENG | 4326 | Language Acquisition or |
| ENG | 4328 | Introduction to English as a Second Language or |
| ENG | 3321 | Language and Culture |
| COMD | 1310 | Beginning Sign Language |
| COMD | 1320 | Intermediate Sign Language |
| - Mathematics: |  |  |
| EMAT | 2306 | Foundations of Mathematics I |
| EMAT | 2307 | Foundations of Mathematics II |
| - Science: |  |  |
| PSC | 1421 | Physical Science I or |
| PSCI | 1422 | Physical Science II |

- Kinesiology:

KIN $4351 \quad$| Adapted Kinesiology (requires |
| :---: |
| admission to College of |
| Education) |

- Other Humanities:

Select three hours from the following:
MUS 1307 Music Appreciation or
MUS 1308 Mexican Folk Music or
MUS 3311 Essential Elements of Music I
HONR 2387 or 2388

- Specialization: Special Education

| SPED | 1305 | Introduction to the Exceptionalities <br> Strategies, Methods and Materials <br> for Teaching Individuals with <br> Mild to Moderate Disabilities |
| :---: | :---: | :---: |
| 4301 | Sta |  |
| SPED | 3302 | Theories of Learning Disabilities |
| SPED | 4300 | Testing and Assessment of <br> Exceptional Individuals |
| SPED | 4303 | Theories of Social Competence and <br> Behavioral Interventions |
| SPED | 4309 | Program Planning for Secondary <br> Special Education |
| EDBE | 4304 | Development of Bilingualism |

Elementary Certification: Academic Specialization Early Childhood Interdisciplinary Area

43 hours

- Reading:

| READ | 3323 | Reading Acquisition |
| :--- | :--- | :---: |
| READ | 3325 | Cognitive Development and Reading <br> Comprehension |

- Language Arts:

| ENG | 4321 | Fundamentals of Language Learning <br> ENG 4325 |
| :--- | :--- | :--- |
| Composition Techniques |  |  |
| or |  |  |

- Math/Science:

| EMAT | 2306 | Foundations of Mathematics I |
| :--- | :--- | :--- |
| EMAT | 2307 | Foundations of Mathematics II |
| BIOL | 1402 | General Biology II |
| BIOL | 2305 | Environmental Biology |

- Social Studies/Other Humanities:

ANTH 3333 U.S. and Other World Cultures
HIST 3330 A General Survey of the
History of Texas
or
$\begin{array}{lll}\text { HIST } & 3373 & \text { Mexican-American Heritage } \\ \text { HLTH } & 2352 & \text { Personal Health and Wellness } \\ \text { MUS } & 3311 & \text { Essential Elements of Music I }\end{array}$

- Specialization: Early Childhood

EDEC 4314 Research in Early Childhood
EDEC 4391 Foundations of Early Childhood
EDEC 4392 Acquisition and Conceptualization
Processes in Early Childhood
EDEC 4394 Cognitive and Psychomotor Development in Early Childhood
EDBE 4304 Development of Bilingualism
ENG 3325 Children/Adolescent Literature

- Professional Education
(Certification Coursework) Elementary


## Bilingual Education: <br> 21 hours

EDCI 4390, EDCI 3301, EDCI 3305, EDCI 4305, EDCI 4306, EDCI 4398, EDCI 4399

Special Education: 21 hours
EDCI 3305, EDCI 4390, EDCI 4305, EDCI 4306,
EDCI 3301, EDCI 4398, EDCI 4399

Early Childhood: 21 Hours
EDCI 4390, EDCI 3301, EDCI 3305, EDCI 4305, EDCI 4306, EDCI 4398, EDCI 4399

Supplement Requirements
Bilingual and English as a Second Language (ESL) supplements consisting of 9-12 additional hours may be added to a standard teacher certificate.

- Supplement: Bilingual Education

The bilingual education supplement may be added to a valid standard teacher certificate. The professional development sequence for the supplement consists of:

1. Oral and written proficiency in the language of the target population as measured by examinations approved by the State Education Agency.
A. Oral proficiency shall be determined by the Texas Oral Proficiency Test (TOPT) with a passing score of level three.
B. Successful completion of TExES/Bilingual Supplemental EC-4.
2. Twelve hours at the graduate or undergraduate level earned after the bachelor's degree as follows:

| EDBE | 3315 | or | EDBE | 6335 |
| :--- | :--- | :--- | :--- | :--- |
| EDBE | 3316 | or | EDBE | 6350 |
| EDBE | 3322 | or | EDBE | 6322 |
| EDBE | 4304 | or | EDBE | 6351 |

- Supplement: English as a Second Language (ESL)

The English as a Second Language (ESL) supplement may be added to a valid standard teacher certificate. The professional development sequence for the ESL endorsement consists of the following 12 hours:
$\left.\begin{array}{lcl}\text { ENG } & 3319 & \begin{array}{c}\text { Introduction to Descriptive } \\ \text { Linguistics }\end{array} \\ \text { ENG } & 3321 & \begin{array}{l}\text { Language and Culture } \\ \text { ENG }\end{array} 4328\end{array} \begin{array}{c}\text { Introduction to English as a } \\ \text { Second Language }\end{array}\right]$ EDBE 3324 English as a Second Language

Students who are completing this supplement as part of their initial teacher certificate should partially fulfill their student teaching requirements with the following course:

EDCI 4310 Directed Teaching-ESL: Internship II

STANDARD MIDDLE SCHOOL
CERTIFICATION WITHIN
THE BACCALAUREATE
INTERDISCIPLINARY DEGREE

In addition to completing the University core curriculum requirements noted above, students must complete the following:

- Interdisciplinary Area 37 hours
- Language Arts:

| ENG | 4326 | Language Acquisition |
| :--- | :---: | :--- |
| ENG | 4316 | Mexican-American Literature <br> Children/Adolescent Literature <br> ENG |
| 3325 |  | or |
| ENG | 4325 | Composition Techniques <br> Introduction to English as a <br> Second Language |

- Math/Science:

| EMAT | 2306 | Foundations of Mathematics I |
| :---: | :---: | :---: |
| EMAT | 2307 | Foundations of Mathematics II |
| BIOL | 1402 | General Biology II |
| BIOL | 2305 | Environmental Biology |
| - Social Studies/Other Humanities: |  |  |
| HIST | 3302 | World History Studies or |
| ANTH | 3333 | United States and Other World Cultures |
| GEOG | 2313 | Principles of Physical Geography |
| HLTH | 3371 | Health Problems in Alcohol, Tobacco and Narcotics or |
| SOC | 2332 | Community |
| COMM | 3317 | Speech for the Classroom Teacher |

Minimum Academic Specialization 18 hours
READ 3310 Narrative and Expository Analysis - Elementary/ Secondary
$\begin{array}{lll}\text { READ } & 3323 & \text { Reading Acquisition } \\ \text { READ } & 3325 & \text { Cognitive Development and }\end{array}$ Reading Comprehension
READ 3327 Assessment/Diagnosis of Special Needs Students
READ 3326 Reading Across the Curriculum Content Areas
EDBE 3316 The Development of Biliteracy

Professional Education 21 hours
EDMS 3353 Young Adolescent Development and Learning
EDMS 3354 Currurriculum/Development and Assessment
EDMS 3305 Exceptional Learners EDMS 3355 Instructional Technology

Methods and Classroom Management
EDMS 4398 Integrated Internship II
EDMS 4399 Supervised Internship II
READ 3329 Language Arts Curriculum

## $\star$ CERTIFICATION REQUIREMENTS

$\underset{\sim}{\imath}$ FOR MIDDLE SCHOOL (4-8)
For the prospective middle school teacher, The University of Texas-Pan American offers bachelor's degrees in various academic disciplines with middle school certification through the College of Education. The core curriculum and major requirements for the various academic disciplines are specified by the departments in this catalog. The College of Education offers middle school certification in the following teaching fields:

- English Language Arts and Reading
- Math
- Science
- Social Studies


## FOR HIGH SCHOOL (8-12)

For the prospective high school teacher, The University of Texas-Pan American offers bachelor's degrees in various academic disciplines with high school certification through the College of Education. The core curriculum and major requirements for the various academic disciplines are specified by the departments in this catalog. The College of Education offers high school certification in the following teaching fields:

- English
- History
- Life Science
- Physical Science
- Social Studies
- Math

In addition to the core curriculum coursework and the major course requirements, the following requirements apply to students seeking Texas Teacher Certificates:

| Professional Development 21 hours |  |  |
| :---: | :---: | :---: |
| EDHS | 4301 | Foundations of Education |
| EDHS | 4302 | Instructional Planning and Assessment |
| READ | 4351 | Developmental Reading in Secondary Schools |
| EDHS | 4303 | Instructional Strategies and Classroom Management |
| EDHS | 3305 | Instructional Methods for English Language Learners and Learners with Exceptionalities in High Schools |
| EDHS | 4398 | Integrated Internship II: 8-12 |
| EDHS | 4399 | Supervised Internship II: 8-12 |

## REQUIREMENTS FOR ALL-LEVEL CERTIFICATES

Standard teacher certificates, all-level, are offered in art, kinesiology, special education (minor), and music. A kinesiology all-level major requires a minor of 24 hours; minors are not required for art and music all-level majors. Specific requirements for each are located in the appropriate departments in this catalog; however, the professional development ( 21 upper-division hours) sequence for dtandard teacher certificate all-level, offered through the College of Education for art and music, is as follows: EDAL 3301, EDAL 3302, EDAL 3303, EDAL 4301, EDAL 4302, EDAL 4303, EDAL 4398, EDAL 4395(Art), EDAL 4396(Music). All-level for kinesiology is as follows: EDAL 3301, EDAL 3302, EDAL 3303, EDAL 4301, EDAL 4302, EDAL 4303, EDAL 4398 AND EDAL 4399.

## INTERNSHIP II

The College of Education offers the Internship II experience as an important component in the preparation of competent teachers. Prospective teacher preparation students should consult with their program advisors and apply at the College of Education Office of Field Experiences. The Internship II admission requirements below are subject to change due to new state agency regulations or College of Education/ University-approved policy.

Requirements for Admission to Internship II Semester EC-4 Certification

1. Minimum 2.5 overall GPA on degree plan.
2. A minimum of 2.5 GPA in all core curriculum courses.
3. A 2.5 GPA in all professional education courses.
4. A minimum of " $C$ " in ENG 1301.
5. A minimum grade of "C" in MATH 1340, EMAT 2306 and EMAT 2307.
6. Completed minimum of 75 percent of total hours required in the interdisciplinary area with a minimum 2.5 GPA.
7. Satisfactory completion of the following courses in EC-4 Certification Programs EDCI 3301, EDCI 4390, EDCl 4305, EDCI 3305, EDCl 4306, READ 3323 and READ 3325 with a minimum GPA of 2.5 .
8. Completed minimum of 75 percent of total hours required in academic specialization with a minimum GPA of 2.5 .

4-8 Certification

1. Minimum overall GPA of 2.5 .
2. A minimum GPA of 2.5 core curriculum required courses completed.
3. ENG 1301 completed with a minimum grade of "C."
4. Successful completion of MATH 1340 with a grade of "C" or better.
5. Completed minimum of 75 percent of total hours required in major teaching field.
6. Minimum of 2.5 GPA in major.
7. Additional requirements as specified by major department.
8. Completed minimum of 75 percent of total hours required in the minor or second teaching field.
9. Minimum of 2.5 GPA in minor.
10. Additional requirements as specified by minor department.
11. 18 hours in Secondary Education: EDMS 3353, EDMS 3354, READ 3325, EDMS 3305, EDMS 3355, READ 3326.
12. Minimum of 2.5 grade point average (GPA) in professional education.

## - 8-12 Certification

1. Minimum overall GPA of 2.5 .
2. A minimum GPA of 2.5 core curriculum required courses completed.
3. ENG 1301 completed with a minimum grade of "C."
4. Successful completion of MATH 1340 with a grade of "C" or better.
5. Completed minimum of 75 percent of total hours

required in major teaching field.
6. Minimum of 2.5 GPA in major.
7. Additional requirements as specified by major department.
8. Completed minimum of 75 percent of total hours required in the minor or second teaching field.
9. Minimum of 2.5 GPA in minor.
10. Additional requirements as specified by minor department.
11. 15 hours in Secondary Education: EDHS 4301, EDHS 4302, EDHS 4303, EDHS 3305 and READ 4351.
12. Minimum of 2.5 grade GPA in professional education.

All-Level EC-12 Certification

1. Minimum overall GPA of 2.5 .
2. A minimum GPS of 2.5 core curriculum required courses completed.
3. ENG 1301 completed with a minimum grade of "C."
4. Successful completion of MATH 1340 with a grade of "C" or better.
5. Minimum of 2.5 GPA in major.
6. Additional requirements as specified by major department.
7. Minimum of 2.5 GPA in minor.
8. Additional requirements as specified by minor department.
9. 15 hours in secondary education: EDHS(AL) 4301, EDHS (AL) 4302, EDHS (AL) 4307, READ 4351, EDAL 3301, EDAL 3302, EDAL 3303, EDAK 3370, EDAK 3380, EDAK 4390.
10. Minimum of 2.5 GPA in professional education courses.

## $\star$ Course Descriptions

A listing of courses offered by the College of Education can be found in the Course Descriptions section beginning on page 295.

## 3 Health and Kinesiology

Dr. Donna Dugas, Department Chair Health and Physical Education Complex I, Room 1.110<br>1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/381-3501<br>Fax: 956/381-3502<br>E-mail: dugasd@utpa.edu<br>Full-time Faculty<br>Dance<br>Blomquist, Melinda, Lecturer<br>Darsow, Fred, Assistant Professor<br>and Program Coordinator<br>Muñoz, Francisco, Lecturer<br>Shackelford, Dana, Assistant Professor<br>Health<br>Guinn, Robert, Professor<br>and Program Coordinator<br>Villas, Paul, Professor<br>Kinesiology<br>Dugas, Donna, Associate Professor Jorgensen, Layne, Professor and Graduate Coordinator Myers, Deb, Assistant Professor Ryman, Jeannean, Lecturer Schmidt, Marcelo, Lecturer Semper, Louis T., Associate Professor and Program Coordinator Romero, Zasha, Lecturer

## Mission Statement

The mission of the Department of Health and Kinesiology is congruous with that of The University of Texas-Pan American and the College of Education. Specifically, it is to prepare health, kinesiology and dance students to function professionally in a changing and diverse society, to fulfill the core curriculum requirements and to improve the quality of University life through the understanding, delivery and promotion of physical activity in the wellness program.

## * GENERAL OVERVIEW

The Department of Health and Kinesiology offers a bachelor of science degree with majors in health and in kinesiology and a bachelor of arts degree in dance. The department also offers minors in health, kinesiology, and dance. At the graduate level, the Department of Health and Kinesiology offers a master of science degree with a specialization in kinesiology. As part of The University of Texas System Consortium, an online master's degree is offered.

## Admission to Program

Students must be formally admitted to their respective programs prior to enrolling in 3000- or $4000-$ level DANC, HLTH or KIN courses. Admissioin criteria are available in the health and kinesiology office located at HPE 1, Room 1.110.

## * Teacher Certification

The following plans are offered:

- All-Level
- Health
- All-Level Kinesiology
- Dance Secondary Option I
- Dance Secondary Option II

The University core curriculum requirement for all students is two hours of credit in a kinesiology activity/ wellness course. This requirement is met during the freshman and/or sophomore year by taking a two-hour activity/wellness course. Students who are physically unable to participate in activity courses must obtain a waiver and are required to take KIN 2301 to satisfy the requirement. DANC 2323 may be used to fulfill the core curriculum requirement for fine arts. (See pages 103-107 for University core curriculum requirements.)

## Degree Requirements

## Special Core Curriculum

 REQUIREMENTS FOR BACHELOR OF Science Degrees in Health and KinesiologyComplete the requirements shown in the University core curriculum requirements section on pages 103-107 of this catalog EXCEPT for the sections, groups, or areas listed below, which must be satisfied only as shown below.

Section B. Science and Mathematics
Group 1. Natural Science
BIOL 2403 and BIOL 2404 required
Section D. Kinesiology
KIN 1201
(for kinesiology non-certified majors only) or
KIN 1202
(for kinesiology certified majors only) This satisfies the core curriculum kinesiology requirement.

## Special Core Curriculum REQUIREMENTS FOR BACHELOR OF Arts Degree in Dance

| Section B. | Science and Mathe |  |
| :--- | :--- | :--- |
| Group 1. | Natural Science |  |
| BIOL | 2403 | required |
| BIOL | 2404 | required |

Student Teaching
Please refer to the student teaching section under the Department of Curriculum and Instruction. In addition, health, kinesiology and dance students must satisfy the following as part of their student teaching requirements:
*No student is allowed to student teach in the school(s) from which they matriculated, and
"No student is allowed to student teach under the supervision of an immediate family member.

## - Health

High School Option I/ (Major): Must have completed HLTH 1354 and 4350 plus 24 additional health hours of which 12 must be advanced, and have a GPA of 2.50 or better and a "C" or better in all health courses. HLTH 2352 may not be used to satisfy Option II Teacher Certification.

- Kinesiology

All-level (Major): must have completed KIN 1351, $2305,2310,2315,2320,3340,3345,3353,3365,4351$, a three-hour advanced elective, and have a GPA of 2.50 or better and a "C" or better in all kinesiology courses.

Kinesiology (Major, Non-certified): must have completed KIN 1351, 1354, 3345, 3352, 3353, 3365, 4351, 4664, a three-hour advanced elective, plus eight hours of activity/wellness courses, and have a GPA of 2.50 or better and a "C" or better in all kinesiology courses.

## Health and Kinesiology

- Dance

High School Option I and II (Major): Must have completed DANC 3202, 2203, 3309, 3310, 3311, 3320, 4202, 4310, 4311, 4312 and at least two 4000-level technique dance courses.

- Health Degree Requirements

Health majors should consult with their advisor in the department.

- Health Major (non-certified) - requires a minor. Required Courses

33 hours
Thirty total hours in health of which 15 must be advanced, including HLTH 4353.

Three hours of Communication 1303 or 1313.
TOTAL
33 hours
A health major (non-certified) requires a support area of 12 hours from the following, with a minimum of six hours advanced: CRIJ 1301, CRIJ 3303, HRP 3310, KIN 3365, MARK 3371, PSY 1310, PSY 3324, REHS 2301, SOC 2332, SOC 3324, SOCW 2314, SOCW 4320.

TOTAL
12 hours

- Health Minor (non-certified)

18 hours in health, of which six must be advanced.
There is no certified minor in health.

- Teacher Certification in Health

Health major must have a GPA of 2.50 or higher and a "C" or better in all health courses.

- Health All-Level Major

Requires an 18 hour institutional minor in a certifiable teaching field.


Safety and First Aid
Growth, Development and Fitness
Drugs, Alcohol and Tobacco
Nutrition and Health
Human Sexuality
Organization of the Health

Program
Twelve hours of which nine hours must be upperdivision courses, excluding HLTH 2352.

| COMM | 1303 | Presentational Speaking <br> or |  |
| :--- | :--- | :--- | :--- |
| COMM | 1313 | Fundamentals of Speech <br> Communication | 3 hours |
| TOTAL |  | 33 hours |  |
| iscellaneous Electives | 6 hours |  |  |
| UNIV | 1301 | Learning Framework <br> READ 4351 | Reading |

Professional Education 24 hours
EDAL 3301 Internship I: Foundations of All-Level Education
EDAL 3302 Internship I: Human Development, Learning Theory and Assessment
EDAL 3303 Internship I: Instructional Methods for ELLs and Learners with Exceptionalities at All Levels
EDAL 4301 Internship II: Elementary (EC-4) Classroom Management, Planning and Curriculum
EDAL 4302 Internship II: Principles of Learning and Classroom Management Grades 4-8
EDAL 4303 Internship II: Planning and Curricular Development for Grades 8-12
EDAL 4398 Integrated Internship III: Seminar All Level
EDAL 4399 Supervised Internship III: All Level in Health

## Kinesiology Degree Requirements

Kinesiology majors should consult with their advisor in the department.

- Major in Kinesiology (non-certified)

Required Courses
30 hours

| KIN | 1351 | Introduction to Kinesiology |
| :--- | :--- | :--- |
| KIN | 1354 | Safety and First Aid |
| KIN | 3345 | Biomechanics |



NOTE: All departmental courses listed as either "Intermediate or II" require the satisfactory prerequisite completion of a similar content course listed as either basic, beginning or level I or must satisfactorily demonstrate requisite skill level proficiency to course instructor. Students lacking the prerequisite courses and/or skill levels who enroll in intermediate or level II courses will be dropped by the course instructor.

| Area 1: | Team Sports |  |
| :--- | :---: | :--- |
| KIN | 1250 | Soccer |
| KIN | 1255 | Softball |
| KIN | 2202 | Volleyball |
| KIN | 2221 | Basketball | Area 1:Team Sports

Area 2: Individual Sports

| KIN | 2203 | Badminton I |
| :--- | :---: | :--- |
| KIN | 2204 | Tennis I |
| KIN | 2213 | Badminton II |
| KIN | 2241 | Racquetball I |
| KIN | 2242 | Racquetball II |
| KIN | 2256 | Tennis II |
| KIN | 2264 | Fencing |
|  |  |  |
| Area 3: Aquatics |  |  |
| KIN | 1200 | Swimming I |
| KIN | 2280 | Lifeguard Training |
| KIN | 2281 | Water Safety Instruction |
| KIN | 2282 | Scuba Diving |

Area 4: Others
Select any other course from those not listed previously in areas 1-3.

COMM 1303 or 1313
3 hours

- Support Area

124 hours
A kinesiology major (non-certified) requires a 24hour support area containing:

Advanced Elective in Kinesiology
3 hours
HLTH 2352 Personal Health and Wellness
MANA 3361 Principles of Management and Organizational Behavior
MARK 3371 Principles of Marketing

MARK 4372 Promoting Management
SOCI 3310 Sports and Society
Six hours advanced elective in any field.
TOTAL
131 hours

- Minor in Kinesiology (non-certified)

Professional Kinesiology (Theory Courses) 18 hours
A minimum of six hours advanced.
Kinesiology Activity/Wellness Courses 6 hours Six hours activity wellness classes:
KIN 1200 (or another aquatic), plus two two-hour activity/wellness activities. In addition, KIN 1201 should be taken as the two-hour activity/wellness requirement in the University core curriculum.

TOTAL
24 hours

There is no certified minor in kinesiology.

Teacher Certification in Kinesiology
Kinesiology major must have a GPA of 2.50 or higher and a "C" or better in kinesiology classes. There is also a professional responsibilities component:

1. health-related fitness assessment
2. first aid and CPR certification
3. professional membership
4. service component

- Kinesiology All-Level

Requires an 18 hour institutional minor.*

| Required Courses <br> KIN |  | 1351 |
| :---: | :---: | :--- |
| KIN | 3340 | Introduction to Kinesiology <br> Kinesiology Activities for <br> Elementary and Middle School |
| KIN | 3345 | Biomechanics <br> KIN |
| KIN | 3353 | Physiology of Exercise <br> Tests and Measurements in <br> Kinesiology |
| KIN | 4365 | Adapted Kinesiology |

*Cannot repeat hours from core curriculum requirements. The minor must be in a certifiable teaching field.

Advanced Electives
3 hours
Selected from the following:

| KIN | 3300 | Theory of Football |
| :--- | :--- | :--- |
| KIN | 3302 | Teaching Individual Sports |
| KIN | 3303 | Theory of Basketball |
| KIN | 3304 | Theory of Baseball |
| KIN | 3305 | Theory of Track and Field |
| KIN | 3320 | Theory of Volleyball |
| KIN | 3333 | Theory of Soccer |


| KIN | 3352 | Care, Treatment and Prevention <br> of Athletic Injuries |
| :--- | :---: | :--- |
| KIN | 3395 | Motor Learning <br> KIN |
| Kinesiology Workshop |  |  |

Kinesiology Activity Courses 12 hours
(This requirement is in addition to the University
core curriculum requirements.)
KIN 2305 Technical Skills for Team Sports
KIN 2310 Outdoor Education
KIN 2315 Technical Skills for Individual Sports
KIN 2320 Movement Arts
Miscellaneous Electives
6 hours

| UNIV | 1301 | Learning Framework <br> READ |
| :--- | :--- | :--- |
| 4351 |  | Developmental Reading <br> in Secondary Schools |

Professional Education 24 hours
EDAK 3370 Internship I: Kinesiology in
EDAK 3380 Internship I: Kinesiology in Middle Schools
EDAK 4390 Internship I: Kinesiology in Secondary Schools
EDAL 3301 Foundations of All-Level Education
EDAL 3302
EDAL 3303 Instructional Methods for ELLs and Learners with Exceptionalities at All Levels
EDAL 4398 Integrated Internship II: Seminar All-Level
EDAL 4399 Supervised Internship II:
All-Level in Kinesiology
Total
129 hours

- Athletic Trainer Licensure Program

The Department of Health and Kinesiology and the UT Pan American head athletic trainer provide an avenue for UT Pan American students to secure a Texas State Athletic Trainer Licensure through the Texas Department of Health. An athletic trainer is an allied health care professional primarily concerned with the prevention, recognition, immediate treatment and rehabilitation of injuries incurred in an athletic or sports setting. Athletic trainers are employed in a wide variety of settings including but not limited to interscholastic athletic programs, intercollegiate athletic programs, sports medicine clinics and health clubs.

The requirements for licensure are:
Curriculum Requirements
BIOL 2403 Anatomy and Physiology

| BIOL | 2404 | Anatomy and Physiology |
| :--- | :---: | :--- |
| KIN | 3353 | Physiology of Exercise |
| KIN | 1354 | Safety and First Aid |

Apprenticeship (Internship) Requirements

1. Scheduled interview with UT Pan American head athletic trainer.
2. Minimum of three academic years (six semesters of fall and spring) under direct supervision of state licensed athletic trainer (UT Pan American head athletic trainer).
3. A minimum of 600 supervised "lab clock hours" each year for a total of 1,800 hours.
4. Enrollment as a full-time student at UT Pan American during each of the three academic years (six semesters).

Application Requirements for Texas State License Exam

1. Student must request an application from the Texas Department of Health.
2. Student must be within 30 hours of graduation and must have completed at least 1,500 clock hours (five semesters) of Apprenticeship.

Texas State License is granted:

1. Once applicant has successfully passed the Texas State License Exam.
2. Once applicant has provided proof of graduation from UT Pan American.
3. Once applicant has all documentation regarding apprenticeship and course requirements in order.
4. Once applicant has paid his/her licensure fee.
5. If applicant has not been convicted of a felony or misdemeanor relating to the duties of an athletic trainer.

## $\star$ Course Descriptions

A listing of courses offered by the Department of Health and Kinesiology can be found on pages 296,320 and 323 .

## MAJOR IN DANCE: Performance Track

| Required Courses |  |  |
| :--- | :--- | :--- |
| DANC | 1201 | Dance Improvisation |
| DANC | 2203 | Music for Dancers |
| DANC | 2112 | Dance Performance |

Beginning/Intermediate or

DANC $3112 \quad$| Dance Performance |
| :---: |
| Intermediate/Advanced |
|  |
| (two hours required) |

DANC 3202 Choreography I
DANC 3309 Dance History I
DANC 3310 Dance History II
DANC 3311 Dance Production
DANC 3320 Dance Science
DANC 4202 Choreography II
Required Dance Techniques Courses - 28 hours
Twenty-eight hours total; 20 hours advanced, 14 hours each from two different techniques. One must be ballet or modern. Minimum one year required at each level and/or faculty approval to advance.

## Select from:

DANC 2241 Ballet I: Primary Technique
DANC 2242 Ballet II: Secondary Technique
DANC 2245 Modern Dance I: Primary Technique
DANC 2246 Modern Dance I: Secondary Technique
DANC 2249 Mexican Dance I: Primary Technique
DANC 2250 Mexican Dance I: Secondary Technique
DANC 2253 Spanish Dance I: Primary Technique
DANC 2254 Spanish Dance I: Secondary Technique
DANC 3241
Ballet II: Primary Technique
Ballet II: Secondary Technique
DANC 3245 Modern Dance II: Primary Technique
DANC 3246 Modern Dance II: Secondary Technique
DANC 3249 Mexican Dance II: Primary Technique
DANC 3250 Mexican Dance II: Secondary Technique
DANC 3253 Spanish Dance II: Primary Technique
DANC 3254 Spanish Dance II: Secondary Technique
DANC 4241 Ballet III: Primary Technique
DANC 4242 Ballet III: Secondary Technique
DANC 4245 Modern Dance III : Primary Technique
DANC 4246 Modern Dance III : Secondary Technique
DANC 4249 Mexican Dance III: Primary Technique
DANC 4250 Mexican Dance III: Secondary Technique
DANC 4253 Spanish Dance III: Primary Technique
DANC 4254 Spanish Dance III: Secondary Technique

Additional Requirements
9 hours
DANC 4102 Senior Project


Select two hours from:
DANC 2112 Dance Performance: Beginning/ Intermediate
DANC 3112 Dance Performance: Intermediate/ Advanced

Select three hours from:
DANC 3312 Dance Philosophy and Criticism
DANC 3313 World Dance
Select three hours from:
DANC 4310 Dance Theory: Ballet, Modern, Jazz
DANC 4311 Dance Theory: Folk
DANC 4312 Dance Theory: Children's Dance
TOTAL
59 hours
Additional Requirements
18 hour electives, six hours must be advanced or minor.

| Other Requirements |  | 11 hours |  |
| :---: | :---: | :--- | :---: |
| BIOL | 2403 | Anatomy and Physiology |  |
| BIOL | 2404 | Anatomy and Physiology |  |
| UNIV | 1301 | Learning Framework |  |

MAJOR IN DANCE: HIGH SCHOOL CERTIFICATION OPTION I

Required Courses
22 hours
DANC 1201 Dance Improvisation
DANC 2203 Music for Dancers
DANC 2112 Dance Performance
Beginning/Intermediate or
DANC 3112 Dance Performance
Intermediate/Advanced
(two hours required)
DANC 3202 Choreography I
DANC 3309 Dance History I
DANC 3310 Dance History II
DANC 3311 Dance Production
DANC 3320 Dance Science
DANC 4202 Choreography II
Required Dance Techniques Courses 20 hours
20 hours total; 16 hours advanced, 10 hours each from two different techniques. One area must be modern. Minimum one year required at each level and/ or faculty approval to advance.

Select from:

| DANC | 2241 | Ballet I: Primary Technique |
| :---: | :---: | :---: |
| DANC | 2242 | Ballet I: Secondary Technique |
| DANC | 2245 | Modern Dance I : Primary Technique |
| DANC | 2246 | Modern Dance I: Secondary Technique |
| DANC | 2249 | Mexican Dance I: Primary Technique |
| DANC | 2250 | Mexican Dance I: Secondary Technique |
| DANC | 2253 | Spanish Dance I: Primary Technique |
| DANC | 2254 | Spanish Dance I: Secondary Technique |
| DANC | 3241 | Ballet II: Primary Technique |
| DANC | 3242 | Ballet II: Secondary Technique |
| DANC | 3245 | Modern Dance II: Primary Technique |
| DANC | 3246 | Modern Dance II: Secondary Technique |
| DANC | 3249 | Mexican Dance II: Primary Technique |
| DANC | 3250 | Mexican Dance II: Secondary Technique |
| DANC | 3253 | Spanish Dance II: Primary Technique |
| DANC | 3254 | Spanish Dance II: Secondary Technique |
| DANC | 4241 | Ballet III: Primary Technique |
| DANC | 4242 | Ballet III: Secondary Technique |
| DANC | 4245 | Modern Dance III: Primary Technique |
| DANC | 4246 | Modern Dance III: Secondary Technique |
| DANC | 4249 | Mexican Dance III: Primary Technique |
| DANC | 4250 | Mexican Dance III: Secondary |


|  | Technique |
| :--- | :--- |
| DANC | 4253 |
| DANC | Spanish Dance III: Primary Technique |
| Spanish Dance III: Secondary |  |
| Technique |  |


| Additional Requirements |  |  |
| :--- | :--- | :--- |
| DANC 4102 | Senior Project | 13 hours |
| DANC 4313 | Dance in the Public Schools |  |
| Select six hours from: |  |  |
| DANC 4310 | Dance Theory: Ballet, Modern, Jazz |  |
| DANC 4311 | Dance Theory: Folk |  |
| DANC 4312 | Dance Theory: Children's Dance |  |
| DANC 4313 | Dance in the Public Schools |  |
| Select three hours from: |  |  |
| DANC 3312 | Dance Philosophy and Criticism |  |
| DANC 3313 | World Dance |  |
| TOTAL |  |  |
| Professional Education Courses |  |  |
| EDHS 3305 | Instructional Methods for English |  |
| Language Learners and |  |  |

## Other Requirements

BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology
READ 4351 Developmental Reading in Secondary Schools

## MAJOR IN DANCE: HIGH SCHOOL CERTIFICATION TRACK OPTION II

| Required Courses |  |
| :---: | :---: |
| DANC 1201 | Dance Improvisation |
| DANC 2203 | Music for Dancers <br> DANC 2112 <br> Dance Performance <br> Beginning/Intermediate <br> or |
| DANC 3112 | Dance Performance <br> Intermediate/Advanced <br> (two hours required) |
| DANC 3202 | Choreography I |


| DANC 3309 | Dance History I |
| :--- | :--- |
| DANC 3310 | Dance History II |
| DANC 3311 | Dance Production |
| DANC 3320 | Dance Science |
| DANC 4202 | Choreography II |

Dance Technique Courses 10 hours Ten hours total; four hours advanced, four hours each from two different techniques. One area must be modern. Minimum one year required at each level and/or faculty approval to advance.

| Select from: |  |  |
| :---: | :---: | :---: |
| DANC | 2241 | Ballet I: Primary Technique |
| DANC | 2242 | Ballet I: Secondary Technique |
| DANC | 2245 | Modern Dance I: Primary Technique |
| DANC | 2246 | Modern Dance I: Secondary Technique |
| DANC | 2249 | Mexican Dance I: Primary Technique |
| DANC | 2250 | Mexican Dance I: Secondary Technique |
| DANC | 2253 | Spanish Dance I: Primary Technique |
| DANC | 2254 | Spanish Dance I: Secondary Technique |
| DANC | 3241 | Ballet II: Primary Technique |
| DANC | 3242 | Ballet II: Secondary Technique |
| DANC | 3245 | Modern Dance II: Primary Technique |
| DANC | 3246 | Modern Dance II: Secondary Technique |
| DANC | 3249 | Mexican Dance II: Primary Technique |
| DANC | 3250 | Mexican Dance II: Secondary Technique |
| DANC | 3253 | Spanish Dance II: Primary Technique |
| DANC | 3254 | Spanish Dance II: Secondary Technique |
| DANC | 4241 | Ballet III: Primary Technique |
| DANC | 4242 | Ballet III: Secondary Technique |
| DANC | 4245 | Modern Dance III: Primary Technique |
| DANC | 4246 | Modern Dance III: Secondary Technique |
| DANC | 4249 | Mexican Dance III: Primary Technique |
| DANC | 4250 | Mexican Dance III: Secondary Technique |
| DANC | 4253 | Spanish Dance III: Primary Technique |
| DANC | 4254 | Spanish Dance III: Secondary Technique |

Additional Requirements
DANC 4102 Senior Project
DANC 4313 Dance in Public Schools
Select three hours from:

| DANC | 4310 | Dance Theory: Ballet, Modern, Jazz |
| :--- | :--- | :--- |
| DANC | 4311 | Dance Theory: Folk |
| DANC | 4312 | Dance Theory: Children's Dance |
| DANC | 4313 | Dance in the Public Schools |



TOTAL
39 hours

Minor
18 Hours
Must be in a certifiable teaching field. Minimum of six hours advanced; cannot repeat hours from core curriculum requirements.

| Profe |  | Courses 21 hours |
| :---: | :---: | :---: |
| EDHS | 3305 | Instructional Methods for English Language Learners and Learners with Exceptionalities in High School |
| EDHS | 4301 | Foundations of Education |
| EDHS | 4302 | Instructional Planning and Assessment |
| EDHS | 4303 | Instructional Strategies and Classroom Management |
| EDHS | 4398 | Integrated Internship II: 8-12 |
| EDHS | 4399 | Supervised Internship II: 8-12 |
| EDCI | 4641 | Secondary Internship II |
| DANC | 4313 | Dance in Public Schools |

Other Requirements 8 hours
BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology
$\sim$ MINOR IN DANCE (Non-Certified)

| Required Courses |  | 16 hours |
| :---: | :--- | :--- |
| DANC | 1201 | Dance Improvisation |
| DANC | 3309 | Dance History I |

Select two hours from:
DANC 3202 Choreographyl
DANC 2203 Music Dancers

Select three hours from:
DANC 3312 Dance Philosophy and Criticism
DANC 3313 World Dance
DANC 3320 Dance Science
Required Dance Technique Courses
8 hours
Eight hours total; four hours advanced; four hours each from two different techniques. One area must be ballet or modern. Minimum one year required at each level and/or faculty approval to advance.

Select from:
DANC 2241 Ballet I: Primary Technique
DANC 2242 Ballet I: Secondary Technique
DANC 2245 Modern Dance I: Primary Technique
DANC 2246 Modern Dance I: Secondary Technique
DANC 2249 Mexican Dance I: Primary Technique
DANC 2250 Mexican Dance I: Secondary Technique
DANC 2253 Spanish Dance I: Primary Technique
DANC 2254 Spanish Dance I: Secondary Technique
DANC 3241 Ballet II: Primary Technique
DANC 3242 Ballet II: Secondary Technique
DANC 3245 Modern Dance II: Primary Technique
DANC 3246 Modern Dance II: Secondary Technique
DANC 3249 Mexican Dance II: Primary Technique
DANC 3250 Mexican Dance II: Secondary Technique
DANC 3253 Spanish Dance II: Primary Technique
DANC 3254 Spanish Dance II: Secondary
Technique
DANC 4241 Ballet III: Primary Technique
DANC 4242 Ballet III: Secondary Technique
DANC 4245 Modern Dance III: Primary Technique
DANC 4246 Modern Dance III: Secondary Technique
DANC 4249 Mexican Dance III: Primary Technique
DANC 4250 Mexican Dance III: Secondary Technique
DANC 4253 Spanish Dance III: Primary Technique
DANC 4254 Spanish Dance III: Secondary Technique

TOTAL
24 hours

## $\star$ Course Descriptions

A listing of dance courses can be found on page 289.


## College of Health Sciences and Human Services



## General Overview

Recognizing the need for the University to take a leading role in the education of health care and human service professionals, the college, with the assistance and cooperation of regional facilities, is dedicated to providing educational programs necessary to meet the needs for competent health and human service professionals in the Rio Grande Valley and Texas.

## $\star$ MisSION

The College of Health Sciences and Human Services supports and facilitates the mission of The University of Texas-Pan American through academic programs of higher education, research and community service. The college is committed to enhancing the quality of life and health care in the Lower Rio Grande Valley binational border community and region. The faculty espouse a holistic multidisciplinary approach to meeting the educational needs of students and the dynamic health and human services needs of a diverse and multicultural society.

Dr. Bruce Reed, Dean
Health Sciences and Human Services West (HSHW)
Room 2.230
1201 W. University Drive
Edinburg, TX 78539-2999
Telephone: 956/381-2291
Fax: 956/384-5054
E-mail: bjreed@utpa.edu
Web site: http://www.utpa.edu/colleges/cohshs.cfm
Karen Chandler, Assistant Dean
Health Sciences and Human Services (HSHW)
Room 2.230
1201 W. University Drive
Edinburg, TX 78539-2999
Telephone: 956/318-5260
E-mail: kchandler@utpa.edu
Dr. Amy Schwartz, Assistant Dean
Health Sciences and Human Services (HSHW)
Room 2.230
1201 W. University Drive
Edinburg, TX 78539-2999
Telephone: 956/381-2291
E-mail: aschwartz@utpa.edu


## Academic Programs

The College of Health Sciences and Human Services offers a Bachelor of Science degree in clinical laboratory science, communication sciences and disorders, dietetics, nursing, rehabilitation services and physician assistant studies; and a Bachelor of Social Work degree. The Department of Rehabilitation also offers a minor in addiction studies as well as a minor in deaf studies. The departments of Communication Sciences and Disorders, occupational Therapy, Nursing, Rehabilitation and Social Work offer master's degrees. More information on master's degrees is available in the Graduate Catalog.

Individual programs offered in the College of Health Sciences and Human Services have specific admissions requirements in addition to the University core curriculum requirements. Most programs also have requirements for student liability insurance and immunizations. Students are advised that a policy requiring criminal background checks on students admitted into programs in the College of Health Sciences and Human Services is currently under review. For specific information on these requirements, see the major department or the advisement center.

The faculty of the college provide academic advisement and assistance to students pursuing careers in health sciences and human services. Curricula for programs within the college are structured to provide theory as well as practice-based learning experiences. In order to provide the practice-experience component of the college's programs, the University negotiated affiliation agreements with numerous health/human service/social service facilities in South Texas and in other regions.

# $\boldsymbol{\omega}_{\text {Heatth }}$ Related Programs 

## * INTERDISCIPLINARY COURSES

Interdisciplinary courses are offered to:

1. promote and provide understanding of the role of personnel involved in the delivery of health care, patient/ client education, and human and social services;
2. focus on the team approach to patient and client care in the delivery of health and human services;
3. introduce the student to the wide range of available careers in the sectors of health and social and human services; and
4. provide the student with a working knowledge of medical terminology.

Another interdisciplinary course is offered to teach basic clinical nutrition concepts.

A listing of these courses can be found under the heading "Health-Related Programs Interdisciplinary Courses" in the Course Descriptions section of this catalog. See page 322.

## Clinical LABORATORY SCIENCES

Karen Chandler, Program Coordinator Health Sciences and Human Services West (HSHW)

Room 2.206
1201 W. University Drive Edinburg, TX 78539-2999
Telephone: 956/318-5269
Fax: 956/318-5253
E-mail: kchandler@utpa.edu
Full-time Faculty
Chandler, Karen, Associate Professor

Eyambe, George, Associate Professor Reyna, Maria Elena, Lecturer
Tijerina, Sandra L., Associate Professor

## Mission Statement

The Clinical Laboratory Science Program supports and facilitates the mission of The University of TexasPan American by providing a quality educational experience which prepares clinical laboratory scientists for leadership roles in a multicultural health care system. It is committed to providing an environment of academic freedom in which students learn from faculty who have expertise in the profession. Excellence in teaching is enhanced by faculty engaged in research and creative activity as well as professional service to the profession, the University and the local community.

## * Program Goals

The Clinical Laboratory Science Program is designed to produce competent and qualified clinical laboratory practitioners to meet the needs of the Rio Grande Valley and the state. It offers the student an opportunity to obtain the knowledge, skills and attitudes necessary to function as competent clinical laboratorians. To these ends, the following goals have been established for the program:

1. Provide a quality education to students enrolled in the Clinical Laboratory Science Program, which will allow them to perform as competent career entry professionals.
2. Provide a flexible curriculum, which meets the needs of the traditional as well as the non-traditional student.
3. Provide a curriculum that presents opportunities for students to develop leadership skills and will enable them to function as an integral part of the health care team.
4. Prepare students to meet the unique challenges of a multicultural border health region.

## $\star$ General Overview

Clinical laboratory sciences (medical technology) is a profession in which theoretical knowledge in the fields of biology and chemistry is applied in the analysis of various cells and body fluids. Clinical laboratory
scientists, or medical technologists, assist in the diagnosis and treatment of disease conditions through laboratory procedures in hematology, microbiology, immunology, blood banking, clinical chemistry and urinalysis.

The pre-professional curriculum is composed of the University core curriculum requirements plus additional biology and chemistry courses. Admission to the professional portion of the Bachelor of Science in Clinical Laboratory Sciences Program is limited; therefore, students are urged to keep high standards of performance during their preprofessional years.

## * ADMISSION REQUIREMENTS

The Clinical Laboratory Science Program begins in the fall semester. In order to be considered for admission, the student should submit an application by March 31. The Admissions Committee meets in April to consider all applications received by March 31. Applications received after March 31 are considered on a space-available basis. A completed application must include official transcripts and three letters of reference.

## ~ ADmission Course prerequisites

Core Curriculum Requirements 48 hours
Complete the University core curriculum requirements EXCEPT for the sections, groups or areas listed below, which must be satisfied only as shown.

Other University Requirements 3 hours
UNIV 1301 Learning Framework
Science and Mathematics
Group 1. Natural Science
Students must select BIOL 1401 and BIOL 1402.
Science Support Courses 24 hours
Required Courses

| BIOL | 3401 | General Microbiology |
| :---: | :---: | :---: |
| CHEM | 1301 |  |
| and | 1101 | General Chemistry I |
| CHEM | 1302 |  |
| and | 1102 | General Chemistry II |
| CHEM | 2302 |  |
| and | 2102 | Organic Chemistry I |
| CHEM | 2303 |  |
| and | 2103 | Organic Chemistry II |
|  |  | or |
| CHEM | 3303 | Biochemistry |
| and 3103 |  |  |

Approved biology course to be selected from any of the following:

| BIOL | 3403 | Medical Microbiology <br> and Immunology |
| :--- | :--- | :--- |
| BIOL | 3412 | Cell Biology |
| BIOL | 3413 | Genetics |
| BIOL | 4406 | Mycology |
| BIOL | 4407 | Animal Parasitology |

Applicants who plan to utilize coursework more than seven years old in the areas of general chemistry or the biological sciences will be required to demonstrate an up-to-date knowledge in these areas. This may be accomplished by either of the following:
A. Completion of at least one formal course in chemistry and one formal course in the biological sciences within the last five years with a grade of at least "C."
B. One year of relevant experience in the field of clinical laboratory science within the last five years.

## $Z$ OTHER ADMISSION INFORMATION

A. Students must complete all non-clinical laboratory science coursework prior to entering the program. The curriculum for the Clinical Laboratory Sciences Program is currently under review and it is anticipated that minor changes in the professional coursework will be recommended. Students should check with their advisor for the latest information on program requirements.
B. Applications from international students with foreign transcripts or degrees seeking admission to the program and planning to apply for a degree in clinical laboratory sciences from The University of Texas-Pan American will be handled in accordance with university policies and must meet all applicable degree requirements.
C. Readmission to the program is not automatic and is on a space-available basis.

## ǐ OTHER REQUIREMENTS

A minimum GPA of 2.0 and a minimum science GPA of 2.0 is required for admission to the program.

## Alternate Admission Pathways

A student who does not wish to receive a degree from The University of Texas-Pan American but who wishes to attend the professional portion of the curriculum must meet one of the following requirements:

1. hold a baccalaureate degree from an accredited
institution and have a minimum of 16 semester hours of chemistry including inorganic and organic or biochemistry and 16 semester hours of biology including microbiology and a college-level math course;
2. hold a foreign baccalaureate degree from an international institution, meet all admission requirements of UT Pan American and have his or her transcript evaluated by agencies acceptable to the National Certification Agencies; this evaluation must show that his or her degree is equivalent to a baccalaureate in the United States with appropriate coursework in biology, chemistry and mathematics;
3. have completed all preprofessional coursework at their parent institution with 16 semester hours of biology, including a course in microbiology, 16 semester hours of chemistry including inorganic and organic or biochemistry, three semester hours of college-level mathematics; and an affiliation agreement between The University of Texas-Pan American and his/her parent university stating that, upon satisfactory completion of the clinical laboratory sciences curriculum offered at UT Pan American, the student will be awarded a baccalaureate degree.

## $\star$ CERTIFICATION REQUIREMENTS

Certification requires a baccalaureate degree including 16 hours of biological sciences, 16 hours of chemistry, three hours of college mathematics and completion of the accredited Clinical Laboratory Sciences Program. Microbiology, immunology and organic chemistry courses should be part of the curriculum. All professional courses must be completed with a grade of "C" or better.

## $\star$ Degree Requirements

## $\checkmark$ MAJOR IN CLINICAL LABORATORY SCIENCES

Admission Prerequisite Requirements 75 hours
See previous page.
Major Course Requirements 57 hours

| CLSC | 3100 | Introduction to Clinical <br> Laboratory Science |
| :--- | :--- | :--- |
| CLSC | 3310 | Hematology I <br> Clinical Immunology and <br> Immunohematology |
| CLSC | 3513 | 3420 | | Clinical Chemistry I |
| :--- |
| CLSC |
| CLSC |
| CLinical Microbiology I |


| CLSC | 4122 | Method Development and Research |
| :---: | :---: | :---: |
| CLSC | 4303 | Medical Laboratory Leadership |
| CLSC | 4411 | Clinical Hematology II |
| CLSC | 4314 | Advanced Immunohematology |
| CLSC | 4315 | Advanced Immunology and Molecular Diagnosis |
| CLSC | 4521 | Clinical Chemistry II |
| CLSC | 4631 | Clinical Microbiology II |
| CLSC | 4340 | Clinical Practicum I |
| CLSC | 4341 | Clinical Practicum II |
| CLSC | 4342 | Clinical Practicum III |
| CLSC | 4343 | Clinical Practicum IV |
| CLSC | 4144 | Clinical Practicum V |

NOTE: Senior year courses include clinical practicum work that may not necessarily conform exactly to the University calendar. Professional courses are subject to change prior to the time a student starts the program. Students should see their advisor for the most current information.

Other Requirements
Students must complete all professional courses with a grade of "C" or better. Students who receive a "D" or below in the on-campus professional courses will not be allowed to proceed to clinical practicums until a satisfactory grade of " $C$ " or better is attained. Readmission to the program is not automatic and is on a space-available basis.

TOTAL
132 hours

## * CoUrse Descriptions

A listing of courses offered by the Clinical Laboratory Sciences Program can be found on page 265.



## COMMUNICATION

 SCIENCES AND DISORDERSDr. Teri Mata-Pistokache, Interim Department Chair Health Sciences and Human Services West (HSHW)

Room 1.264 1201 W. University Drive Edinburg, TX 78539-2999 Telephone: 956/316-7040

Fax: 956/ 318-5238
E-mail: tmpistok@utpa.edu

Full-time Faculty<br>Ayala, Kara, Assistant Professor Gittins, Colleen, Lecturer Mata-Pistokache, Teri, Associate Professor<br>Molinar, Monica R., Lecturer Parchman-Gonzalez, Keri, Lecturer<br>Salinas, Sonya, Lecturer<br>Sibley, Keith, Lecturer<br>Wang, Bailey, Associate Professor

## Major in Communication DISORDERS

The Bachelor of Science in communication disorders is a preprofessional degree designed to prepare its graduates for graduate study in one of two professions, speech-language pathology or audiology.

## $\star$ REQUIREMENTS FOR ADMISSION TO THE COMMUNICATION SCIENCES AND DISORDERS Undergraduate Program

The Communication Sciences and Disorders Undergraduate Program begins every fall semester.


Specific program requirements and application may be obtained at http://www.panam.edu/dept/commdisorder/.

## - Admission Requirements

1. Students must have applied and have been accepted to UTPA prior to applying to the Communication Sciences and Disorders Undergraduate Program.
2. A completed application packet for admission to the Communication Sciences and Disoders Undergraduate Program must be submitted on or before a specified date for consideration for subsequent fall admission.

## * Degree Requirements



\(\left.$$
\begin{array}{lcl}\text { COMD } & 3360 & \begin{array}{c}\text { Neuroanatomy and Physiology for } \\
\text { Speech, Language, Hearing }\end{array} \\
\text { COMD } & 4310 & \begin{array}{c}\text { Behavior Management for } \\
\text { Speech-Language Pathology }\end{array} \\
\text { COMD } & 4330 & \begin{array}{l}\text { Audiology (Re) Habilitation } \\
\text { COMD }\end{array}
$$ 4350 <br>

COMical Applications\end{array}\right]\)| COMD | 4360 |
| :--- | :--- |
| Language Disorders in Children I |  |
| COMD | 4365 |
| COMD | Functional Speech Disorders |
| Professional Report Writing |  |
| in Speech-Language Pathology |  |

Supplemental Course Requirements

| COMD | 1310 | Beginning Sign Language |
| :--- | :---: | :--- |
| COMD | 1320 | Intermediate Sign Language |
| MATH | 2330 | Survey of Elementary Statistics |
| PHIL | 2330 | Ethics |
| SOC | 1313 | Principles of Sociology |
| ENG | 3321 | Language and Culture |
| REHS | 3320 | Family and Disability |
| PSCI | 1421 | Physical Science I |

Advanced Elective
3 hours

TOTAL
124 hours

## $\star$ Course Descriptions

A listing of courses offered by the Department of Communication Sciences and Disorders can be found on page 272.

# COORDINATED Program in Dietetics 

Dr. Bahram Faraji, Program Coordinator<br>Health Sciences and Human Services West (HSHW)<br>Room 2.226<br>1201 W. University Drive Edinburg, TX 78539-2999<br>Telephone: 956/318-5264<br>Fax: 956/318-5265<br>E-mail: bfaraji@utpa.edu<br>Full-time Faculty<br>Edionwe, Alexander, Associate Professor Faraji, Bahram (Bob), Professor Yang, Jimin, Assistant Professor

## * General Description

The Coordinated Program in Dietetics prepares students to successfully complete the national registration examination and be qualified for entrylevel positions in administrative, clinical or community dietetics. Graduates will possess additional knowledge and skills that will enable them to work with the specific and unique needs of the local community which is largely Mexican-American, as well as other areas of the country with large Hispanic populations.

The goals of the dietetics program are to 1) prepare competent entry-level registered dietitians to serve the Rio Grande Valley and southern region of the United States, 2) prepare program graduates for graduate-level study and for employment in food- and nutrition-related fields and 3) develop professionals who are committed to lifelong education and involvement in positive wellnessoriented lifestyles.

The accelerated program combines the academic study of dietetics with the opportunity to apply knowledge in a professional setting. Qualified students complete their education in dietetics in a variety of settings during their junior and senior years. Upon successful completion, students earn a Bachelor of Science degree with a major in dietetics. Upon graduation, they are eligible to become an active
member of the American Dietetic Association and take the examination to become a Registered Dietitian (RD) and Licensed Dietitian (LD).

The dietetics program is accredited by the American Dietetic Association's Commission on Accreditation for Dietetics Education (CADE).

## $\star$ REQUIREMENTS FOR ADMISSION to the Dietetics Program

## A. Submission of the following:

1. Completed application for admission to the Coordinated Program in Dietetics. Call 956/318-5264 for information.
2. Official transcript showing completion of at least 80 hours with a minimum of 2.5 grade point average to include:
ENG 1301 and ENG 1302
MATH 2330
Science Support Courses: BIOL 2403, BIOL 2404, CLSC 2429 or BIOL 3401, CHEM 1301, 1101, CHEM 1302, 1102, CHEM 2302, 2102 and CHEM 3303, 3103

Dietetic Core: HRP 2303, DIET 2351 and DIET 2352

NOTE: A minimum GPA of 2.0 with a minimum grade of "C" in each course is required in the Science Support Courses and Dietetic core courses.
3. Three letters of recommendation.
4. A letter from the applicant stating reason for interest in the dietetics program.
5. Completion of a minimum of 80 hours of work-related experience, either volunteer or paid, in the area of dietetics or food service prior to entrance into the dietetics program; this must be documented and verified by the applicant's employer.
B. Selection by the Admissions Committee is based upon the following:

1. Completion and submission of the required material by the second Friday in May.
2. Grade point average overall and in science courses.
3. Evaluation of selected references and criteria.
4. Admission interview.

## READMISSION

Readmission is not automatic. Students desiring readmission must notify the dietetics program in writing at least one semester (or two summer sessions) in advance. Complete information regarding readmission can be obtained in the current Coordinated Program in Dietetics Student Guidebook available in the department.

## $\sum$ GRADUATION REQUIREMENTS

1. Complete all courses and practicums with a grade of "C" or better. Grade of " $C$ " is 75.0 79.9 percent of maximum possible points.
2. Complete all five practicums with at least 900 hours of supervised practice.
3. Complete two Exit Exams and one mock RD (Registered Dietition) exam with a minimum of 75 percent.
4. Complete University graduation requirements.
5. Receive Verification Statement for the RD exam.

## MAJOR IN DIETETICS

## Degree Requirements

Core Curriculum Requirements 51 hours
Complete the University core curriculum requirements section on pages 103-107 of this catalog EXCEPT for the sections, groups or areas listed here, which must be satisfied only as shown below.

Section B. Science and Mathematics
Group 1. Natural Science
Students should select BIOL 2403 and BIOL 2404, CHEM 1301, 1101 and CHEM 1302, 1102. Otherwise, both sequences must be taken as part of the science support courses.

Section E. Social Sciences
Group 3. Other Social Science
Students must select Economics 1301, and Psychology 1310.

Revisions in science support courses are under way. Please check with the dietetics program before enrolling in these courses.

| Science Support Courses |  |  |  |
| :--- | :--- | :--- | :--- |
| CHEM | 1301 | General Chemistry I |  |
| CHEM | 1101 | General Chemistry Lab I |  |
| CHEM | 1302 | General Chemistry II |  |

CHEM 1102 General Chemistry Lab II
CHEM 2302 Organic Chemistry I
CHEM 2102 Organic Chemistry I Lab
CHEM 3303 Biochemistry
CHEM 3103 Biochemistry Lab
BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology
CLSC 2429 Clinical Microbiology in Health Care
or
BIOL 3401 General Microbiology
"If the student completes BIOL 2403 and BIOL 2404 or CHEM 1301, 1101 and CHEM 1302, 1102 as part of the University core curriculum requirements, only 20 additional hours of science support courses are required. The grades for all courses listed will be used in determining compliance with minimum grade and GPA requirements.

Interdisciplinary Support Courses
6 hours
MANA 3361 Principles of Management and
ECON 1301 In

Admission Prerequisite
Dietetic Core Courses
9 hours
DIET 2352 Food Preparation
HRP 2303 Medical Terminology
DIET 2351 Introduction to Clinical Nutrition
Dietetic Professional Courses 48 hours
(Enrollment eligibility based on acceptance into the dietetics program.)

- First year (Junior)

| DIET | 3452 | Quantity Foods Production |  |
| :--- | :---: | :--- | :---: |
| DIET | 3353 | Advanced Nutrition |  |
| DIET | 3354 | Food Systems Management |  |
| DIET | 3655 | Food Systems Management |  |
|  | Practicum |  |  |
| DIET | 3356 | Experimental Foods |  |
| DIET | 3357 | Medical Nutrition Therapy I |  |
| DIET | 3358 | Medical Nutrition Therapy II |  |
|  |  |  |  |
| Second year (Senior) |  |  |  |
| DIET | 4852 | Clinical Nutrition Practicum |  |
| DIET | 4455 | Community Nutrition Practicum |  |
| DIET | 4456 | General Dietetics Practicum |  |
| DIET | 4257 | Seminar in Dietetics |  |
| DIET | 4258 | Communication Skills in Dietetics |  |
| DIET | 4359 | Community and Life Cycle |  |
|  | $\quad$ Nutrition |  |  |

## DIETETICS, NURSING

- Other Requirements

A minimum grade of "C" is required for all dietetics (DIET) courses (lecture, labs and clinicals) and for all science support courses. Grade of " $C$ " is 75.0-79.9 percent of possible points.

TOTAL
134 hours

## Course Descriptions

A listing of courses offered by the Coordinated Program in Dietetics can be found on pages 292.


## NURSING

Dr. Carolina G. Huerta, Department Chair Health Sciences and Human Services East (HSHE)

Room 2.192 1201 W. University Drive Edinburg, TX 78539-2999 Telephone: 956/381-3491

Fax: 956/381-2875 E-mail: chuerta@utpa.edu

Full-time Faculty Bautista, Beatriz, Lecturer Cabrera, Fernando, Lecturer Cantú-Cabrera, Juana, Lecturer Delgado, Diana, Clinical Specialist Diaz, Maria, Assistant Professor Flores-Vela, Alma, Assistant Professor Fuentes, Lilia, Clinical Specialist Garza, Viola, Lecturer
Guzman, Isabel (Penny), Clinical Specialist Herrera-Erdem, Orelia, Clinical Specialist Huerta, Carolina, Professor James, Barbara, Clinical Specialist Maville, Janice A., Professor Mellen, Graciela Maria, Lecturer Milan, Cindy L., Assistant Professor Nadeau, Nancy, Lecturer
Nieto, Beatríz, Assistant Professor Otto, Debra, Assistant Professor Rodríguez, Melinda, Lecturer
Sánchez, M. Sandra (Sandy), Associate Professor
Sullivan, Pamela, Assistant Professor
Voss, Judy, Lecturer Williams, Jacquelyn, Clinical Specialist Wilson, Bruce K., Professor

## * General Overview

The Department of Nursing offers a Bachelor of Science and a Master of Science in nursing, both accredited by the Board of Nurse Examiners for the state of Texas and the Commission on Collegiate Nursing Education (1 Dupont Circle, NW Suite 530, Washington, D.C. 20036-1120, 202/887-6791).

The Nursing Department supports the mission of the College of Health Sciences and Human Services through programs that educate individuals to meet the health
care needs of a culturally diverse society. These programs facilitate the development of competent practitioners with critical thinking skills to provide holistic nursing care to individuals, families, groups and communities. A commitment to fostering research and service that enhance health promotion, maintenance and restoration is integral to the mission of the nursing department.

## $\star$ Bachelor of Science in NURSING Program

The Bachelor of Science in Nursing (BSN) Program is generic in nature with an alternate pathway for registered nurses. It is designed to enable students to integrate knowledge from theory and research, high-level skills and concepts of leadership into the practice of professional nursing care of individuals, families and groups. The BSN Program provides a foundation for graduate study.

BSN graduates are eligible to apply to the Texas State Board of Nurse Examiners to take the National Council Licensure Examination. After successfully completing this examination, the graduate is issued a license to practice as a registered nurse in the State of Texas.

> Dr. Sandy Sánchez, BSN Coordinator
> Health Sciences and Human Services East (HSHE) Room 2.190
> Telephone: 956/381-3491
> E-mail: sandy@utpa.edu

## REQUIREMENTS FOR ADMISSION to the BSN Program

1. Meet UTPA's admissions requirements.
2. Have a minimum 2.5 grade point average on a 4.0 scale on all prerequisite courses.
3. Complete all prerequisites with a minimum grade of " $C$ " in each course (see detail on the next page).
4. Pass math quiz (grade of 100).
5. Provide proof of current certification in cardiopulmonary resuscitation (CPR; health care provider).
6. Provide documentation verifying absence of active pulmonary disease.
7. Provide documentation verifying current immunization or immunity status for specified diseases (hepatitis $B$, measles, mumps, rubella, tetanus/ diphtheria, varicella, etc.).
8. Alternate pathway applicants: Be a registered nurse in the state of Texas or have a temporary permit to practice professional nursing in Texas.
9. Submit application to the BSN Program by Oct. 1.
10. Be admitted by the BSN Student Development Committee. After being rank-ordered according to prerequisite GPA, students will be admitted on a spaceavailable basis.

## $\approx$ Prerequisite Course REQUIREMENTS FOR ADMISSION

Core Curriculum Requirements 48 hours
Complete the requirements shown in the University core curriculum requirements section shown on pages 103107 of this catalog EXCEPT for the sections, groups, or areas listed below, which must be satisfied only as shown here.

Section B. Science and Mathematics
Group 1. Natural Science
BIOL 2403 and BIOL 2404 must be selected.
Group 2. Mathematics
MATH 2330 must be selected.
Section E. Social Science
Group 3. Other Social Science
ANTH 1323 (from Area 1, Anthropology) or
SOCI 1313 (from Area 4, Sociology) must be selected.
Other Course Requirements 25 hours
Microbiology 4 hours
General Chemistry 4 hours
Nutrition 3 hours
Nursing (Generics only) 3 hours
NURS 2301 Wellness
Psychology 6 hours
Developmental Psychology/
Life Span 3 hours
Introduction to General Psychology 3 hours
Kinesiology (activity) 2 hours
Modern Language (in same language) 3 hours

## BSN ADVISEMENT

Current and prospective BSN students must be advised by a BSN advisor every semester.

## EXCEPTIONS TO ADMISSION CRITERIA

Students may formally petition the BSN Student Development Committee for exceptions to the admission criteria. Each request will be evaluated on an individual basis.

## ADVANCED Placement

Alternate Pathway (RN) students may be granted credit for selected BSN courses after approval by the BSN Student Development Committee.

## E COMPUTERIZED BACKGROUND CHECKS

According to the Texas Nurse Practice Act contained in the Texas Occupations Code, the Board of Nurse Examiners (BNE) may refuse to admit persons to its examinations. Any individual who has reason to believe that she/he is ineligible for the license may contact the BNE at 512/3057400; www.bne.state.tx.us.

## Professional Liability Insurance

All students enrolled in clinical nursing courses are required to maintain professional liability insurance. Since "blanket" student coverage is billed along with other student fees, RNs who have their own coverage and do not wish to purchase student coverage must inform provide appropriate documentation to the BSN coordinator.

## PROGRESSION CRITERIA

To continue enrollment in the BSN Program, students must:

1. Maintain at least $\$ 1$ million in professional liability insurance.
2. Provide annual documentation verifying absence of active pulmonary disease.
3. Provide documentation verifying current immunization or immunity for selected diseases (hepatitis $B$, measles, mumps, rubella, tetanus/ diphtheria, varicella, etc.).
4. Provide annual proof of current certification in CPR (health care provider).
5. Maintain a 2.0 GPA on a 4.0 scale.
6. Achieve a minimum grade of " $C$ " in each required course. (Any grade below a "C" is a failing grade.)
7. Satisfactorily complete nursing courses in approved sequence.
8. Alternate pathway students: provide evidence of current licensure to practice registered nursing in the state of Texas. Students will not be permitted to continue in clinical courses if a temporary permit expires without a license being issued or if a license to practice registered nursing has expired or been suspended, canceled or revoked.

9. Seek academic advisement each semester regarding program progression.

## z READMISSION

Readmission into the BSN Program is not guaranteed. After failing (or dropping) a BSN course, the student must apply for readmission, in writing, to the BSN Student Development Committee before continuing with nursing courses. Students applying for readmission will be considered on a space-available basis pending recommendation of the BSN Student Development Committee and the consent of the course faculty. Students must apply by April 1 for summer or fall readmission or Oct. 1 for spring readmission.

A student who has failed (or dropped) a clinical course may petition to be allowed to enroll in nonclinical courses. Being allowed to do so does not guarantee that the student will be readmitted into the program. Students being readmitted into BSN courses may be required to demonstrate proficiency in select nursing skills (e.g., psychomotor, psychosocial, cognitive, etc.), as determined by course faculty.

Students are generally not allowed readmission after a year's absence from the BSN Program. Students who fail the same BSN course twice are ineligible for readmission into the program.

## $\hat{\sim}$ GRADUATION CRITERIA

1. Achieve a minimum grade of " $C$ " in each required course.
2. Satisfactorily complete all required courses.
3. Have a 2.0 GPA on a 4.0 scale.
4. File a Degree Plan approved by the BSN coordinator.
5. File an acceptable Application for Degree with the Office of the Registrar on or before the date specified in the University Calendar.
6. Meet UTPA's core curriculum requirements for a bachelor's degree.
7. Pass BSN Readiness Exam.

## $\approx$ Degree requirements for the bachelor of Science in Nursing

- Major in Nursing (BSN Degree)

Admission Prerequisite Courses
Generic Pathway 73 hours
Alternate Pathway 70 hours*
*NURS 2301 not required
Nursing Core Courses
Generic Pathway 52 hours
NURS 3202, 3209, 3403, 3405, 3408, 3604,
3608, 4601, 4602, 4203, 4404, 4607
Alternate Pathway
24 hours
NURS 3202, 3403, 3407, 3209,
4203, 4404, 4607 plus 32 hours"
*As approved by BSN Student Development Committee.

Designated Electives
Generic Pathway
Alternate Pathway
o hours
o hours

## * OTHER REQUIREMENTS

1. Achieve a minimum grade of " $C$ " in each required course. (Any grade below "C" is a failing grade.)
2. Have 2.0 GPA on a 4.0 scale.

The BSN Program has an advanced placement credit option. Please contact the Department of Nursing Office for more information.

## TOTAL

- Semester-by-Semester

Generic Curriculum
125 hours (minimum)

52 hours

- Junior Year

Spring (1)
12 hours
NURS 3202 Pharmacology
NURS 3403 Client Assessment
NURS 3604 Nursing Fundamentals
Summer (2)

| NURS | 3408 | Health Promotion and <br> Maintenance <br> Across the Life Span |
| :--- | :--- | :--- | :--- |
| Fall (3) |  |  |
| NURS | 3405 | Mental Health Nursing |
| NURS | 3608 | Adult Health I |
| NURS | 3209 | Research |


| Advanced Placement BSN |  | Alternate |  |
| :---: | :---: | :---: | :---: |
| Credit Available |  | Pathway |  |
| (up to 32 SCH ) |  |  | SCH |
| NURS 3604 | Nursing Fundamentals | General Ed | 70 |
| NURS 3408 | Health Promotion and | RN |  |
|  | Maintenance Across | Upper-level |  |
|  | the Life Span | Credit | 32 |
| NURS 3405 | Mental Health Nursing | Nursing | 24 |
| NURS 3608 | Adult Health I |  |  |
| NURS 4601 | Adult Health II |  |  |
| NURS 4602 | Family Health Care |  |  |
| TOTAL |  |  | 126 |

## $\star$ Course descriptions

BSN course descriptions can be found on page 348.

# 3 Physician Assistant Studies 

Frank Ambriz, Program Chair<br>Health Sciences and Human Services East (HSHE)<br>Room 2.142<br>1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/381-2298<br>Fax: 956/381-2438<br>E-mail: frankambriz@utpa.edu<br>Full-time Faculty<br>Ambriz, Frank, PA-C, Assistant Professor<br>and Program Chair<br>Baker, Willard, PA-C, Assistant Professor<br>Farooqi, Mohammed, PA-C, Assistant Professor<br>Kuhn, Lisa, PA-C, Assistant Professor<br>and Academic Coordinator<br>Koo, Felix, M.D., Ph.D., Assistant Professor and Clinical Coordinator<br>Tavarez, Hiram, M.D., Medical Director Villarreal Jr., Elias, PA-C, Assistant Professor

## * General OVerview

The Physician Assistant Studies Program (PASP) within the College of Health Sciences and Human Services offers a two-year professional curriculum leading to the Bachelor of Science degree in physician assistant studies.

The Physician Assistant Studies Program is designed to offer the student the opportunity to develop the competencies necessary to practice as an assistant to the primary care physician as defined by the American Academy of Physician Assistants. The graduate will be prepared to assist the physician in multiple and complex tasks directly related to health and medical care; interviewing, examining, compiling and evaluating medical data; treatment; follow-up care; maintaining a continuity of communications and observations; and coordinating other health-related personnel. Within the defined standards, the graduate may be called upon to carry out responsibilities specifically assigned to him or her. The graduate physician assistant remains directly responsible to the physician-supervisor/employer, who
retains complete control over the management of the patient.

At the time of this printing, the Physician Assistant Studies Program is pending transition to a master's degree curriculum. Pending approval, the Bachelor's Degree in Physician Assistant Studies will no longer be offered. Please check with the program directly for the latest information or log on to the program Web site at http://www.utpa.edu/dept/pasp.

## * Prerequisites

Although the preprofessional course of study may be accomplished at any accredited junior college, senior college or university, it is preferred that all science courses be taken at a senior college and/or university. All prerequisite coursework must be completed by the application deadline for that year's admissions cycle. Applicants should review the Prerequisite Equivalency Sheet for their respective college at http://www.utpa. edu/dept/pasp for detailed course requirements tailored to their particular college and/or university. Coursework must include the following:

Course
Hours

| Science |  |
| :--- | ---: |
| General Biology I and II with labs |  |
| General Chemistry I and II with labs | 8 |
| Organic Chemistry with lab |  |
| or | 8 |
| Biochemistry with lab |  |
| General Microbiology with lab | 4 |
| Anatomy \& Physiology with labs | 4 |
| Math | 8 |
| College Algebra or higher |  |
| Statistics | 3 |
|  | 3 |
| Humanities | 3 |
| General Psychology | 3 |
| English Rhetoric | 3 |
| English Composition | 47 |
| Total |  |
| NOTE: The above prerequisites represent the |  |General Biology I and II with labs8Organic Chemistry with labBiochemistry with lab4

Anato \& Physiolo with lab ..... 4College Algebra or higher3
Statistics ..... 3
Humanities
English Rhetoric ..... 3
English Composition ..... 3
Total ..... 47annually every fall semester.

## The Admissions Process

## PHASE I - THE APPLICATION

The admissions application is available online at http://www.utpa.edu/dept/pasp/olapp from Sept. 1-Dec. 31 of every year. The admissions application is not available in paper/hard copy format. All applications and supporting materials are due on Dec. 31 of every year.

In addition to completing the online application, each applicant must submit the following by the application deadline:

1. Copies of all transcripts and foreign evaluations (unofficial copies are not acceptable).
2. Three Applicant Reference Forms (ARF).
3. Shadowing Log Form(s) documenting 50 hours minimum of shadowing.
4. Signed Admissions Code of Cooperation.

## - Minimum Academic Requirements

 for Application1. Minimum grade point average (GPA) of 3.0 on a 4.0 scale is required in all three of the following areas:

- overall prerequisites
- prerequisite sciences
- last 60 hours of coursework

2. Completed bachelor's degree.
3. Completed all prerequisite coursework by the application deadline.
4. Completed Foreign Degree Translation/Evaluation by the Foreign Credential Service of America at http:// www.fcsa.biz/pan_am.shtml.

## Phase II - Application Review

The basis for inviting an applicant for interview is competitive. It includes the applicant's academic performance represented by coursework, grades and the three GPA calculations discussed in the previous section. In addition, application review includes, but is not limited to, consideration of non-academic qualifications listed below (listed in no particular order of preference or weight):

- awards and honors
- health care experience
- knowledge of and commitment to the PA profession
- leadership
- PA shadow time
- primary care/South Texas-oriented
- research background
- scholastic achievements
- service/volunteerism
- work experience


## Phase III - The Interview

Admissions interviews are granted by invitation only. Applicants are selected for interviews based on a holistic evaluation of the entire application and supporting materials. Application file review occurs through the entire month of January. Approximately 70-100 applicants or more are invited for an interview during the months of February and March. Two panel interviews are required of every applicant. Typically, interviews are 15-20 minutes in duration with each panel comprised of three PASP faculty, practicing PA's and other important PASP stakeholders. Each interviewer asks questions to assess the applicant's knowledge of the PA profession, motivation and commitment, maturity, intellectual curiosity, interest patterns, interpersonal skills and academic history.

## $\Sigma$ PHASE IV - ADMISSION

At the conclusion of all interviews, the admissions committee (comprised of the PASP faculty, medical director and representation from administration) meets to review all applicants who were interviewed. Thirty to 40 candidates are selected for admission. Additionally, five to 10 applicants are selected and ranked as alternates. The number of seats offered for admission may vary from year to year. Letters notifying all applicants of their status are sent.

## Professional Course of Study

The professional curriculum, six semesters in length, begins each June:
Didactic Year

Hours
8
Medical Anatomy and Physiology I and II
2
Studies in the PA Profession
2
Medical Interviewing
Medical Psychiatry ..... 2
Patient Education ..... 2
Patient Evaluation ..... 4
Pathophysiology of Disease I and II ..... 4
Preventive Medicine \& Community Health ..... 3
Legal and Ethical Issues in Health Care ..... 3
Principles of Clinical Medicine I and II ..... 6
Clinical Laboratory Methods ..... 2
Pharmacology I ..... 2
Pharmacology II ..... 3
Clinical Clerkship ..... 2
Medical Research \& Statistics ..... 1
Total Didactic Year ..... 46


Clinical Year
Hours
Medicine I and II
Surgery I and II
Pediatrics I and II8

Obstetrics-Gynecology I and II 8
Emergency Medicine
Clinical Elective
Total Clinical Year
Total Professional Curriculum Hours
Upon successful completion of academic and clinical training requirements, the student is conferred the degree of Bachelor of Science in physician assistant studies.

The curriculum meets and exceeds the requirements outlined in the Essentials of an Approved Educational Program for the Assistant to the Primary Care Physician established by the Accreditation Review Commission on Education for the Physician Assistant. Graduates of the program are eligible to apply for membership in the American Academy of Physician Assistants or other nationally recognized organizations representing the physician assistant and to sit for the Physician Assistant National Certifying Examination. Successful completion of the examination leads to certification by the National Commission on Certification of Physician Assistants and is accepted by many states as proof of competency.

## $\underset{\sim}{\sim}$ AcADEMIC FRESH START

An applicant who is a Texas resident may seek to enter pursuant to the "Academic Fresh Start" statute, Texas Education Code, Paragraph 51.929. If the applicant informs the registrar in writing of this election, the University, for admissions purposes, will not consider academic course credits or grades earned by the applicant 10 or more years prior to the starting date of the semester in which the applicant seeks to enroll. An applicant who makes the election to apply under this statute may not receive any course credit for courses taken 10 or more years prior to enrollment.

## PHYSICIAN AsSISTANT STUDIES

All courses in the professional curriculum of the PASP must be passed with a grade of "C" or better for advancement in the PASP. If a grade lower than a "C" is recorded, the student will not be permitted to advance in the PASP. The Grading, Promotion and Retention Committee will review the student's academic performance and determine the student's status within the PASP. Courses may not be repeated, taken more than twice and the timing of the repeated course or remedial instruction will be scheduled at the discretion of the faculty.

## $\star$ COURSE DESCRIPTIONS

A listing of courses offered by the Physician Assistant Studies Program can be found on page 350 .


## $\omega$

## DEPARTMENT OF REHABILITATION

Thomas Shefcik, Interim Department Chair Health Sciences and Human Services West (HSHW)

Room 1.266
1201 W. University Drive
Edinburg, TX 78539-2999
Telephone: 956/316-7036
Fax: 956/318-5237
E-mail: tshefcik@utpa.edu

Full-time Faculty<br>Blankenship, Charlene, Assistant Professor and Undergraduate Coordinator Chen, Roy, Assistant Professor<br>Graf, Noreen, Associate Professor<br>Hansmann, Sandra, Assistant Professor<br>Marini, Irmo, Professor<br>and Graduate Coordinator<br>Miller, Eva, Associate Professor<br>Reed, Bruce J., Dean and Professor<br>Reid, Charlles, Associate Professor

Rivas, Belinda, Clinical Specialist
Saladin, Shawn, Assistant Professor
Shefcik, Thomas E., Associate Professor

## * General OVERVIEW

The University of Texas-Pan American offers a Bachelor of Science degree in rehabilitative services. The program has two primary objectives:

- Preparing individuals to enter a wide range of beginning-level careers involving work with people who have disabilities.
- Preparing students who have the educational background and desire to continue graduate studies in rehabilitation.

Rehabilitation is defined as a comprehensive sequence of services, mutually planned by the person with a disability and the rehabilitation worker, to maximize employability, independence, integration and participation of people with disabilities in the workplace and the community. Total rehabilitation includes physical, mental, economic, familial, social, environmental, personal and vocational goals in life as part of the comprehensive process that is rehabilitation.

The rehabilitation process generally involves three identifiable stages:

1. medical
2. Physical or technical aid and adjustive services
3. vocational, social and independent living

In practice, it is found that improvement in the ability to work and to live independently brings about a
concurrent adjustment in other areas of an individual's life. Work is a major source of self-esteem and identification.

The undergraduate program at UT Pan American focuses primarily on preparing students to assist individuals during the third phase of the process - vocational, social and independent living - although a basic understanding of the first two phases, and their interrelationships, is essential.

The rehabilitative services student will have an opportunity to learn to help people with disabilities through a series of services designed to conserve, develop or restore the ability of the individual with a disability to become independent in daily living skills and financially through employment.

The undergraduate program at UT Pan American has a special emphasis on the training of bilingual and/or bicultural individuals. The need for such personnel has been demonstrated through feasibility studies conducted since 1982, both in the Rio Grande Valley and nationally.

## * Career Opportunities

New career opportunities in rehabilitation counseling are emerging rapidly. A student trained in rehabilitative services might seek employment in state vocational rehabilitation agencies, correctional facilities, community mental health programs, vocational evaluation and work adjustment facilities, independent living centers, residential facilities, alcohol and substance abuse programs, private rehabilitation companies and private nonprofit rehabilitation programs such as Easter Seals and Goodwill Industries.

Other potential employers include the Veterans Administration, Social Security Administration, state employment services, public assistance, private personnel and placement companies, vocational advisory services and special disability organizations. In addition, many private industries employ rehabilitation specialists for their personnel and employee assistance programs.

## * ADMISSION REQUIREMENTS

Students seeking admission to the undergraduate program should apply prior to the year in which they intend to be an upper-division major.

Applicants must provide the following to the undergraduate program coordinator by April-17 for fall and Nov. 7 for spring:

1. A completed application form (Application forms are available in Health Sciences and Human Services West

Building, Room 1.266.) or atwww.utpa.edu/rehabser.
2. Two letters of recommendation using the program's recommendation form; at least one must be from a university/college instructor outside of this program. The recommendation form should be transmitted to the program coordinator directly from the reference source.
3. A current transcript from each college or university attended.

Provide all completed application material to:

> Admissions Committee
> Department of Rehabilitation Services Undergraduate Program
> The University of Texas-Pan American 1201 W . University Drive Edinburg, TX $78539-2999$

Application material will be reviewed by, and a personal interview will be scheduled with, the Admissions Committee. Admission to the Rehabilitation Services Program is competitive and based upon a rating system using the following criteria:
A. Completion of all application material.
B. A minimum 2.0 GPA is required for admission.
C. Evaluation of letters of recommendation.
D. Responses to the individual interview questions.

Students will be notified as to the outcome of their application prior to the end of the semester in which they apply.

## * Degree Requirements

## MAJOR IN REHABILITATION SERVICES <br> (BS Degree)

- University Core Curriculum 48 hours

Complete the University core curriculum requirements as shown on pages 103-107 of this catalog.

## - Rehabilitation Services

| Support Courses | 9 hours |  |  |
| :--- | :--- | :--- | :--- |
| MANA | 3361 | Principles of Management |  |
| PSY | 4313 | Abnormal Psychology |  |
| REHS | 4355 | Multicultural Issues <br> in Human Services |  |
| Major Electives |  |  |  |
| REHS | 3340 | Intermediate Aspects |  |
| in Addiction Studies |  |  |  |
| REHS | 4100 | Independent Study |  |
| REHS | 4340 | Clinical Issues in Addiction Studies |  |



| REHS | 4345 | Culture and Addictions |
| :--- | :--- | :--- |
| REHS | 4350 | Special Topics in Rehabilitation |

Concentration Courses 48 hours
REHS 2301 Introduction to Rehabilitation
REHS 2321 Introduction to Addiction Studies
REHS 2331 Psychology of Disability (PSY 2331)
REHS 3303 Case Management I
REHS 3311 Disability Policy and Consumerism
REHS 3320 Family and Disability
REHS 3325 Medical Aspects of Rehabilitation I
REHS 3330 Medical Aspects of Rehabilitation II
REHS 4301 Vocational Assessment
REHS 4302 Job Placement
REHS 4303 Case Management II
REHS 4310 Rehabilitation Research
REHS 4330 Clinical Topics in Rehabilitation
REHS 4360 Assistive Technology
REHS 4602 Clinical Practicum in Rehabilitation
Electives
16 hours

TOTAL
124 hours

## - Addictions Studies Concentration

for Bachelor of Science Degree Students
Students may select the concentration in addictions studies. This option requires completion of the three upper-division addictions courses. Contact the program for an addictions degree plan.

Concentration in Deaf Rehabilitation for

Bachelor of Science Degree Students
Students may seek admission for the concentration in deaf rehabilitation. Students in this concentration will learn to provide specialized services for people who are deaf and hard-of-hearing and learn to communicate in American Sign Language. Admission to the deaf rehabilitation concentration is fall semester only. Required courses unique to this concentration are as follows:
\(\left.$$
\begin{array}{lll}\text { COMD } & 1310 & \text { Beginning Sign Language } \\
\text { COMD } & 1320 & \text { Intermediate Sign Language } \\
\text { REHS/COMD } 3335 & \text { Sign Language III } \\
\text { REHS/COMD } 4335 & \begin{array}{l}\text { Sign Language IV } \\
\text { REHS }\end{array} & 3315\end{array}
$$ \begin{array}{c}Hearing Disorders and <br>

Assistive Technology\end{array}\right\}\)| REHS |
| :--- |

- Minor in Rehabilitation Services

Eighteen hours in rehabilitation services, of which six hours must be advanced.

- Minor in Addiction Studies

REHS 2301 Introduction to Rehabilitation
REHS 2321 Introduction to Addiction Studies
REHS 3303 Case Management I
REHS 3340 Intermediate Aspects
in Addiction Studies
REHS 4340 Clinical Issues in Addiction Studies
REHS 4345 Culture, Family and
Prevention in Addictions

## * Course Descriptions

A listing of courses offered by the Department of Rehabilitation Services can be found on page 375.

## SOCIAL WORK

Dr. Héctor Luís Díaz, Department Chair Health Sciences and Human Services East (HSHE) Room 2.128<br>1201 W. University Drive Edinburg, TX, 78539-2999<br>Telephone: 956/381-3575<br>Fax: 956/381-3516<br>E-mail: socialwork@utpa.edu

Raúl H. Solís, BSW Program Director
Room 2.122 HSHE
Telephone: 956/381-3266
E-mail: rsolis@utpa.edu
Estela Soza Garza, Field Education Director Room 2.123 HSHE
Telephone: 956/381-2555
E-mail: egarzao81@utpa.edu
Full-time Faculty
Arizmendi, Lydia González, Associate Professor
Arredondo, Sonja, Lecturer
Beverly, William, Assistant Professor
Cavazos, Alonzo, Associate Professor
Díaz, Héctor Luis, Professor
Faver, Catherine Ann, Professor
Feldman, Janis B., Assistant Professor
Penzerro, Rose Marie, Associate Professor Pittman, Sharon, Professor
Ramírez, Noe, Associate Professor Rombough, Shirley, Associate Professor Solís, Raúl H., Assistant Professor

## * General Overview

The Department of Social Work offers a Bachelor of Social Work (BSW) degree program accredited by the Council on Social Work Education. The BSW is a professional degree built on a liberal arts foundation with supporting course content in the social and behavioral sciences. Department courses provide basic knowledge of
social welfare systems, the social work profession and the knowledge necessary for generalist social work practice, as well as preparing students to pursue graduate study in social work and related professions.

The department also offers a Master of Science in Social Work, that is detailed in the graduate catalog. The students who complete the BSW may apply for advanced standing in the master's program.

The overall goal of the BSW program is to impart knowledge, values, skills and attitudes for beginning professional social work practice with special emphasis in the uniqueness of the bilingual/bicultural Texas-Mexico border.

The student will have the opportunity to learn the competencies of the entry-level generalist practitioner. These include such functional skills as the problemsolving approach to assessing needs, intervening, evaluating responses and linking client systems to resources and opportunities for change.

A student who wishes to major in social work should successfully complete SOCW 1313 Introduction to the Social Work Profession, as well as 30 hours of University core curriculum requirements.

Next, the student should apply for admission into the social work program. A 2.4 GPA is required for entry into the major. Academic advisement is required for all social work majors. As departmental requirements, the student will take eight hours of human anatomy and physiology and six hours in Spanish, three hours in philosophy (PHIL 1310, 1320, 2330 or 2390) and must select three hours from HRP 2303, REHAB 103 or 19 NURS 2301. Students must complete a 480 -hour field internship. Eligibility for field instruction in social work requires an official degree plan and application for the internship on file in the social work office.

Students in the social work program are eligible for membership in the Social Work Student Association and the National Association of Social Workers (NASW)-Texas Chapter, and local NASW Branch. Upon graduation, a BSW student may be licensed as a social worker (LBSW) under the Texas Professional Social Work Act and passing of the Texas licensing exam.

## Degree Requirements

## MAJOR IN SOCIAL WORK

University Core Curriculum Requirements 48 hours Complete the requirements shown in the University core requirements section shown on pages 103-107 of this catalog except for the sections, groups or areas listed below, which must be satisfied only as shown below.


| Section A. Humanities |  |  |
| :---: | :---: | :---: |
| Group 3. Language requirement is Spanish |  |  |
| Group 4. Other Humanities |  |  |
| Section B. Science and Mathematics |  |  |
| Group 1. Natural Science |  |  |
| BIOL 2403 and BIOL 2404 must be selected. |  |  |
| Social Work Core Courses |  |  |
| ( 30 hours are advanced) |  |  |
| sOCW | 1313 | Introduction to the |
| Socw | 2375 | Statistical Methods |
| SOCW | 2314 | The Social Welfare Institution |
| SOCW | 3321 | Human Behavior and the Social Environment I |
| socw | 3322 | Human Behavior and the Social Environment II |
| socw | 3314 | Social Welfare Policy and Programs |
| SOCW | 3323 | Social Work Practice I |
| socw | 4301 | Social Work Practice II |
| socw | 4311 | Research for the Social Services |
| socw | 4302 | Social Work Practice III |
| socw | 4619 | Field Block Placement |
| SOCW |  | Integrative Field Seminar |

Support Courses
24 hours

Twelve hours required from the following:
Three hours (choose one from the following two):
PSY 4313 Abnormal Psychology
SOCI 4314 Sociology of Deviance

Three hours (choose one from the following three):
PSY 3337 Developmental Psychology: Lifespan
PSY 3332 Developmental Psychology: Infancy and Childhood
PSY 3333 Psychology of Adulthood: Maturity and Old Age

Three hours (choose one from the following two):
SOCI 4313 American Minorities
SOCl 4323 The Mexican-American People

Three hours (required):
SOCI 4352 Social Inequality

Twelve hours of Upper Division Electives: CRIJ, REHS, SOCW, PSY, SOCI, POLS, or ANTH

## General Electives

7 hours
Seven general elective (advanced or non-advanced)
hours from any course that is approved by the
University.

TOTAL
124 hours

## $\star$ Course Descriptions

A listing of courses offered by the Department of Social Work can be found on page 375.

## $\checkmark$ Coopreative PHARMACY PROGRAM

Dr. Amy Schwartz, Program Director<br>1201 W. University Drive, E-RAHC 1.100.00<br>Edinburg, TX 78539-2999<br>Telephone: 956/318-5255<br>Fax: 956/381-0663<br>E-mail: aschwartz@utpa.edu<br>Graduate Faculty<br>Canales, Patricia L., Assistant Professor<br>Ramirez, Isidro, Instructor<br>Tasnif, Yasar, Assistant Professor

## $\star$ INTRODUCTION

The University of Texas-Pan American, in cooperation with The University of Texas at Austin College of Pharmacy offers a six-year curriculum leading to the Doctor of Pharmacy (Pharm.D.) degree. The Pharm.D. degree is the sole entry-level degree offered in the United States for those interested in becoming a licensed pharmacist. \# The Pharm.D. is a professional doctorate designed to prepare pharmacist practitioners to provide patient-oriented care in contemporary settings including but not limited to community practice, hospital environments and long-term care facilities.

The Cooperative Pharmacy Program (CPP) was developed to encourage students to consider pharmacy as a career. The CPP offers students the opportunity to complete pre-pharmacy and pharmacy curriculum at UTPA and in the surrounding Rio Grande Valley. The CPP offers two pathways, an early admissions pathway intended for high school students, and a transitional pathway for students enrolled as pre-pharmacy majors at UTPA. Students admitted into the CPP will have conditional admission to the UT Austin College of Pharmacy upon successful completion of pharmacy prerequisites and other CPP requirements.

UTPA students who are not admitted into the CPP, yet are interested in pursuing pharmacy as a career, may apply directlly to UT Austin College of Pharmacy upon

completion of the required pharmacy prerequisites at UTPA. The CPP academic advisor and faculty members are available to assist students with the application process to the UT Austin College of Pharmacy.

## Mission Statement

The mission of the Cooperative Pharmacy Program is to enhance the knowledge, health and well-being of the people we serve in concert with the mission, vision and values of both cooperating campuses of The University of Texas through the recruitment, training and retention of proficient Doctor of Pharmacy trained pharmacists. The program will strive to encourage the provision of pharmaceutical care by cultivation of our graduates' critical thinking skills and an appreciation for the need for lifelong learning. The program will foster the development of clinical and translational research and clinical pharmacy services with other healthcare providers in the region, state and nation.

## $\star$ ACCREDITATION

The Commission on Colleges of the Southern Association of Colleges and Schools accredits both The University of Texas-Pan American and The University of Texas at Austin. In addition, UT Austin College of Pharmacy is accredited by the Accreditation Council for Pharmacy Education, 20 North Clark Street, Suite 2500,

Chicago, IL 60602-5109, 312/664-3575, 800/533-3606; fax: 312/664-4652; Web site: www.acpe-accredit.org.

Only graduates of accredited programs are eligible to sit for the North American Pharmacist Licensure Examination ${ }^{\text {TM }}$ (NAPLEX ${ }^{\circledR}$ ) and Multistate Pharmacy Jurisprudence Examination ${ }^{\circledR}$ (MPJE ${ }^{\circledR}$ ), both of which are required for licensure in the state of Texas.

## PHARMACY CURRICULUM

The CPP is structured so the students admitted into the program complete their first two years of prepharmacy requirements at UTPA, and then matriculate to UT-Austin to complete their first two years of the pharmacy curriculum. Students then return to UTPA and the Rio Grande Valley to complete their third and fourth years of the pharmacy curriculum.

Pre-Pharmacy - Years 1 and 2 at UTPA
(see next section for details)
Years 1 and 2: Coursework in eommunieation, English, mathematics and the natural sciences.
Pharmacy Curriculum - Years 3 and 4 at UT Austin
Year 3: A broad foundation in physiology, pathology, pharmaceutical sciences and pharmacy administration.
Year 4: An interdisciplinary approach to disease management and patient care through case-based learning.

Pharmacy Curriculum - Years 5 and 6 at UTPA in the Rio Grande Valley

Year 5: Advanced coursework in disease management and patient care.
Year 6: Calendar year consisting of seven sixweek experiential rotations at pharmacy practice sites around the Rio Grande Valley.

## Pre-Pharmacy Course REQUIREMENTS

The following is an overview of the pre-pharmacy curricular requirements for the CPP and UT-Austin College of Pharmacy. Individual degree plans will be developed for students admitted into the CPP.

| Natural Sciences <br> BIOL | 1401 | General Biology <br> or |
| :---: | :---: | :---: |
| BIOL | 1487 | Honors Biology |
| BIOL | 1402 | General Biology |

or
Honors Biology
Microbiology
Genetics
General Chemistry I
and
General Chemistry Lab I
General Chemistry II and
General Chemistry lab II
Organic I
and
CHEM 2102 Lab
CHEM 2303 Organic II
and
CHEM 2103 Lab
PHYS 1401
Mathematics
MATH 1460
MATH 1487
MATH 2330

MATH 3337
English
ENG
1301
ENG 1387
ENG 1302
ENG 1388
ENG 2300
ENG 2303
ENG 2305

ENG 2307
ENG 2387

ENG 2388

Political Sciences
POLS 2313

POLS 2387

7 hours
Calculus I
or
Honors Calculus I
Survey of Elementary
Statistics
or
Applied Statistics I
9 hours
Composition
or
Honors Rhetoric and
Composition
Rhetoric
or
Honors Rhetoric and Literature
Introduction to Literature
Introduction to American
Literature
Introduction to British Literature
Introduction to World Literature Honors Readings in World Literature
or
Honors Readings in World Literature

6 hours
U.S. and Texas

Government and Politics
or
Honors U.S. and Texas
Government and Politics


## College of Science and Engineering



## General Overview

The College of Science and Engineering consists of the departments of biology, chemistry, computer science, electrical engineering, manufacturing engineering, mechanical engineering, mathematics, and physics and geology.

## Academic Programs

The college offers the Bachelor of Science in biology, chemistry, computer science, computer engineering, electrical engineering, manufacturing engineering, mathematics, mechanical engineering, physics, and a Bachelor of Science in interdisciplinary studies in middle school mathematics.

Students may minor in biology, chemistry, computer science, electrical engineering, elementary mathematics, geology, manufacturing engineering, mathematics, mechanical engineering/thermal, middle school mathematics, physical science, physics and statistics. All-level certification is available in life sciences. High school teacher certification is available in life science and all-level science, chemistry, mathematics, and physics; and middle school teacher certification is available in mathematics.

Also included in the biology and chemistry departments are programs for pre-dental and premedical students. Chemistry also has a plan of study for prepharmacy students.

At the graduate level, students can earn master's degrees in biology, chemistry, computer science, electrical engineering, engineering management, information technology, manufacturing engineering, mechanical engineering, mathematical sciences or mathematics teaching. More information on master's degrees is available in the Graduate Catalog.

The College of Science and Engineering provides several options to satisfy the University core curriculum requirements in science, mathematics and computer literacy.

New state-of-the-art facilities house the departments of biology, chemistry, mechanical engineering, electrical engineering, manufacturing engineering and computer science.

Dr. Edwin LeMaster, Dean
Engineering Building, Room 1.294 1201 W. University Drive Edinburg, TX 78539-2999
Telephone: 956/381-2404
Fax: 956/381-2428
E-mail: elemaster@utpa.edu
Web site: www.utpa.edu/colleges/cose.cfm


## $\star$ Overview

The School of Engineering and Computer Science is an organization within the College of Science and Engineering that groups together four of the eight academic departments in the college. The school is made up of three engineering departments: electrical, manufacturing and mechanical engineering plus the computer science department. The school is headed by an associate dean and director who oversees the academic program development, the accreditation processes and the effective interactions with industry for the departments within the school. There is an external industry advisory council for computer science and also an engineering advisory council that provide advice on program development, evaluation of our placement processes for graduates and general feedback on the preparation of our students for jobs in industry or government facilities.

## * Academic Programs

Each of the four departments in the School of Engineering and Computer Science offers the bachelor's and the master's degree in the discipline. The graduates of
these four departments are among the most sought-after University graduates and command the highest starting salaries for bachelor's degrees, according to a recent survey of the National Association of Colleges and Employers.

All four departments share the new Engineering Building that contains more than $\$ 7$ million of teaching and research equipment. More than 63 percent of the funded research in the College of Science and Engineering resides in the School of Engineering and Computer Science. The enrollment of majors in the school is about 1,400 and makes up about half the total enrollment of the college.

## Dr. Miguel Gonzalez, Associate Dean <br> Telephone: 956/381-3522 <br> E-mail: gonzalezma@utpa.edu

School of Engineering and Computer Science
Engineering Building, Room 1.294
1201 W. University Drive
Edinburg, TX 78539-2999
Telephone: 956/381-3510
Fax: 956/381-2428
E-mail: Idutschman@utpa.edu
Web site: www.utpa.edu/colleges/cose.cfm

## * Special Programs in Medicine and Dentistry

The Department of Biology houses a Special Programs Office (SCIE BIdg., Room 1.352) which administers several cooperative programs in premedical and pre-dental education. These programs are designed to provide a pipeline of highly competitive South Texas students into medical and dental school. Each program requires a separate application which must be filed with the Special Programs Office. Application deadlines vary depending on the program with several programs requiring application as a high school senior. Please contact the special programs coordinator at 956/316-5216 or stop by the Special Programs Office for applications and additional information. Students accepted into these programs hold a guarantee of acceptance to the partner medical/dental school provided specific program requirements are met. These requirements generally include maintaining a specific overall and science grade point average and earning a specific minimal score on the required standardized test. There may be additional program opportunities and requirements depending on the specific program. The following programs are available through the Special Programs Office.

Programs in Medicine:

- Joint Admission Medical Program with the State of Texas Medical Schools
- Premedical Honors College with Baylor College of Medicine
- Early Medical School Acceptance Program with The University of Texas Medical Branch at Galveston
- Medical School Early Matriculation Program with The University of Texas Health Science Center at San Antonio School of Medicine

Programs in Dentistry:

- Early Dental School Acceptance Program with The University of Texas Dental Branch at Houston
- Dental Early Acceptance Program with The University of Texas Health Science Center at San Antonio Dental School
- 3-4 and 4-4 Dual Degree Program with Baylor College of Dentistry



## BIOLOGY

Dr. Mohammed Y.H. Farooqui, Department Chair<br>Science Building, Room 2.352<br>1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/381-3537<br>Fax: 956/381-3657<br>E-mail: farooqui@utpa.edu<br>Web site: www.utpa.edu/dept/biology

Full-time Faculty
Brush, Timothy, Professor Davelos-Baines, Anita, Assistant Professor

DeYoe, Hudson, Associate Professor
Edwards, Robert J., Professor
Egle, Ardath L., Lecturer
Farooqui, Mohammed Y. H., Professor
Faulkes, Zen, Assistant Professor
Gunn, Scott J., Professor Henry, Brad, Associate Professor
Judd, Frank W., Research Professor
Kuang, Anxiu, Associate Professor
Lieman, Jonathon, Assistant Professor
Lonard, Robert I., Research Professor
Lowe, Kristine, Assistant Professor
Materon, Luis A., Associate Professor
McDonald, Andrew, Assistant Professor
Persans, Michael W., Assistant Professor
Summy, Kenneth R., Assistant Associate Professor
Terry, Matthew, Assistant Professor
Wedig, Cindy M., Lecturer
Zaidan, Frederic III, Assistant Professor

## General Overview

The Department of Biology offers a major leading to a Bachelor of Science degree and a minor in biology. Biology students may elect a curriculum for a major in biology or a biology secondary teaching plan.

The department also offers study beyond the bachelor's degree leading to a Master of Science in biology. A limited number of teaching assistantships are usually available. Interested persons should consult the Graduate Catalog or the chair of the Department of Biology.

NOTE: Students are typically expected to furnish their own transportation for laboratory sessions and field work.

## * Degree Requirements

## $\approx$ MAJOR IN BIOLOGY

University Core Curriculum Requirements 48 hours
Complete the University core curriculum
requirements as shown on pages 103-107 of this catalog.
Core Courses
12 hours
BIOL
1401
General Biology
or
BIOL 1487 General Biology (Honors)
BIOL 1402 General Biology

BIOL 1488 General Biology (Honors)
BIOL 4100 Biology Seminar
BIOL 3302 Biological Writing
Designated Electives
21 hours
Select one course from each of the following areas:

- Molecular Biology, Cellular Biology, Microbiology or Biotechnology
BIOL 3401 General Microbiology
BIOL 3403 Medical Microbiology and Immunology
BIOL 3412 Cell Biology
BIOL 3415 Introduction to Molecular Biology
BIOL 4404 General Virology
BIOL 4418 Electron Microscopy
BIOL 4420 Biotechnology
- Genetics or Biological Evolution

BIOL 3301 Biological Evolution
BIOL 3413 Genetics
BIOL 4317 Diseases Epidemiology
BIOL 4417 Bacterial Genetics

- Developmental or Morphological Biology

BIOL 2401 Vertebrate Zoology
BIOL 2402 Comparative Vertebrate Anatomy
BIOL 3405 Histology
BIOL 3407
BIOL 3408 Plant Morphology

- Organismal or Environmental Biology
BIOL 2305 Environmental Biology

BIOL 2405 Principles of Plant Systems
BIOL 3409 Ecology
BIOL 3414 Invertebrate Zoology
BIOL 4303 Mammalogy

| BIOL | 4304 | Ichthyology |
| :--- | :---: | :--- |
| BIOL | 4409 | Herpetology |
| BIOL | 4314 | Plant Taxonomy |
| BIOL | 4318 | Ethnobotany |
| BIOL | 4402 | Marine Zoology |
| BIOL | 4403 | Introduction to Remote |
|  |  | Sensing Technology |
| BIOL | 4406 | Mycology |
| BIOL | 4407 | Animal Parasitology |
| BIOL | 4408 | Plant Pathology |
| BIOL | 4410 | Marine Botany |
| BIOL | 4412 | Ornithology |
| BIOL | 4415 | Entomology |
| BIOL | 4416 | Environmental Toxicology |
| BIOL | 4419 | Aquatic Entomology |
| BIOL | 4424 | Microbial Ecology |
| BIOL | 4426 | Marine Ecology |
|  |  |  |
| Physiology |  |  |
| BIOL | 2403 | Anatomy and Physiology |
| BIOL | 2404 | Anatomy and Physiology |
| BIOL | 3310 | Neurobiology |
| BIOL | 3411 | Mammalian Physiology |
| BIOL | 4405 | Plant Physiology |
| BIOL | 4411 | Ecological Physiology |
| BIOL | 4422 | Neurobiology Methods |

Select additional biology courses to complete 33 hours in biology, of which 18 must be advanced.

## - Other Requirements

Where appropriate, the following requirements may also be used to satisfy University core curriculum requirements.

- Mathematics

Complete three hours from the following:

| MATH | 1340 | College Algebra |
| :--- | :--- | :--- |
| MATH | 1450 | Precalculus Mathematics |
| MATH | 1460 | Calculus I |
| MATH | 1470 | Calculus II |



- Chemistry Complete all of the following: CHEM 1301/1101 General Chemistry I, General Chemistry Lab I
CHEM 1302/1102 General Chemistry II, General Chemistry Lab II
CHEM 2302/2102 Organic Chemistry I, Organic Chemistry Lab I
- Statistics

Complete three hours from the following:
MATH 2330 Elementary Statistics and Probability
or
STAT 2330 Survey of Elementary Statistics

- Other Science

PHYS 1401 and PHYS 1402 or GEOL 1401 and GEOL 1402 are recommended, but not required.

- Minimum GPA Requirements

A minimum GPA of 2.5 in the required hours for both the major and minor fields is required. A minimum GPA of 2.5 is required for Pre-Dental, Premedical and PreOptometry majors.

## * Pre-Dental/Premedical/ Pre-Optometry

Biology majors interested in attending dental, medical or optometry school are advised to include the following suggested and required courses in their major to maximize their potential for success. A minor in chemistry is suggested for all pre-professional students. Students should check with the Health Professions Advisor at 956/381-3540 for updated requirements.

Pre-dental students are required to complete BIOL 1401, BIOL, 1402, CHEM 1101/1301, CHEM 1102/1302, CHEM 2102/2302, CHEM 2130/2303, PHYS 1401 and PHYS 1402. The students must complete a minimum of 90 hours and take the Dental Admissions Test (DAT) in order to apply to Texas dental schools. CHEM 3303 is required by U.T. Dental Branch in Houston and is highly suggested by the other dental schools. There is no specific mathematics requirement beyond the biology core requirements.

Premedical students are required to complete BIOL 1401, BIOL 1402, CHEM 1101/1301, CHEM 1102/1302, CHEM 2102/2302, CHEM 2130/2303, PHYS 1401 and PHYS 1402. The students must complete a minimum of 90 hours and take the Medical College Admissions Test (MCAT) in order to apply to Texas medical schools. CHEM 3303, BIOL 2402 and PSY 1310 are suggested by
the medical schools. Either MATH 1401 or MATH/STAT 2330 is required for acceptance into medical school, however completion of both courses is suggested.

Pre-optometry students must complete a bachelor's degree prior to entering the University of Houston College of Optometry (some out of state schools require only 90 hours). Required coursework to enter optometry school includes: BIOL 1401, BIOL 1402, BIOL 2403, BIOL 2404, BIOL 3401, BIO 3411, CHEM 1101/1301, CHEM 1102/1302, CHEM 2102/2302, CHEM 2130/2303, CHEM 3303, MATH 1401, MATH/STAT 2330, PHYS 1401, PHYS 1402 and PSY 1310. Students must take the Optometry Admissions Test (OAT) in order to apply to optometry school.

Pre-dental, premedical and pre-optometry students who have completed a minimum of 90 hours and the general core curriculum requirements at UTPA may apply for a Bachelor of Science degree after completion of two years in an accredited college of medicine, dentistry or optometry, with grades acceptable for transfer to UT Pan American. The hours accepted will be credited toward a major and minor in biology or chemistry.

## $\star$ Major in Life Sciences WITH TEACHER CERTIFICATION

Thirty-six hours are required; 21 of which must be advanced.

- Teacher Certification Programs and Requirements

Admission to College of Education (COE) teacher education programs is required for all undergraduate students seeking teacher certification. Students following high school certification degree plans (grades 8-12) should consult with their advisor in the department in which their degree is offered. They should also seek information from the COE Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302, for admission requirements. Students may call the office at 956/381-3420 or log on to the Web site for more information at http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for high school (8-12) certification include the following: EDHS 4301, EDHS 4302, EDHS 4303, EDHS 3305, READ 4351, EDHS 4398 and EDHS 4399.

| Core Courses |  |  |
| :---: | :---: | :---: |
| BIOL | 1401 | General Biology <br> or |
| BIOL | 1487 | General Biology (Honors) |
| BIOL | 1402 | General Biology <br> or |


| BIOL | 1488 | General Biology (Honors) |
| :--- | :--- | :--- |
| BIOL | 4100 | Biology Seminar |
| BIOL | 4315 | Inquiry-Based Science |

Designated Electives
24 hours
Select at least three hours from each of the following areas:

| Molecular Biology or Cellular Biology |  |  |
| :--- | :---: | :--- |
| BIOL | 3412 | $\begin{array}{l}\text { Cell Biology } \\ \text { BIOL }\end{array}$ |
| 3415 | Introduction to Molecular |  |
| Biology |  |  |$]$| BIOL | 4404 | General Virology |
| :--- | :--- | :--- |
| BIOL | 4404 | Virology |
| BIOL | 4416 | Environmental Toxicology |
| BIOL | 4420 | Biotechnology |

- Genetics or Biological Evolution
BIOL 3301 Biological Evolution BIOL 3413 Genetics
- Environmental Biology

BIOL 2305 Environmental Biology
BIOL 3409 Ecology
BIOL 4426 Marine Ecology

- Zoology

| BIOL | 3310 | Neurobiology |
| :--- | :--- | :--- |
| BIOL | 3405 | Histology |
| BIOL | 3407 | Comparative Embryology |
| BIOL | 3414 | Invertebrate Zoology |
| BIOL | 4303 | Mammalogy |
| BIOL | 4304 | Ichthyology |
| BIOL | 4407 | Animal Parasitology |
| BIOL | 4309 | Herpetology |
| BIOL | 4402 | Marine Zoology |
| BIOL | 4412 | Ornithology |
| BIOL | 4415 | Entomology |
| BIOL | 4419 | Aquatic Entomology |
|  |  |  |
| Botany |  |  |
| BIOL | 2405 | Principles of Plant Systems |
| BIOL | 3408 | Plant Morphology |
| BIOL | 4405 | Plant Physiology |
| BIOL | 3410 | A Survey of the Plant Kingdom |
| BIOL | 4411 | Ecological Physiology |
| BIOL | 4314 | Plant Taxonomy |
| BIOL | 4317 | Disease Epidemiology |
| BIOL | 4318 | Ethnobotany |
| BIOL | 4406 | Mycology |
| BIOL | 4408 | Plant Pathology |
| BIOL | 4410 | Marine Botany |
| BIOL | 4418 | Electron Microscopy |
| BIOL | 4424 | Microbial Ecology |

- Prokaryotic Biology

BIOL 3401 General Microbiology
BIOL 3403 Medical Microbiology and Immunology
BIOL 4417 Bacterial Genetics

## BACHELOR OF <br> InTERDISCIPLINARY STUDIES Science 4-8 Certification

- Teacher Certification Programs and Requirements Admission to College of Education (COE) teacher education programs is required for all undergraduate students seeking teacher certification. Students following middle school certification degree plans (grades 4-8) should consult with their advisor in the department in which their degree is offered. They should also seek information from the COE Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302, for admission requirements. Students may call the office at 956/381-3420 or log on to the Web site for more information at http://www.utpa. edu/colleges/coe/studentservices.

The professional education courses for middle school (4-8) certification include the following: EDMS 3353, EDMS 3354, READ 3325, EDMS 3305, EDMS 3355, READ 3326, EDMS 4398 and EDMS 4399.

University Core Curriculum Requirements 48 hours
Complete the University core curriculum requirements as shown on pages 103-107 of this catalog.

| Middle School Content 50 hours/24adv. |  |  |
| :---: | :---: | :---: |
| ASTR | 1401 | General Astronomy |
| BIOL | 1401 | General Biology |
| BIOL | 1402 | General Biology |
| BIOL | 2305 | Environmental Biology |
| CHEM | 1301 | General Chemistry I |
| CHEM | 1101 | General Chemistry Lab I |
| GEOG | 2313 | Principles of Physical Geography |
| PSCl | 1421 | Physical Science (from General Ed) |
| PSCl | 1422 | Physical Science (from General Ed) |
| PSCI | 3310 | Planet Earth and its Place in The Solar System |
| SCIE | 4240 | Capstone Course |
| SCIE | 4350 | Local and Global Environmental Sciences |
| SCIE | 4360 | Applications of the Natural Sciences for Teachers |
| SCIE | 4370 | Planet Earth and its Inhabitants |

SCIE 4480 Applications of Chemistry and Physics in Society

Three hours from the following:
BIOL 3302, 3409, 4403, GEOL 3403, 3408
CHEM 1302, 1102, PHYS 1401, 1402, ASTR 1402
Professional Development 18 hours
EDMS 3353 Young Adolescent Development and Learning
EDMS 3354 Middle School Curriculum Development and Assessment
EDMS 3305 Instructional Methods for English Language Learners and Learners with Exceptionalities in Middle Schools
EDMS 3355 Instructional Technology Methods And Classroom Management for Middle School Classrooms
EDMS 4398 Integrated Internship II: Seminar - Middle School

Additional Requirements 12 hours

| READ | 3326 | Reading Across the Curriculum <br> Content Areas |
| :--- | :---: | :---: |
| READ | 3325 | Cognitive Development and <br> Reading Comprehension |
| EMAT | 2306 | Foundations of Mathematics I |
| EMAT | 2307 | Foundations of Mathematics II |

Miscellaneous Requirements
6 hours

| MMAT | 3315 | Probability and Statistics <br> EDCI 1301 |
| :--- | :--- | :---: |
|  |  | Introduction to the Teaching <br> Profession |

- Teacher Certification Programs and Requirements Admission to College of Education (COE) teacher education programs is required for all undergraduate students seeking teacher certification. Students following high school certification degree plans (grades 8-12) should consult with their advisor in the department in which their degree is offered. They should also seek information from the COE Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302, for admission requirements. Students may call the office at 956/381-3420 or log on to the Web site for more information at http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for high school (8-12) certification include the following: EDHS 4301, EDHS 4302, EDHS 4303, EDHS 3305, READ 4351, EDHS 4398 and EDHS 4399.

## Minor in BiOlogy

Requires 18 hours in biology, of which six hours must be advanced.

## * CoUrse Descriptions

A listing of courses offered by the Department of Biology can be found on page 256.

## CHEMISTRY

Dr. Hassan Ahmad, Department Chair<br>Science Building, Room 3.316<br>1201 W. University Drive<br>Ebinburg, TX 78539-2999<br>Telephone: 956/381-3372<br>Fax: 956/384-5006<br>E-mail: ahmadh@utpa.edu<br>Web site: www.utpa.edu/dept/chemistry

Full-time Faculty
Ahmad, Hassan, Professor, Biochemistry Banik, Bimal, Associate Professor, Organic Chemistry
Bhat, Narayan, Professor, Organic Chemistry Chen, Banglin, Assistant Professor, Inorganic Chemistry
DeLassus, Phillip, Professor, Physical Chemistry Diaz, Sylvia, Lecturer
Gregorius, Roberto, Associate Professor, Chemistry Gutierrez-Gonzales, Jose Juan, Assistant Professor, Organic Chemistry Ibrahim, Elamin, Associate Professor, Analytical Chemistry Innis, Wendy, Assistant Professor, Biochemistry Macossay-Torres, Javier, Assistant Professor, Organic Chemistry
Mondal, Jalal U., Professor, Inorganic Chemistry Rampersad-Ammons, Joanne, Assistant Professor, Biochemistry Villarreal, John R., Professor, Physical Chemistry Whelan, Thomas, Associate Professor, Chemistry


## General Overview

The Department of Chemistry offers a major leading to a Bachelor of Science degree, certified by the American Chemical Society, and a minor in chemistry. The department also offers programs of study for premedical and pre-dental studies, each leading to a Bachelor of Science degree in chemistry. In addition, the department offers plans of study for pre-pharmacy and teacher certification in chemistry.

The Department of Chemistry offers undergraduate research projects to highly motivated chemistry majors interested in conducting individual research under the supervision of a faculty member. Such projects offer students the opportunity to obtain knowledge of research methods in a specialized area and proceed to graduate school.

All new students who intend to major in chemistry should schedule an appointment with a faculty advisor within the department. Students are encouraged to consult with their faculty advisors regarding the degree requirements needed to satisfy their professional goals.

## * MISSION

The Department of Chemistry is committed to the mission of providing quality education in the process of preparing students for graduate work or careers in chemistry and the biomedical sciences. The department strives to fulfill its mission by offering a program that leads to an undergraduate major or minor in chemistry. In addition, the department prepares students for admission to schools of dentistry, pharmacy and medicine. The department also offers a program that leads to teacher certification. The chemical curriculum is designed to introduce students to the fundamental fields of chemistry and provides opportunities for chemical research.

The department is committed to engaging in its activities of teaching, research and professional service in an environment of academic freedom.

The chemistry department at The University of Texas-Pan American provides an excellent program in helping the University fulfill its responsibility of providing high quality academic programs for the people of this region and the state of Texas.

## * Degree Requirements

## MAJOR IN CHEMISTRY

University Core Curriculum Requirements 48 hours
Complete the requirements shown in the University core curriculum requirements section on pages 103-107 of this catalog EXCEPT for the following sections, groups or areas listed, which must be satisfied only as shown.

| Natural Science and Mathematics |  |  |
| :--- | :--- | :--- |
| CHEM | 1301 | General Chemistry I |
| CHEM | 1101 | General Chemistry Lab I |
| CHEM | 1302 | General Chemistry II |
| CHEM | 1102 | General Chemistry Lab II |
| MATH | 1340 | College Algebra |

Major Course Requirements
32 hours
Chemistry Core Courses
CHEM 2301 Analytical Chemistry
CHEM 2101 Analytical Chemistry Lab
CHEM 2302 Organic Chemistry I
CHEM 2102 Organic Chemistry Lab I
CHEM 2303 Organic Chemistry II
CHEM 2103 Organic Chemistry Lab II
CHEM 3301 Inorganic Chemistry
CHEM 3202 Inorganic Chemistry Lab
CHEM 3103 Biochemistry Lab
CHEM 3303 Biochemistry
CHEM 3304 Physical Chemistry I
CHEM 3104 Physical Chemistry Lab I
CHEM 3305 Physical Chemistry II
CHEM 3105 Physical Chemistry Lab II
CHEM 4101 Chemistry Seminar
CHEM 4201 Chemistry Problems I
CHEM 4304 Instrumental Analysis
CHEM 4104 Instrumental Analysis Lab
Designated Electives in Chemistry
In addition to the major course requirements shown above, the Department of Chemistry offers the following elective courses: (These may be used to help satisfy the college requirement of 51 advanced hours or to acquire
greater depth in a specific area of chemistry.)

| CHEM | 3306 | Polymer Science and <br> Engineering |
| :--- | :--- | :--- |
| CHEM | 4202 | Chemistry Problems II |
| CHEM | 4301 | Advanced Inorganic Chemistry |
| CHEM | 4302 | Advanced Biochemistry |
| CHEM | 4303 | Advanced Organic Chemistry |
| CHEM | 4378 | Special Topics in Chemistry |

Other Course Requirements 16 hours

| MATH | 1401 | Calculus I |
| :--- | :--- | :--- |
| MATH | 1402 | Calculus II |
| PHYS | 1401 | General Physics |
| PHYS | 1402 | General Physics |

TOTAL

Students are required to select electives that will bring their total number of advanced hours to 51 and the total number of hours for the completion of their degree to 124.

NOTE: The Department of Chemistry allows students to receive credits for courses in the curriculum if proficiency is demonstrated in these courses by advanced placement exams such as CEEB or CLEP. Contact the UT Pan American Testing Center for information on advanced placement tests.

Minimum GPA Requirements
A minimum GPA of 2.0 is required for both major and minor fields.

Pre-Dental and Premedical
Chemistry majors in pre-dental and premedical programs are required to complete 18 hours of biology, of which six hours must be advanced.

## TEACHER CERTIFICATION In CHEMISTRY

- Teacher Certification Programs and Requirements

Admission to College of Education (COE) teacher education programs is required for all undergraduate students seeking teacher certification. Students following high school certification degree plans (grades 8-12) should consult with their advisor in the department in which their degree is offered. They should also seek information from the COE Office of Teacher Certification and Admission Services at the Education Complex, Room 1.302, for admission requirements. Students may call the office at 956/381-3420 or log on to the Web site for more information at http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for high school (8-12) certification include the following: EDHS 4301, EDHS 4302, EDHS 4303, EDHS 3305, READ 4351, EDHS 4398 and EDHS 4399.

Pre-Pharmacy<br>Students are required to complete the following courses in their freshman and sophomore years:<br>Freshman Year: ENG 1301, ENG 1302; CHEM 1301,<br>CHEM 1101, CHEM 1302, CHEM 1102; BIOL 1401, BIOL 1402; MATH 1401; HIST 2313, HIST 2314;<br>Sophomore Year: English (sophomore literature) six hours; CHEM 2302, CHEM 2303, CHEM 2102, CHEM 2103; MATH 2330; PHYS 1401; POLS 2313, POLS 2314.

NOTE: The University of Texas at Austin requires one semester of freshman English and one of sophomore English. BIOL 3401 is required by the University of Houston and UT Austin, while Texas Southern University requires BIOL 2402. The University of Houston also requires COMM 1303, PSY 1310, three hours of social science electives, and six hours of cultural heritage electives, while UT Austin requires six hours of electives. Texas Southern University requires one hour of medical terminology and a three-hour elective in philosophy, music, sociology or psychology. Texas Tech University offers only the Pharm.D. degree. The prerequisites include COMM 1303, ECO 1301, PHYS 1402 and a minimum of 15 hours of electives in the humanities and social sciences. See the faculty advisor in the Department of Chemistry for more information, since curricula at other institutions may vary.

## MINOR IN CHEMISTRY

Requires 18 hours of chemistry, of which six must be advanced.

## $\star$ Course Descriptions

A listing of courses offered by the Department of Chemistry can be found on page 261.

# COMPUTER ENGINEERING 

Dr. Charles A., Harlow, Program Director Computer Engineering Office Engineering Building, Room 3.245 1201 W. Universisty Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/292-7375<br>Web Site: http://cmpe.utpa.edu<br>Faculty<br>The Computer Engineering Program is a cooperative program with the Departments of Electrical Engineering and Computer Science.<br>The faculty associated with the Computer Engineering Program have appointments with those departments and teach computer engineering courses.

Affiliated faculty from the Departments of Electrical Engineering and Computer Science:

Abraham, John, Professor
Brazier, Pearl, Associate Professor
Kuang, Weidong, Assistant Professor
Kumar, Sanjeev, Associate Professor
Peng, Jun, Assistant Professor Tsai, Ping-Sing, Assistant Professor

## $\star$ INTRODUCTION

Computer engineering is a discipline that embodies the science and technology of design, construction and implementation of software and hardware components of modern computing systems and computer-controlled equipment. The body of knowledge for computer engineering includes algorithms, computer architecture and organization, computer systems engineering, circuits and signals, database systems, digital logic, digital signal processing, electronics, embedded systems, computer networks, operating systems, programming, software engineering and discrete structures. The program awards a Bachelor of Science in Computer Engineering (BSCE).

## PRE-PHARMACY, CHEMISTRY, COMPUTER ENCDNNEREN®F SCIENCE AND ENGINEERING

## MISSION/OBJECTIVES

An objective of the BSCE program is to produce computer engineers with an ABET accredited Bachelor of Science in Computer Engineering who are prepared for both industry and further study at the graduate level. The curriculum has been designed in accordance with model curriculum guidelines and for ABET accreditation. Students graduating from the computer engineering program should have the following: a knowledge of mathematics and basic sciences necessary for the analysis and design of computer hardware and software; an understanding of the principles of electronics as applicable to computer systems, including analysis, synthesis, simulation and testing of digital and analog electronics; an understanding of programming and software engineering, including specification, design and testing; an ability to combine hardware and software techniques to produce integrated systems; an in-depth knowledge beyond the basic level in one or more specific computer engineering topics selected by the student; and the ability to use their engineering knowledge to successfully complete design projects of substantial complexity including a capstone design project.

There are two distinct tracks available in the Computer Engineering Program - the hardware track and the software track. The objective of the software emphasis track is to provide additional concentrated skills in the area of software engineering, architecture and systems, networks and security. The objective of the hardware emphasis track is to provide additional concentrated skills in interfacing, embedded control, instrumentation and electronics.

## * Degree Requirements

Computer engineering education involves the traditional computer hardware education from electrical engineering departments with the computer software education from computer science departments. A computer engineer should have a deep understanding of both hardware and software. In addition, their education program has extensive components of mathematics and science disciplines.

During the first two years of the program, students take comprehensive courses in mathematics, physics and chemistry along with introductory courses in computer science and electrical engineering. During the last two years of the program, students take an extensive set of courses in electronics, computing hardware and computing software.

With a computer engineering degree, an individual
has a balanced view of hardware, software, hardwaresoftware trade-offs, analysis, design and implementation techniques. There are two distinct tracks available in the Computer Engineering Program - the hardware track and the software track.

## $\underset{\sim}{\imath}$ COMPUTER ENGINEERING Hardware Track

The hardware track focuses on digital circuits and systems, microprocessor interfacing and systems design, system security and computer system architecture and design. The hardware track will encompass many electrical engineering classes, but will focus more on computer and digital systems.

- Computer networks
- Communication systems
- Computer system architecture and design
- Embedded systems
- Microcomputers
- Microprocessor interfacing and system design
- VLSI circuits and systems
- Large-scale hardware and software systems


## COMPUTER ENGINEERING Software Track

The software track allows students to learn about a broad range of topics in computer engineering, including software engineering, computer security, computer networks, computer graphics, computer languages, computer organization and architecture, parallel and distributed systems and Artificial Intelligence. The software track is designed to encompass many computer science classes, but focuses more on networking, operating systems and software engineering.

- Computer networks
- Computer architecture
- Computer systems
- Fault-tolerant computing
- Computer and network security
- Parallel and distributed systems
- Client and server-based tools for the Internet


## Requirements

Foundation Courses
University Core Curriculum Requirements 48 hours
ENG 1301 or 1387
ENG 1302 or 1388
ENG/ Literature Course

| HIST 2313, 2333 or 2387 |  |  |  |
| :---: | :---: | :---: | :---: |
| HIST 2314 or 2388 |  |  |  |
| POLS 2313 or 2387 |  |  |  |
| POLS 2314 or 2388 |  |  |  |
| MATH 1460* |  |  |  |
| PHYS 2401 and PHYS 2402 |  |  |  |
| CMPE 1370* |  |  |  |
| KIN |  |  |  |
| Three hours Modern Language |  |  |  |
| Three hours Art, Music, Dance or Theatre |  |  |  |
| PHIL 2390 |  |  |  |
| Three hours from ANTH, ECO, PSY, SOC or CRIJ |  |  |  |
| UNIV | 1301 | Learning Framework | 3 hours |
| Math and Sciences 18 hours |  |  |  |
| CHEM 1301 and |  |  |  |
| 1101 Chemistry |  |  |  |
| MATH 1460* Calculus |  |  |  |
| MATH 1470 Calculus II |  |  |  |
| MATH 3349 Differential Equations |  |  |  |
| MATH 2346 Math for EE/CE |  |  |  |
| CMPE | 3342 | Probability and Statistics for Electrical Engineers |  |
|  | or |  |  |
| MATH 4339 Probability and Statistics |  |  |  |
| "Three hours of MATH 1460 and two hours of CMPE |  |  |  |
| 1370 are used to satisfy the University core curriculum requirements, the remaining hours are under MATH and computer engineering requirements. |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Computer | Engine | ing Courses | 44 hours |
| Courses required of all students in the program. |  |  |  |
| CMPE 1370** Engineering Computer |  |  |  |
| CMPE | 1170 | Engineering Compute | nce Lab |
| CMPE | 2380 | Computer Science II |  |
| CMPE | 3333 | Algorithms and Data S | ures |
| CMPE | 3334 | Systems Programming |  |
| CMPE | 3340 | Software Engineering |  |
| CMPE | 4334 | Operating Systems |  |
| CMPE | 2330 | Digital Systems I |  |
| CMPE | 2130 | Digital Systems I Lab |  |
| CMPE | 2320 | Electrical Circuits I |  |
| CMPE | 2120 | Electrical Circuits I Lab |  |
| CMPE | 3403 | Electronics for CMPE |  |
| CMPE | 4303 | Digital Systems II |  |
| CMPE | 4375 | Intoduction to VLSI |  |
| CMPE | 4335 | Computer Architectur <br> or |  |
| CMPE | 4380 | Computer Architectur |  |
| Choose (4371 and 4372) or (4373 and 4374). |  |  |  |
| CMPE |  | Senior Design I Softw and |  |


| CMPE | 4372 | Senior Design II Software <br> or |
| :---: | :---: | :---: |
| CMPE | 4373 | Senior Design I Hardware <br> and |
| CMPE | 4374 | Senior Design II Hardware |

* One hour of CMPE 1370 is used in the computer engineering required courses.

Take 15 hours from the software track or 15 hours from the hardware track below:

Software Track
15 hours
CMPE 3341 Software Engineering II
CMPE 4345 Computer Networks
CMPE 4336 Parallel and Distributed Computing
CMPE 4363 Computer and Network Security
CMPE 2333 Computer Organization and
Assembly Language
Hardware Track 15 hours
CMPE 2322
Signals and Systems
CMPE 3226 Instrumental Lab
CMPE 3331 Microcontroller and Embedded Systems Lab
CMPE 4390 Communications Networks
CMPE 3437 Microprocessor Systems
Technical Electives
6 hours
Choose six hours from:
CMPE 4301 Digital Image Processing
CMPE 4327 Compiler Construction
CMPE 4333 Database Design and Implementation
CMPE 4341 Topics in Computer Engineering
CMPE 4343 Software Verification, Validation and Quality Assurance
CMPE 4350 Artifical Intelligence
CMPE 4365 Digital Signal Processing
CMPE 4366 Intoduction to Image Processing
CMPE 4367 Fiber Optics Communication
CMPE 4378 Signal Integrity and
Electromagnetic Compatibility
CMPE 4381 Interactive Systems and User Interface Design
CMPE 4382 Computer Visualization

Total

## - Special Requirements

As part of the degree, all students must complete a two-semester capstone senior design project, represented by CMPE 4371 and 4372 or CMPE 4372 and 4374 in the
degree plan. This project must meet ABET standards which implies that the project must be of substantial scope and complexity, demonstrate competencies from across the curriculum (in particular, the ability to design computer software, electronic hardware and integrate the two in systems) and address the social, economic and ethical consequences of the project.

## $\star$ Course Descriptions

A listing of courses offered by the Department of Computer Engineering can be found on page 267.

## COMPUTER SCIENCE

Dr. Zhixiang Chen, Department Chair<br>Engineering Building, Room 3.295<br>1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/381-2320 3520<br>Fax: 956/384-5099<br>E-mail: chen@cs.utpa.edu

Full-time Faculty
Abraham, John P., Professor
Brazier, Pearl W., Associate Professor
Chen, Zhixiang, Associate Professor
Dietrich, Gustavo D., Lecturer
Egle, David L., Lecturer
Figueroa-Lozano, Andres, Assistant Professor
Fowler, Richard H., Professor
Fu, Bin, Assistant Professor
Lawrence-Fowler, Wendy A., Professor
Ng, Peter A., Professor
Tsai, Ping-Sing, Assistant Professor
Wang, Xusheng, Assistant Professor

## * INTRODUCTION

Computer science is the study of the structure, function and application of computers and is central to the rapidly expanding use of information technology.

Computers have traditionally been used in business, engineering and scientific applications, and now applications are found in almost all human activities from art to zoology. Computer science is both an applied and theoretical discipline, supported by the principles of science, engineering and mathematics that has a direct and profound impact on the quality of life and society at large.

## * Mission/GOALS/ObJECTIVES

## - Mission

The department offers four degrees: Bachelor of Science in Computer Science (BSCS) as a broad-field major, Bachelor of Science (BS) with a major in computer science with a required minor field, Master of Science (MS) with a major in computer science, and Master of Science in Information Technology (MSIT). The BSCS degree is accredited by the Accreditation Board for Engineering and Technology Computing Accreditation Commission (ABET/ (AC). The department offers a Bachelor of Science degree in Computer Engineering (BSCE) in cooperation with the Department of Electrical Engineering. The department also offers courses leading to teacher certification in computer science, service courses to fulfill University core curriculum requirements, and computer science courses required for degree programs in engineering, science, and mathematics. Faculty conduct research in computer science, computer science education, and interdisciplinary fields, and contribute their professional service to student advising, mentoring, professional organizations, university activities, industrial interactions and to the community through professional expertise.

## - Goals

The undergraduate curricula in computer science are based on the Association for Computing Machinery and the Institute of Electrical and Electronics Engineers Computer Society recommendations for curricula and reflect the goals of a liberal arts education. The graduate curricula provide advanced and specialized study in the areas of computer science and information technology. The curricula in computer science provide the student with marketable expertise to enter the computing and information technology fields, the skills and education required to adapt to the rapid change characteristic of the fields, and the foundation to pursue graduate study in computer science and information technology.

Objectives
The objectives for the BSCS degree are to provide graduates with a thorough grounding in the key
principles and practices of computing, and in the basic mathematics, and scientific principles that underpin them; to provide graduates with an understanding of the mathematical and scientific concepts that underlie computer science; to provide graduates with an understanding of human and social issues that will enable them to be informed and involved members of their communities, and responsible engineering and computing professionals; to provide students with appropriate social and organizational skills, and to prepare graduates for employment in the computer science profession upon graduation, as well as for successful careers in the rapidly changing profession, and for graduate study in computing.

## DEPARTMENTAL ADMISSION REQUIREMENTS

Students must have computer experience equivalent to CSCl 1300 or CSCl 1360 and must have completed or be concurrently enrolled in MATH 1340 before enrolling in CSCl 1380 Computer Science I.

## $\gtrsim$ OTHER INFORMATION

The department has access to the well-equipped University computing facilities, which include IBMcompatible and Macintosh computers and Sun Workstations with networked access to the University VAX cluster and the Internet. Advanced courses and research efforts are supported by departmental Unix workstations.

## * Degree Requirements

The Department of Computer Science offers a 128hour Bachelor of Science in Computer Science (BSCS) degree as a 48-hour broad-field major with supporting mathematics and science requirements to meet $A B E T /$ CAC accreditation standards, and a Bachelor of Science degree with a 39-hour major with a required minor field. The department offers two 18-hour minors in computer science and a 24 -hour minor in computer science teacher certification. The Computer Science for Science and Engineering (CSSE) minor is designed for engineering, science, and mathematics majors, and the CSCI minor is designed for majors in any discipline. The computer science major can be completed to fulfill a plan for high school teacher certification.

For the 39-hour bachelor's degree with a major in computer science, students are required to complete a minor and are encouraged to select the minor
from a supporting discipline. Typical minors include mathematics, business administration, computer information systems and electrical engineering; however, a variety of other minors can support the degree. Students should seek continual advisement from the computer science faculty beginning from their freshman year to plan a timely completion of their degree. An official degree plan must be filed with the department upon completion of 60 hours of University courses.

## BACHELOR OF SCIENCE in Computer Science (BSCS) AS A BROAD-FIELD MAJOR

Students pursuing the Bachelor of Science in Computer Science (BSCS) as a broad-field major must complete the University core curriculum requirements and a computer science core. No minor is required for this degree; however, students may elect to complete a minor.

University Core Curriculum Requirements 48 hours
Complete the requirements shown in the University core curriculum requirements section shown on pages 103-107 of this catalog. PHIL 2390 (Professional Ethics) must be taken to meet the philosophy requirement. Courses to meet the natural science requirement must be taken from biology, chemistry or physics.

NOTE: The computer literacy and mathematics requirements of the University core curriculum requirements can be met by required courses listed below. CSCl 1360 is the recommended computer literacy course for students who need an introduction to the concepts of computer science and programming experience before taking CSCI 1380.

Computer Science Core Courses 30 hours

| CSCI | 1380 | Computer Science I |
| :---: | :---: | :---: |
| CSCI | 1381 | Foundations of Computer Science |
| CSCl | 2333 | Computer Organization and Assembly Language |
| CSCI | 2344 | Programming in the Unix <br> (®)/Linux Environment |
| CSCl | 2380 | Computer Science II |
| CSCl | 3333 | Algorithms and Data Structures |
| CSCl | 3334 | Systems Programming |
| CSCI | 3336 | Organization of Programming Languages |
| CSCl | 3340 | Software Engineering |
| CSCI | 4325 | Automata, Formal Languages and Computability |
| CSCI | 4390 | Senior Project |

Designated Computer Science Electives 15 hours
Select three hours from the following programming language courses:

CSCI 3326, CSCl 3327 or CSCl 2320.
Select six hours from the following:
CSCI 4333, CSCI 4334, CSCI 4335, CSCI 4345.
Any six advanced CSCl courses, excluding
programming language courses.
NOTE: Only CSCI 2320 and CSCI 4341 may be repeated for credit when topics change.

| Mathematics/Engineering |  |
| :--- | :--- |
| MATH 1401 | Calculus I |
| MATH 1402 | Calculus II |
| MATH 2345 | Elementary Linear Algebra |
| MATH 3373 | Discrete Structures <br> ELEE <br> ELEE <br> 2130 |
| Digital Systems Laboratory |  |
| Digital Systems Engineering I |  |

Communications/English
6 hours
ENG 3333 Technical Report Writing
Select three hours from the following:
COMM 1303 Presentational Speaking
COMM 1313 Fundamentals of Speech Communication

## Lab Science

4 hours
Any four-hour laboratory science course from biology, chemistry or physics. (This is in addition to the University core curriculum requirement but need not be in the same subject as the eight hours taken for that requirement.)

## Other Electives

6-12 hours
Students must select electives to complete a total of 51 advanced hours in their degree. Depending on the selection of electives, this will require from six to twelve hours of advanced electives.

## Other Requirements

Students must complete all computer science core courses with a grade of "C" or better.

Total
136 hours

## BACHELOR OF SCIENCE WITH A MAJOR IN COMPUTER ENGINEERING (BSCE)

The computer engineering degree is a cooperative program offered jointly with the electrical engineering department. The curriculum for the degree and description of the program can be found on page 207. Courses from computer science are cross-listed as CSCI and CMPE courses. Courses from electrical engineering are cross-listed as ELEE and CMPE courses.

## BACHELOR OF SCIENCE (BS) WITH MAJOR IN COMPUTER SCIENCE (MINOR REQUIRED)

Students wishing to major in computer science must complete the University core curriculum requirements, a computer science core and the requirements for a related minor. It is recommended that students wishing to pursue graduate study in computer science complete Sequence 1 under the mathematics requirements.

University Core Curriculum Requirements 48 hours
Complete the requirements shown in the University core curriculum requirements section shown on pages 103-107 of this catalog. For the computer literacy requirement, CSCl 1360 or higher CSCl course may be recommended by the department for students with prior computer experience. Mathematics requirement can be satisfied by requirements listed below.

Computer Science Core Courses 27 hours
CSCI 1380 Computer Science I
CSCI 1381 Foundations of Computer Science
CSCl 2333 Computer Organization and
Assembly Language
CSCI 2344 Programming in the UNIX(®)/ Linux Environment
CSCI 2380 Computer Science II
CSCl 3333 Algorithms and Data Structures
CSCI 3334 Systems Programming
CSCl 3336 Organization of Programming Languages
CSCI 3340 Software Engineering
Designated Electives in Computer Science 12 hours
Select three hours from the following:
CSCl 3326, CSCl 3327, CSCI 2320.
Select six hours from the following:
CSCI 4333, CSCI 4334, CSCI 4335 or CSCI 4345.
Select three hours of advanced CSCl courses.

Mathematics
MATH 3373 Discrete Structures
Select one sequence from the following:
Sequence One (recommended).
Complete at least two of the following courses:
MATH 1357 Pre-calculus Mathematics
MATH 1401 Calculus I
MATH 1402 Calculus II
Sequence Two.
Student may substitute for Sequence One with
advisor approval:
MATH 1341 Business Algebra
MATH 1342 Business Calculus
Communications/English
ENG 3333 Technical Report Writing
Select three hours from the following:
COMM 1303 Presentational Speaking
COMM 1313 Fundamentals of Speech Communication

Minor 18-24 hours
Students must complete all requirements for a related minor.

Other Electives
12-15 hours
Students must select electives to complete a total of 51 advanced hours in their degree. Depending on the number of advanced courses for the minor, the selection of elective hours in the major and the selection of other course requirements, this will require from 12-15 hours of advanced electives.

Other Requirements
Students must complete all Computer Science Core Courses with a grade of "C" or better.

TOTAL
127-138 hours

## - Teacher Certification in <br> Computer Science

Teacher certification in computer science is required for teachers of Computer Science I and II in the high schools. This certification also allows teachers to teach the computer literacy course in the junior high school. Admission to College of Education (COE) teacher education programs is required for all undergraduate students seeking teacher certification. Students following high school certification degree plans (grades 8-12) should consult with their advisor in the department in which their degree is offered. They should also seek information from the COE Office of Teacher Certification
and Admission Services at the Education Complex, Room 1.302, for admission requirements. Students may call the office at 956/381-3420 or log on to the Web site for more information at http://www.utpa.edu/colleges/coe/ studentservices.

The professional education courses for high school (8-12) certification include the following: EDHS 4301, EDHS 4302, EDHS 4303, EDHS 3305, READ 4351, EDHS 4398 and EDHS 4399.

University Core Curriculum Requirements 48 hours
Complete the requirements shown in the University core curriculum requirements section shown on pages 103-107 of this catalog. For the computer literacy requirement, CSCI 1380 or higher CSCI course may be recommended by the department for students with prior computer experience.

NOTE: The computer literacy and mathematics requirements of the University core curriculum requirements can be met by required courses listed below. CSCl 1360 is the recommended computer literacy course for students who need an introduction to the concepts of computer science and programming experience before taking CSCI 1380.

Computer Science Core Courses
27 hours
CSCI 1380 Computer Science I
CSCI 1381 Foundations of Computer Science
CSCl 2333 Computer Organization and Assembly Language
CSCl 2344 Programming in the UNIX(®)/ Linux Environment
CSCI 2380 Computer Science II
CSCl 3333 Algorithms and Data Structures
CSCI 3334 Systems Programming
CSCl 3336 Organization of Programming Languages
CSCI 3340 Software Engineering
Designated Electives in Computer Science 12 hours Select three hours from the following:
CSCl 1300, CSCl 1360, CSCl 2320, CSCl 2330,
CSCl 3326, CSCI 3327.
Select six hours from the following:
CSCl 4333, CSCl 4335, CSCI 4345.
Select three hours of advanced CSCl courses. A maximum of three hours from CSCl 3300 and CSCl 3390 can be used to fulfill CSCl elective requirements.

Professional Education Courses
21 hours
Admission to teacher education is required prior to enrolling in the following courses:

| EDHS 4301 | Foundations of Education <br> EDHS 3305 | Instructional Methods for <br> English Language Learners with <br> Exceptionalities in High Schools |
| :---: | :---: | :---: |
| EDHS 4302 | Instructional Planning and <br> Assessment |  |
| EDHS 4303 | Instructional Strategies and <br> Classroom Management |  |
| EDHS 4398 | Integrated Internship II: 8-12 <br> SUR |  |
| READ 4399 | 4351 | Supervised Internship II: 8-12 <br> Developmental Reading <br> in Secondary Schools |

Communication/English 6 hours
ENG 3333 Technical Report Writing Select three hours from the following:
COMM 1303 Presentational Speaking
COMM 1313 Fundamentals of Speech
Communication

Mathematics
9 hours
MATH 3373 Discrete Structures
Select one sequence from the following:
Sequence One (recommended).
Complete at least two of the following courses:
MATH 1357 Pre-calculus Mathematics
MATH 1401 Calculus I
MATH 1402 Calculus II
Sequence Two.
Student may substitute for Sequence One with
advisor approval:
MATH 1341 Business Algebra
MATH 1342 Business Calculus

## Minor

18 hours
Students must complete all requirements for a related minor. A minimum of six hours must be advanced hours.

TOTAL
136 hours

## Minor in Computer Science

Core Courses
9 hours
CSCl 1380
Computer Science I
CSCI 1381 Foundations of Computer Science
CSCI 2380
Computer Science II
Designated Electives
9 hours
Select one of CSCI 2320, CSCI 3326 or CSCI 3327
Select six hours of advanced Computer Science courses.

TOTAL
18 hours
Minor in Computer Science FOR ENGINEERING MAJORS

Required Course
15 hours
CSCI 1380
Computer Science I
CSCl 2344 Programming in UNIX(®)/
Linux Environments
CSCI 2380 Computer Science II
CSCl 3333 Algorithms and Data Structures
CSCI 3334
Systems Programming
Designated Elective
3 hours
Select one from the following courses:
CSCI 3336 Organization of Programming Language
CSCI 3340 Software Engineering
CSCl 4333 Database Design and Implementation
CSCl 4334 Operating Systems
CSCI 4350 Artificial Intelligence
CSCl 4360 Interactive Computer Graphics and Systems

## Minor in Computer Science with TEACHER CERTIFICATION in Computer Science

Core Courses
12 hours

| CSCI | 1380 |
| :--- | :--- |
| CSCI | 1381 |
| CSCI | 2380 |
| CSCI | 3333 |

Computer Science I
Foundations of Computer Science
Computer Science II
Algorithms and Data Structures

Designated Electives
12 hours
Select one of CSCI 2320, CSCI 3326 or CSCI 3327.
Select nine advanced hours in computer science (up to six hours from CIS 3335, CIS 3338 and CIS 4308 may be used to partially satisfy this requirement).

TOTAL
24 hours

## $\star$ Course Descriptions

A listing of courses offered by the Department of Computer Science can be found on page 284.

## . ELECTRICAL ENGINEERING

Dr. Heinrich D. Foltz, Department Chair<br>Engineering Building, Room 3.214<br>1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/381-2609<br>Fax: 956/381-3527<br>E-mail: hfoltz@utpa.edu<br>Full-Time Faculty<br>Aounallah, Abdallah, Lecturer<br>Banatoski, Edward, Lecturer<br>Ben Ghalia, Mounir, Associate Professor<br>Foltz, Heinrich D., Associate Professor<br>Harlow, Charles, Professor<br>and Lloyd Bentsen Endowed Chair<br>Kumar, Sanjeev, Assistant Professor<br>LeMaster, Edwin W., Professor<br>Li, Junfei, Assistant Professor<br>Son, Jaesok, Associate Professor<br>Zarnani, Hamid, Assistant Professor

## * OVERVIEW

Electrical engineering is a broad field with applications in almost all areas of industry, including computer systems, control systems, telecommunications, semiconductors, electronics, and electric power.

The Department of Electrical Engineering offers a Bachelor of Science in Electrical Engineering (BSEE) degree that is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

This degree provides a broad, solid education in engineering fundamentals as well as the opportunity for in-depth study in specialized topics. Students completing the program will have rigorous foundation for engineering practice in industry as well as for graduate studies in engineering and other disciplines. The program has well-equipped, accessible laboratories and extensive computing facilities.

A Master of Science in Engineering (MSE) degree is also offered. For more information, consult the graduate catalog.

## MISSION

The Department of Electrical Engineering will provide students a quality education to prepare them for the practice of engineering, with sufficient depth to continue their education beyond the baccalaureate degree. The curriculum will provide skills that enhance the understanding of the applications of engineering sciences. In order to provide an awareness of current and emerging industrial practice, the department will provide the students the opportunity to participate in professional organization, industrial internships or co-op experiences, and scholarly activities including supervised research. The faculty will be readily accessible and will continuously strive to improve their instructional materials and the methods of dissemination. The faculty will also practice lifelong learning by keeping abreast of and participating in the latest developments in their chosen areas of expertise and interacting across disciplines. The opportunity for student success in the undergraduate programs will be enhanced by liberal access to the computational facilities and laboratories.

## * Degree Requirements

University Core Curriculum Requirements 48 hours Students must meet the University core curriculum requirements; however, some of the requirements must be fulfilled with particular courses:

English, Literature
same as University requirements
Language Other Than English
same as University requirements
The Arts
same as University requirements
Philosophy or Modern
or
Classical Language Literature
PHIL 2390
Natural Science
PHYS 2301/2101, 2302/2102
Mathematics
MATH 1401*
Computer Literacy
CSCl 1380*
Kinesiology
same as University requirements
History
same as University requirements
Political Science
same as University requirements

Other Social Science
ECON 2301
"NOTE: Three hours of MATH 1401 and two hours of CSCI 1380 are used to satisfy the University core curriculum requirements, the remainder fall under "Other Course Requirements."

Electrical Engineering Required Courses 44 hours
ELEE 2319 Numerical Computation and Data Visualization
ELEE 2330 Digital Systems Engineering
ELEE 2130 Digital Systems Laboratory
ELEE 2420 Electrical Circuits I
ELEE 2321 Electrical Circuits II
ELEE 3301 Electronics I
ELEE 3225 Electrical Engineering Lab I
ELEE 3435 Microprocessor Systems
ELEE 3315 Electromagnetic Engineering
ELEE 3302 Electronics II
ELEE 3330 Electrical Engineering Lab II
ELEE 4303 Digital Systems Engineering II
ELEE 4321 Automatic Control Systems
ELEE 4351 Communication Theory
ELEE 4328 Solid State Electronic Devices
Electrical Engineering Elective Courses
9 hours
Students choose nine hours of additional ELEE courses with faculty advisor approval. The following courses have been approved as electives:

| ELEE | 3370 | Power Electronics <br> Electrical Power Systems <br> ELEE |
| :--- | :--- | :--- |
| 3371 | Design and Application |  |
| ELEE | 4360 | Microwave Systems Engineering <br> Digital Signal Processing |
| ELEE | 4365 | Image Processing |
| ELEE | 4366 | ELEE |
| Eiber Optic Communications |  |  |
| ELEE | 4375 | Introduction to VLSI Design |
| ELEE | 4380 | Computer Architecture |
| ELEE | 4390 | Communications Networks <br> ELEE 4333 |

Other elective course options may be available. Consult your faculty advisor for approval. ELEE 3305 and ELEE 3306 are not acceptable as technical electives.

Senior Design
8 hours
Students must complete a major capstone design project, to be completed over a two-semester period.

```
ELEE 4461 Senior Design I
ELEE 4462 Senior Design II
```

Other Course Requirements* 28 hours
ENGR 1101 Introduction to Engineering
MATH 1402 Calculus II
MATH 2346 Mathematics for Electrical Engineers
MATH 2401 Calculus III
MATH 3349 Differential Equations
CHEM 1301 General Chemistry I
CHEM 1101 General Chemistry I Lab
MECE 2405 Engineering Mechanics
ELEE 3340 Probability and Statistics for Electrical Engineers or
MATH 4339 Mathematical Probability and Statistics
"Includes one hour each from MATH 1401 and CSCI 1380.

Total
137 hours

A grade of "C" or higher is required in any course that is a prerequisite (directly or indirectly) for an ELEE course. Electrical Engineering courses in which a grade of "C" or higher has been earned cannot be repeated in an attempt to earn a higher grade.

## $\mathcal{Z}$ MINOR IN Electrical ENGINEERING

This minor is suitable for students who wish to have a general introduction to applications of electricity and electronics.

| Required Courses |  |  |
| :---: | :---: | :---: |
| ELEE | 3305 | Electrical Systems <br> or |
| ELEE | 2420 | Electrical Circuits I |
| ELEE | 3306 | Electronic Systems |

Elective Courses
12 hours
Select 12 hours of ELEE courses other than 2420, 3305, or 3306; at least three hours of which must be advanced.

## $\approx$ MINOR IN ELECTRICAL ENGINEERING for Computer SCience majors

This minor is designed for computer science majors and other students with a particular interest in the area of computer engineering.

Required Courses

| ELEE | 2330 |
| :--- | :--- |
| ELEE | 2130 |
| ELEE | 3305 |

ELEE 2130
ELEE 3305

13 hours
Digital Systems Engineering I
Digital Systems I Lab
Electrical Systems

| ELEE | 3306 | Electronic Systems <br> Probability and Statistics <br> for Electrical Engineers |
| :---: | :---: | :---: |
| MATH | 3340 | or |
|  | Mathematical Probability and |  |
| Statistics |  |  |

## Elective Courses

6 hours
Select two courses from the following:

| ELEE | 4303 | Digital Systems Engineering II |
| :--- | :--- | :--- |
| ELEE | 4375 | Introduction to VLSI Design |
| ELEE | 4380 | Computer Architecture |
| ELEE | 4390 | Communication Networks |

NOTE: Students should not take both ELEE 4380 and $\operatorname{CSCl} 4335$, or ELEE 4390 and $\operatorname{CSCl} 4345$.

## COURSE Descriptions

A listing of courses offered by the Department of Electrical Engineering can be found on page 303.

MANUFACTURING EnGineering

Dr. Douglas H. Timmer, Department Chair

Engineering Building, Room 3.224
1201 W. University Drive
Edinburg, TX 78539-2999
Telephone: 956/381-2606
Fax: 956/381-3527
E-mail: timmer@utpa.edu
Full-time Faculty
Bose, Subhash C., Beecherl Professor
Butler, Alley, Professor
Gonzalez, Miguel, Associate Professor
Lee, Kye-Hwan, Assistant Professor
Li, Jianzhi, Assistant Professor
Nambiar, Rajiv V., Associate Professor
Timmer, Douglas H., Associate Professor

## * GENERAL OVERVIEW

UT Pan American offers the Bachelor of Science degree in manufacturing engineering that is equivalent in scope to engineering programs at other institutions in Texas. The bachelor's degree has accreditation from the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET) effective May 1996. The engineering curriculum provides a rigorous foundation for engineering practice in industrial and governmental organizations as well as for graduate studies in engineering, business administration, law and medicine. In addition, a number of graduate engineering courses are offered for professional development and a Master of Science degree in engineering-concentration manufacturing.

UT Pan American is located in an industrialized region with numerous manufacturing facilities that provide an unusual opportunity for students to participate in practical applications of engineering knowledge in both the United States and Mexico.

## $\star$ Mission

The UTPA Department of Manufacturing Engineering will provide a quality engineering education to prepare students for the practice of engineering. A strong laboratory component in the curriculum, with opportunities for industrial internships and research experience, will provide engineering skills that enhance the understanding of the applications of engineering sciences and the importance of lifelong learning. A strong emphasis on verbal and written communication is stressed in all aspects of the curriculum.

## * Degree Requirements

## Basic Engineering <br> 32 hours

All students must complete a basic engineering requirement composed of the following courses:

| CHEM | $1301 / 1101$ | General Chemistry I* |
| :--- | :---: | :--- |
| CSCI | 1380 | Computer Science I* |
| ENG | 1301 | Composition* |
| ENG | 1302 | Rhetoric* |
| MATH | 1401 | Calculus I* |
| MATH | 1402 | Calculus II |
| PHYS | 2401 | Physics for Scientists and |
|  |  | $\quad$ Engineers II |
| ENGR | 1101 | Introduction to Engineering |
| MECE | 1221 | Engineering Graphics |
| MECE | 2440 | Engineering Materials |

## ELECTRICAL ENGINEERING, MANUFACTURINCOLSIEANEHRSNIENCE AND ENGINEERING

"This course also satisfies the University's core curriculum requirements (see below).

A student must complete each of the above courses with a grade of "C" (or higher) before enrollment in subsequent engineering courses will be recommended. Highly qualified students are expected to obtain advanced standing credit through acceptable test scores on ACT, CEEB (Advanced Placement Test) or CLEP. Common courses for which advanced standing credit can be attained include ENG 1301 and ENG 1302, CHEM 1301/1101, HIST 2313 and modern language. Additional information about advanced standing credit is given on page 64-66 of this catalog.

University Core Curriculum Requirements

32 hours
(Nineteen hours of the University core curriculum requirements are satisfied as part of the basic engineering requirements.) All students must complete the University's core curriculum requirements shown on pages 103-107 of this catalog EXCEPT for the sections, groups and areas noted below which must be satisfied as shown.

and Performing Arts 12 hours
Must select Art, Music,
Dance or Theatre Appreciation
PHIL 2390
English Literature
3 hours
Modern Language
3 hours
Science and Mathematics
Computer Literacy
Social Sciences
U.S. History 6 hours
Political Science 6 hours
Economics 3 hours
Kinesiology 2 hours
Learning Framework
3 hours
TOTAL
11 hours
The following non-engineering courses are also
required:

MATH 2401
MATH 3349
Differential Equations Engineers II

## MANUFACTURING ENGINEERING MAJOR

Manufacturing engineering is a new engineering specialty at the University. UT Pan American offers the only accredited bachelor's degree in manufacturing engineering in Texas. The curriculum includes elements of traditional mechanical, electrical and industrial engineering curricula. Graduates with this specialization will find many opportunities for employment in all types of manufacturing facilities.

The total course requirements for a Bachelor of Science in manufacturing engineering consist of the following:

Manufacturing Engineering Program 139 hours
Basic Engineering 32 hours
Other Core Curriculum Requirements 32 hours

Other Non-Engineering Requirements 11 hours
Major Requirements 64 hours
The actual number of courses taken at UT Pan American will depend on a student's high school preparation and on the number of courses for which advanced standing credit is received. The major requirements for this degree are shown below.
$\begin{array}{cc}\text { Major Requirements } & 64 \text { hours } \\ \text { Core Courses } & 58 \text { hours }\end{array}$
MECE 2303 Statics
MECE 2304 Dynamics
ENGR 4161 Senior Design Project I
ENGR 4261 Senior Design Lab
ENGR 4362 Senior Design Project II
ELEE 3305 Electrical Systems
MANE 2332 Engineering Statistics
MANE 3164 Manufacturing Processes Lab
MANE 3300 Computer-Aided Design
MANE 3302 Computer-Aided Manufacturing
MANE 3337 Engineering Economics
MANE 3340 Fundamentals of Industrial Engineering
Manufacturing Engineering Analysis
Manufacturing Processes and
Quality Control
Automation Systems
Manufacturing Planning and Control
Operations Research

| MECE | 3321 | Mechanics of Solids |
| :--- | :--- | :--- |
| MECE | 2335 | Thermodynamics I |
| MECE | 3315 | Fluid Mechanics |

Technical Electives
Select with faculty advisor's approval.
Engineering courses in which a grade of "C" or higher has been earned cannot be repeated in an attempt to earn a higher grade.

## MINOR IN MANUFACTURING ENGINEERING

This minor provides a background in manufacturing engineering. It is intended to support business majors and other engineering majors and will be especially valuable for those who will be involved in manufacturing enterprises. It requires 18 hours in engineering, six of which must be at the advanced level.

The minor requires certain support courses as prerequisites. Check with the department for more information.

| Required Courses |  |  |
| :---: | :---: | :--- |
| MANE | 3332 | Engineering Statistics |
| MANE | 3364 | Manufacturing Processes and |
| MANE | 3164 | Manufacturing Processes Lab |
| MECE | 2440 | Engineering Materials |


| Designated Electives |  |  |
| :---: | :---: | :---: |
| Select seven hours from the following: |  |  |
| MANE | 3101 | Projects in Manufacturing Engineering |
| MANE | 3300 | Computer-Aided Design |
| MANE | 3302 | Computer-Aided Manufacturing |
| MANE | 4311 | Quality Control |
| MANE | 4331 | Manufacturing Planning and Control |
| MANE | 4352 | Manufacturing Simulation |

## * Course Descriptions

Courses offered by the Department of Manufacturing Engineering can be found under their respective headings in the Course Descriptions section beginning on page 329.

## MECHANICAL ENGINEERING

Dr. Hashim Mahdi, Department Chair<br>Engineering Building, Room 3.222A 1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/381-2381<br>Fax: 956/381-3527<br>E-mail: mahdi@utpa.edu<br>Full-Time Faculty<br>Ahn, Seokyoung, Assistant Professor Crown, Stephen, Associate Professor<br>Freeman, Robert, Professor<br>Fuentes, Arturo, Assistant Professor<br>Jones, Robert, Associate Professor<br>Kypuros, Javier, Assistant Professor<br>Lozano, Karen, Associate Professor<br>Mahdi, Hashim, Professor<br>Mihut, Dorina, Lecturer<br>Qubbaj, Ala, Associate Professor<br>Tarawneh, Constantine, Assistant Professor<br>Vasquez, Horacio, Assistant Professor

## $\star$ MISSION

The Department of Mechanical Engineering will provide students a quality education to prepare them for the practice of engineering, with sufficient depth to continue their education beyond the baccalaureate degree. The curriculum will provide skills that enhance the understanding of the applications of engineering sciences. In order to provide an awareness of current and emerging industrial practice, the department will provide the students the opportunity to participate in professional organizations, industrial internships or co-op experiences, and scholarly activities including supervised research. The faculty will be readily accessible and will continuously strive to improve their instructional materials and the methods of dissemination. The faculty will also practice lifelong learning by keeping abreast of and participating in the latest developments in their chosen areas of expertise and interacting across disciplines. The opportunity for the student success in the undergraduate programs will be enhanced by liberal access to the computational facilities and laboratories.

## MANUFACTURING ENGINEERING, MECHANICADIERGENDERMNENCE AND ENGINEERING

## General Overview

The School of Engineering and Computer Science offers an accredited Bachelor of Science degree in mechanical engineering from the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET) effective 1996.

The mechanical engineering curriculum provides a rigorous foundation for engineering practice in industrial and governmental organizations as well as graduate studies in engineering.

Mechanical engineers possess a broad technical background that enables them to work in virtually every industrial sector. They are concerned generally with the development of energy systems, power generation, environmental control machines and vehicles, as well as materials processing. Mechanical engineers usually work closely with engineers having other specializations.

The total course requirements for a Bachelor of Science in mechanical engineering consist of the following:

## * Degree Requirements

| University Core Curriculum Requirements |  |  | 50 hours |
| :---: | :---: | :---: | :---: |
| Humanities |  |  | 18 hours |
| A course in visual and performing arts. |  |  |  |
| ENG | 1301 | Composition |  |
| ENG | 1302 | Rhetoric |  |
| ENG | 23xx | Sophomore Literature |  |
|  |  | Foreign Language |  |
| PHIL | 2390 | Professional Ethics |  |
| Science and Math |  |  | 12 hours |
| MATH | 1401 | Calculus I |  |
| PHYS | 2101 | Intermediate Lab |  |
| PHYS | 2102 | Intermediate Lab |  |
| PHYS | 2301 | Intermediate Physics |  |
| PHYS | 2302 | Intermediate Physics |  |
| Computer Literacy |  |  | 3 hours |
| CSCl | 1380 | Computer Science I or |  |
| CSCl | 2325 | Survey of Elementary Sci Programming | entific |
| Kinesiology |  |  | 2 hours |
| KIN | x2xx | Kinesiology and Wellness |  |
| Social Science |  |  | 15 hours |
| ECON | 2301 | Principles of Economics |  |
| HIST | 2313 | American Heritage I |  |


| HIST | 2314 | American Heritage II |
| :--- | :---: | :---: |
| POLS | 2313 | U.S. and Texas Government and <br> Politics |
| POLS | 2314 | U.S. and Texas Government and <br> Politics |

Other Non-Engineering Courses 18 houors

| UNIV | 1301 | Learning Framework |
| :--- | :--- | :--- |
| CHEM | 1101 | General Chemistry Lab I |
| CHEM | 1301 | General Chemistry I |
| MATH | 1402 | Calculus II |
| MATH | 2401 | Calculus III |
| MATH | 3349 | Differential Equations |

Highly qualified students are expected to obtain advanced standing credit through acceptable test scores on ACT, CEEB (Advanced Placement Test) or CLEP. Common courses for which advanced standing credit can be obtained are:

| CHEM | 1101 |
| :--- | :--- |
| HIST | 2313 |
| CHEM | 1301 |
| HIST | 2314 |
| CHEM | 1302 |
| MATH | 1401 |
| CSCI | 1380 |
| PHYS | 2301 |

Engineering Courses
62 hours

| ELEE | 3305 | Electrical Systems |
| :--- | :---: | :--- |
| ELEE | 3306 | Electronic Systems |
| MANE | 3164 | Manufacturing Processes Lab |
| MANE | 3364 | Manufacturing Processes |
| MECE | 1101 | Introduction to Engineering |
| MECE | 1221 | Engineering Graphics |
| MECE | 2303 | Statics |
| MECE | 2304 | Dynamics |
| MECE | 2335 | Thermodynamics I |
| MECE | 2440 | Engineering Materials |
| MECE | 3115 | Fluid Mechanics Laboratory |
| MECE | 3160 | Heat Transfer Laboratory |
| MECE | 3304 | System Dynamics |
| MECE | 3315 | Fluid Mechanics |
| MECE | 3320 | Measurement and |
|  |  | Instrumentation |
| MECE | 3321 | Mechanics of Solids |
| MECE | 3336 | Thermodynamics II |
| MECE | 3350 | Mechanical Engineering Analysis |
| MECE | 3360 | Heat Transfer |
| MECE | 3380 | Kinematics and Dynamics of |
| MECE | 4101 | Fundamentals of Engineering |
| MECE | 4350 | Machine Elements |


courses as prerequisites as shown below.
Required Courses

MECE 2335
MECE 2440
MECE
MECE 3115
MECE 3336
MECE 3360
MECE 3160
Thermodynamics I
Engineering Materials Fluid Mechanics Fluid Mechanics Laboratory Thermodynamics II Heat Transfer Heat Transfer Laboratory

Prerequisites

| MATH | 2401 | Calculus III |
| :--- | :--- | :--- |
| MATH | 3349 | Differential Equations |
| PHYS | 1401 | General Physics |

## * COURSE DESCRIPTIONS

A listing of courses offered by the Department of Computer Engineering can be found on page 337.

MATHEMATICS

Dr. Lokenath Debnath, Department Chair Mathematics and General Classrooms Building

Room 3.202
1201 W. University Drive Edinburg, TX 78539-2999
Telephone: 956/381-3452
Fax: 956/384-5091
E-mail: debnathl@utpa.edu
Full-time Faculty
Alvarado, Frances E.M., Lecturer
Balogh, András, Associate Professor
Bernard, John E., Professor
Bhatta, Dambaru, Assistant Professor
Bracken, Paul, Assistant Professor
Chakraborty, Santanu, Assistant Professor
Debnath, Lokenath, Professor
and Department Chair
Ebaseh-Onofa, Benjamin O., Associate Professor
Fatehi, Mohammed, Lecturer
Feng, Baofeng, Assistant Professor
Feng, Zhaosheng, Assistant Professor
Galstyan, Anahit, Assistant Professor Gonzalez, Roberto, Lecturer
Heller, William, Associate Professor Hinthorn, Richard W., Lecturer
Knobel, Roger A., Jr., Associate Professor Liu, Liping, Assistant Professor Maruno, Kenichi, Assistant Professor Olsen, Janet, Lecturer Paredes, Miguel, Professor Poletaeva, Elena, Assistant Professor Pontius, Paul, Assistant Professor Qiao, Zhijun, Assistant Professor Ramirez, Olga M., Professor Riahi, Daniel, Professor Rivera, Gustavo, Lecturer Skow, Donald P., Senior Lecturer Taylor, Monty B., Professor Torres, J. Rene, Lecturer Tsay, Jenq-Jong, Assistant Professor Varlamov, Vladimir, Associate Professor Villalobos, Maria Cristina, Assistant Professor Voisei, Mircea, Assistant Professor Wang, Xiaohui, Assistant Professor Watkins, William, Professor Wiener, Bella, Senior Lecturer Yagdjian, Karen, Assistant Professor

## * DEGREE PROGRAMS

The Department of Mathematics offers a major in mathematics leading to a Bachelor of Science degree, minors in mathematics, applied mathematics and statistics. It also offers a Bachelor of Interdisciplinary Studies degree in mathematics for certification in grades 4-8 (middle school). In addition, it offers courses for students seeking to teach mathematics in grades 812 (high school), as well as courses for those students seeking a second teaching field in mathematics at either the middle school or high school levels.

## * Degree Requirements

## $\sim$ MAJOR IN MATHEMATICS

University Core Curriculum Requirements 48 hours
Complete the requirements shown in the University core curriculum requirements section on pages 103-107 of this catalog EXCEPT for the sections, groups or areas listed below, which must be satisfied only as shown.

Section B. Science and Mathematics
Group 1. Natural Science
At least one four-hour course in physics is required.
Group 2. Mathematics
MATH 1460 is the recommended beginning course.
Section C. Computer Literacy
A course in a programming language from the Department of Computer Science above CSCl 1360 is required.

Major Course Requirements 36 hours

Core Courses
24 hours
MATH
460
MATH
1470
MATH
2401
MATH
2345
MATH
4339
MATH 4351
MATH

Calculus I
Calculus II
Calculus III
Elementary Linear Algebra
Mathematical Probability and Statistics
Modern Algebra (grade of "C" or better)
Real Analysis
(grade of "C" or better)

Designated Electives
Choose Group I or Group II
Group 1:
MATH 3304 Geometry
and
MATH 3311 Organizational Structures and Processes of Mathematics

Group I/:
MATH 3349 Differential Equations and
Three hours of approved advance MATH electives.

## Other Electives

 6 hoursSix hours of approved advanced MATH electives.

Total
124 hours
Other Requirements

- Complete the major course requirements with a 2.25 or better GPA.
- Complete at least 21 hours of approved advanced MATH coursework
- Complete the requirements of a minor.

Any minor from outside the mathematics department is permitted but the only permitted minors from within the department are the minor in statistics and the minor in middle school mathematics (see below).

Certification is NOT required for the mathematics major, but it is an option. Students seeking teacher certification should consult with the mathematics department undergraduate advisor and the Teacher Certification Office regarding courses required for certification.

Total
124 Hours

## BACHELOR OF INTERDISCIPLINARY Studies - Mathematics Teacher Certification for Grades 4-8

This degree option is intended for students seeking certification in mathematics grades 4-8.

- Teacher Certification Programs and Requirements Admission to College of Education (COE) teacher education srograms is required for all undergraduate students seeking teacher certification. Students following middle school certification degree plans (grades 4-8) should consult with their advisor in the department in which their degree is offered. They should also seek information from the COE Office of Teacher Certification and Admission Services at the Education

Complex, Room 1.302, for admission requirements. Students may call the office at 956/381-3420 or log on to the Web site for more information at http://www.utpa. edu/colleges/coe/studentservices.

The professional education courses for middle school (4-8) certification include the following: EDMS 3353, EDMS 3354, READ 3325, EDMS 3305, EDMS 3355, READ 3326, EDMS 4398 and EDMS 4399.

University Core Curriculum Requirements 48 hours Complete the requirements shown in the University core curriculum requirements section of this catalog.

NOTE: By choosing appropriately, a student may use some University core curriculum requirement courses to fulfill other requirements listed below.

Interdisciplinary Major Area
54 hours
Math
36 hours
EMAT 2306 Foundations of Mathematics I
EMAT 2307 Foundations of Mathematics II
MMAT 3309 Foundations of Mathematics III
MMAT 3312 Measurement and Geometry
MMAT 3313 Algebraic Structures
MMAT 3315 Probability and Statistics
MMAT 3317 Basics of Discrete Mathematics
MMAT 3318 Basics of Number Theory
MMAT 3319 Mathematical Structures and Processes
MMAT 3320 Basics of Mathematical Modeling
MMAT 3321 Mathematical Problem Solving
MMAT 4322 Capstone Research Project
Grade of "C" or better required in all EMAT and
MMAT courses. A GPA of 2.25 or greater also required for these courses.

| Language Arts <br> READ <br> READ 3325 | Cognitive Development and <br> Reading Comprehension |
| :---: | :---: | :---: |
| Reading Across the Curriculum |  |
| Content Areas |  |

Science (beyond the core)
6 hours
PHYS, ASTR, GEOL, PSCI (At least one course in physics with a lab is required if not in core.)

Computer/Technology 3 hours
$\begin{array}{ccc}\text { CSCI } & 1380 & \begin{array}{c}\text { Computer Science I } \\ \text { or }\end{array} \\ \text { MMAT } & 3316 & \text { Mathematics in a }\end{array}$
Computer Environment

| Arts and Humanities |  |  |
| :---: | :---: | :---: |
| PHIL | 1320 | Introduction to Logic <br> (if not in core) or |
| UNIV | 1301 | Learning Framework |

Academic Minor
$\quad$ Any Discipline (nine hours advanced)

Professional Education
18 hours
EDMS 3305 Instructional Methods for English Language Learners and Learners with Exceptionalities in Middle Schools
EDMS 3353 Young Adolescent Development
EDMS 3354 Middle School Curriculum Development and Assessment
EDMS 3355 Instructional Technology Methods and Classroom Management for Middle School Classrooms

## EDMS 4398 Integrated Internship II

Seminar - Middle School
TOTAL
138 hours

## MINORS IN MATHEMATICS

The Department of Mathematics offers five minors tailored to students with various majors and career goals. Consult with the mathematics department undergraduate advisor for the minor that best fits your needs.

## MINOR IN MATHEMATICS

A minor in Mathematics requires 23 hours of MATH courses, of which 12 hours must be advanced. This minor must include MATH 1460, MATH 1470, MATH 2345, and 12 advanced hours of approved MATH courses which must include at least on the following: MATH 4302, MATH 4351, MATH 4357, or MATH 4360. All courses in this minor must be completed with a grade of "C" or better.

## MINOR IN APPLIED MATHEMATICS

A minor in applied mathematics requires 23 hours of MATH courses, of which nine hours must be advanced. This minor includes MATH 1460, MATH 1470, and 15 hours chosen from MATH 2345, MATH 2401, MATH 3337, MATH 3338, MATH 3349, MATH 3355, MATH 3368, MATH 3373, MATH 4317, MATH 4318, MATH 4319 and MATH 4339. All courses in this minor must be completed with a grade of "C" or better.

## MINOR IN MATHEMATICS <br> WITH SECONDARY CERTIFICATION

A minor in mathematics with high school certification requires 26 hours of MATH courses of which 15 hours must be advanced. This minor includes MATH 1401, MATH 1402, MATH 2345, MATH 3304, MATH 3311, MATH 3337 or MATH 4339, and six hours chosen from MATH 3303, MATH 3373 and MATH 4302. All courses in this minor must be completed with a grade of "C" or better.

## ¿ MINOR IN MIDDLE SCHOOL MATHEMATICS

The minor in middle school mathematics requires the following 24 hours of EMAT and MMAT courses: EMAT 2306, EMAT 2307, MMAT 3309, MMAT 3312, MMAT 3313, MMAT 3315, MMAT 3320 and MMAT 3321. All courses in this minor must be completed with a grade of "C" or better.

Z MINOR IN STATISTICS
A minor in statistics requires 18 hours of approved MATH, STAT, or CSCl courses, of which nine hours must be advanced. This minor includes MATH/STAT 2330, MATH/STAT 3337, MATH 3338, MATH 4339 and STAT 4336. These 18 hours cannot be used simultaneously to fulfill requirements in the student's major. All courses in this minor must be completed with a grade of "C" or better.

## * COURSE DESCRIPTIONS

A listing of courses offered by the Department of Mathematics can be found on page 332.


# PHYSICS AND Geology 

Dr. Steven C. Tidrow, Department Chair Physical Science Building, Room 123<br>1201 W. University Drive<br>Edinburg, TX 78539-2999<br>Telephone: 956/381-3521<br>Fax: 956/381-2423<br>Full-time Faculty<br>Bhatti, Muhammad Idrees, Professor Chipara, Mircea, Assistant Professor Corpuz, Edgar, Assistant Professor<br>Cunningham, Mark, Associate Professor<br>Dimakis, Nicholas, Assistant Professor<br>Hannan, Mohammad A., Associate Professor<br>Lin, Yuankun, Assistant Professor<br>Mazariegos, Ruben A., Associate Professor Pereya, Nicolás, Lecturer<br>Zeng, Liang, Associate Professor

## MISSION

The Department of Physics and Geology will provide students with a high quality education, allowing for a fundamental understanding of science and preparation for future careers. The department will serve the university in providing natural science core educational and degree requirements in the physical sciences and providing majors and minors with specialized courses required for their field. The department will strive to enhance the education of its students by providing expertise advising on degree and career options and opportunities such as teaching assistantships, individual research mentoring and field trips.

## General Overview

The Department of Physics and Geology offers a Bachelor of Science degree with a major in physics and minors in geology, physical science, Geographic Information Systems (GIS) and physics. It also offers secondary and elementary teaching fields in physics, physical science and earth science. The department also offers a Master of Science in Interdisciplinary Studies
(MSIS).
Our program includes interdisciplinary research and teaching that brings the unique perspectives of physics and geology to scientific problems at many spatial and temporal scales. Our areas of expertise encompass a range of physics and geology disciplines. This currently includes atomic, environmental, molecular, nuclear, and particle physics, material science, geophysics, earth science and physics education. Students are encouraged to actively participate in research endeavors being carried out by faculty.

The department facilities support a range of research methods including theoretical, experimental and field work. Research facilities include a number of experimental labs including a remote sensing and GPS systems, a Neutron Activation Analysis Lab, a Laser Optics Lab and a Physics Education Research Lab. Departmental computational facilities include a GIS/Remote Sensing Lab, an 8-node computer cluster (for parallel computations) and state-of-theart computational biophysics software. For more information about the department and course offerings see the departmental Web site at http://www.utpa.edu/ dept/physci.

## * Degree Requirements

MAJOR IN PHYSICS

University Core Curriculum Requirements 48 hours Complete the University core curriculum requirements as shown on pages 103-107 of this catalog.

30 Hour Core, Six Hour Physics Electives

Core Courses

| PHYS | 2401 | Physics for Scientists and <br> Engineers I |
| :--- | :---: | :--- |
| PHYS | 2402 | Physics for Scientists and <br> Engineers II |
| PHYS | 3301 | Electromagnetic Theory I <br> PHYS |
| 3402 | Modern Physics |  |
| PHYS | 3303 | Thermodynamics and Statistical <br> Mechanics |
| PHYS | 3404 | Optics |
| PHYS | 3305 | Classical Mechanics <br> PHYS |
| PHYS | 3303 | Quantum Mechanics |
| PHY | Q101 | Laboratory Research |

(two hours any combination)
Current Available Electives:
Each offered once every two years.
PHYS 4308 Seminar in Physics

PHYS
PHYS 3307 Introduction to Solid State Physics
PHYS 4309 Nuclear and Particle Physics
PHYS 4310 Introduction to Atomic Physics
GEOP 4301
PHYS 3308
PHYS 3309
PHYS 3310

PHYS 4309 Nuclear and Particle Physics (elective)

Spring Even Years

| PHYS | 1401 | General Physics I |
| :--- | :---: | :--- |
| PHYS | 1402 | General Physics II |
| PHYS | 2401 | Physics for Scientists and <br> Engineers I |
| PHYS | 2402 | Physics for Scientists and <br> Engineers II |
| PHYS | $3101 / 4101$ | Laboratory Research <br> PHYS |
|  | 3307 | Introductions to Solid State |
| PHYS | 4303 | Quantum Mechanics (elective) |
| PHYS | 4308 | Seminar in Physics (elective) |

## $\star$ Degree Plan Cycling

## DEGREE PLAN FOR A MAJOR IN PHYSICS

NOTE: In addition to listed courses, students are required to take six hours of physics electives and two hours of lab research.

Student Course Cycle \#1:
For Freshman entering on an even year.
Year 1: Fall PHYS 2401: Spring PHYS 2402
Year 2: Fall PHYS 3301: Spring PHYS 3404
Year 3: Fall PHYS 3303, PHYS 3305: Spring PHYS 4303

Year 4:Spring PHYS 3402
Student Course Cycle \#2:
For Freshman entering on an odd year.
Year 1: Fall PHYS 2401: Spring PHYS 2402
Year 2: Fall PHYS 3303, PHYS 3305
Year 3: Fall PHYS 3301: Spring PHYS 3404, PHYS 3402
Year 4: Spring PHYS 4303

Student Course Cycle \#3:
For Freshman entering on an odd year with no
previous physics or calculus.
Year 1: Fall PHYS 1401: Spring PHYS 1402
Year 2: Fall PHYS 2401: Spring PHYS 2402
Year 3: Fall PHYS 3301: Spring PHYS 3404, PHYS 3402
Year 4: Fall PHYS 3303, PHYS 3305: Spring PHYS 4303
Student Course Cycle \#4:
For Freshman entering on an even year with no

previous physics or calculus.
Year 1: Fall PHYS 1401: Spring PHYS 1402
Year 2: Fall PHYS 2401: Spring PHYS 2402
Year 3: Fall PHYS 3303, PHYS 3305: Spring PHYS 4303
Year 4: Fall PHYS 3301: Spring PHYS 3404, PHYS 3402

## Minor in Earth Science

Eighteen hours in geology (GEOL) or the combination of courses in (GEOL), Geography (GEOG), and Geophysics (GEOP); of which six hours must be advanced.

NOTE: To obtain a minor in earth science, the natural science core requirements has to be satisfied by a course sequence other than GEOL 1401/GEOL 1402.

## MINOR IN GEOGRAPHIC Information Systems

## Choose two from":

8 hours
GEOL 1401, GEOL 1402, PSCI 1421, PSCI 1422, PHYS 1401, PHYS 1402, PHYS 2401, PHYS 2402; ASTR 1401, ASTR 1402
GEOL 3308 Introduction to Geographic Information Systems 3 hours
GEOL 4408 Applications of Geographic Information Systems 4 hours or
BIOL 4403 Introduction to Remote Sensing Technology
GEOL 4309 Undergraduate Research in Geoscience 3 hours

Total 18 hours
*NOTE: The selected course sequence is to satisfy the minor in Geographic Information Systems. The
natural science core requirements should be satisfied with an additional course sequence.

## MinOR IN PHYSICAL SCIENCE

Eighteen hours in the physical sciences, of which six hours must be advanced.

NOTE: To obtain the minor in physical science, the natural science core requirements must be satisfied by a course sequence other than PSCI 1421/PSCI 1422.

Required Courses
PSCI 1421
PSCI 1422 Physical Science II
Electives Courses (Choose one)

8 hours 4 hours 4 hours

GEOG 2313 Principles of Physical Geography
PSCI 3310 Planet Earth and its Place in the Solar System
GEOL 3308 Introduction to Geographic Information Systems

Advanced Required Courses
(Choose one 3000 and one 4000 level) 7 hours
PSCI 3408 Survey of Physical Science 4 hours
GEOL 3401 Geomorphology 4 hours
GEOL 3403 Oceanography 4 hours
PSCI 4311 Topics in Physical Science 3 hours
GEOL 4309 Undergraduate Research in Geoscience

3 hours

Total
18 hours

## $\star$ Course Descriptions

A listing of courses offered by the Department of Physics and Geology can be found on pages 315 (GEOL) and 356 (PHYS).

# COLLEGE OF SOCIAL and Behavioral Sciences 



## General Overview

The College of Social and Behavioral Sciences is composed of five departments: Criminal Justice, Military Science, Political Science, Psychology and Anthropology, and Sociology.

The goals of the College of Social and Behavioral Sciences are based upon the importance for students that a liberal arts education has as the foundation for all university studies. Consequently, the college endorses the "Goals of a Liberal Arts Education" found on page 102 of this catalog.

## * Academic Programs

The college offers the Bachelor of Arts in anthropology, political science, psychology and sociology; the Bachelor of Science in psychology and criminal justice; the Bachelor of General Studies and the Bachelor of Applied Arts and Sciences. Students may minor in anthropology, criminal justice, military science, political science, psychology or sociology.

At the graduate level, students can earn master's degrees in criminal justice, psychology, public administration, sociology and interdisciplinary studies
with a concentration in anthropology. More information on master's degrees is available in the graduate catalog.

The College of Social and Behavioral Sciences helps provide students with a liberal arts education by offering instruction in several areas. Students also can satisfy the University core curriculum requirements for physical activity and social science courses (see pages 103-107) by taking classes within the college.

Additionally, the Department of Military Science provides ROTC training that can lead to commissioning in the Army, Army Reserve or National Guard.

Dr. Van Reidhead, Dean
Social and Behavioral Sciences Building, Room 234 1201 W. University Drive Edinburg, TX 78539-2999 Telephone: 956/381-3551

Fax: 956/381-2180
Web site: http://www.utpa.edu/colleges/cosbs.cfm
Dr. Kristin Croyle, Assistant Dean
Dr. Fred Ernst, Acting Assistant Dean
Social and Behavioral Sciences Building, Room 234 1201 W. University Drive Edinburg, TX 78539-2999 Telephone: 956/381-3551

Fax: 956/381-2180

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# BACHELOR OF APPLIED ARTS \& SCIENCES (BAAS) 

## Program Description

The Bachelor of Applied Arts and Sciences (BAAS) is specifically designed to allow individuals who hold an Associate of Applied Arts and Sciences degree in a technical or an occupational area from an accredited institution to earn a bachelor's degree. The BAAS degree will be awarded to individuals who have successfully completed (a) the liberal arts-based University core curriculum requirement (48 hours), (b) one of the professional development sequences (36 hours), and (c) the occupational or vocational coursework (48-51 hours) in meeting the requirements for an Associate of Applied Arts and Sciences degree.

## * Program Requirements

Academic Foundations
48 hours
Complete the University core curriculum requirements as shown on pages 103-107 of this catalog.

Six hours in two separate social science disciplines outside the University core curriculum requirements.

Three additional hours in either the same language or three hours of communication.

$\underset{\sim}{\sim}$ BAAS PROFESSIONAL DEVELOPMENT

Sequences
Before entering the BAAS Program, the student is assigned a degree counselor within the Office of the Dean. With the advice of the degree counselor, the student selects one of the Professional Development Sequences, and a degree plan is placed on record.

Sequences are as follows:

- Applied Business Technologies

36 hours
Students selecting this sequence will receive preparation in areas that can be applied to different occupations.

Required Courses
18 hours

ECON 3360
ECON 4362
MANA 3335

POLS 3323

POLS 3324

POLS 3343

Labor or Economics or
Managerial Economics or
Global Entrepreneurship
Communication Policy and Strategy
Introduction to Public Administration
Government Organization and Administrative Theory or
International Politics or


| POLS | 3314 | American State and Local Government |
| :---: | :---: | :---: |
| SOCI | 3324 | Sociology of Health |
| SOCl | 4352 | Social Inequality |
| Any advanced elective in business, political science or sociology. |  |  |
| Designated Electives 6 hours |  |  |
| Complete one of the following groups: |  |  |
| Group A |  |  |
| MANA | 3361 | Principles of Management and Organizational Behavior |
| MANA | 3362 | Human Resource Management |
| Group B |  |  |
| MARK | 3371 | Principles of Marketing |
| MARK | 3373 | Industrial Marketing |
| Group C |  |  |
| FINA | 3381 | Money and Banking |
| FINA | 3386 | Financial Institutions and Markets |

## Electives 12 hours

Select 12 hours of advanced non-business courses in conference with academic advisor.

## Liberal Arts

36 hours
Students selecting this sequence may be prepared for careers in hotel/motel management or state/federal services in which skills in the use of modern languages are required.

## Required Courses

18-24 hours
Language Other than English
Complete at least 12 advanced hours in the same language or 18 advanced hours in two languages (i.e., six and 12).

Other
MANA 3361 Principles of Management and Organizational Behavior
MANA 3362
Human Resource Management
Designated Electives
12 hours

## Business

Three hours of advanced electives in business.
Political Science
Select at least six hours from the following:
POLS 3314 American State and
Local Government

| POLS | 3323 | Introduction to Public Administration |
| :---: | :---: | :---: |
| POLS | 3324 | Government Organization and Administrative Theory |
| POLS | 4310 | Comparative Public Administration |
| POLS | 4320 | American Constitutional Law: Federalism |
| POLS | 4360 | American Executive Process |
| POLS | 4365 | American Administrative Process |
| POLS | 4367 | American Judicial Process |
| story |  |  |
| Select three hours from the following: |  |  |
| HIST | 4313 | 2oth Century America, 1917 to the Present |
| HIST | 4325 | The American Southwest after 1821 |
| HIST | 4353 | History of Mexican Culture |
| HIST | 4354 | Contemporary Mexico |
| HIST | 4363 | U.S.-Latin American Relations |
| HIST | 4374 | The Caribbean and Central |

Free Electives
6-o hours
Six advanced hours, to be selected in conference with academic advisor (hours required depend upon amount of language taken above).

Occupational or Vocational Emphasis 48-51 hours
Occupational or vocational work completed as a part of BAAS degree.

Other Requirements
At least 51 hours must be at the advanced level.
TOTAL
124 hours


## BACCALAUREATE IN

 GENERAL STUDIES
## $\star$ Program Description

Students taking the Baccalaureate in General Studies (BGS) will complete a minimum of 124 hours with at least 51 hours of advanced coursework. Students will develop their academic programs in consultation with the

general studies program director in the Office of the Dean, College of Social and Behavioral Sciences, and the academic advisors for the departments or disciplines involved.

## * PROGRAM REQUIREMENTS

Core Curriculum Requirements
48 hours
Complete the University core curriculum
requirements as shown on pages 103-107 of this catalog.
College Core
9 hours
Six hours in two separate social science disciplines outside the core curriculum.

Three additional hours in either the same language or three hours of communication.

Required Courses:
54 hours
Discipline 1
18 hours
(minimum of 12 advanced hours)
Discipline 2 18 hours (minimum of 12 advanced hours)
Discipline 3 18 hours
(minimum of 12 advanced hours)
The three disciplines selected may come from any academic department within the University that offers a major or minor. Students must complete all the requirements for each minor. Some minors may require more than 18 hours per minor.

## Free Electives

22 hours
Including a minimum of 15 advanced hours.

Other Requirements
A minimum of 51 hours of advanced coursework.
TOTAL
124 hours

## $\boldsymbol{\omega}_{\text {Criminal }}$ JUSTICE

Dr. S. George Vincentnathan, Department Chair Social and Behavioral Sciences Building, Room 321

1201 W. University Drive
Edinburg, TX 78539-2999
Telephone: 956/381-3566
Fax: 956/381-2490
E-mail: gvincent@utpa.edu
Full-time Faculty
Appiahene-Gyamfi, Joseph, Associate Professor
Dantzker, Mark, Professor
Dearth, Daniel K., Associate Professor
Ethridge, Philip, Associate Professor
Resendiz, Rosalva, Assistant Professor
Vincentnathan, S. George, Professor
Vincentnathan, Lynn, Assistant Professor
White, Thomas, Assistant Professor

Lecturers<br>Bowe, George<br>Gonzales, Stanley<br>Lynch, Robert

## * GENERAL OVERVIEW

The mission of the Department of Criminal Justice is to impart knowledge and promote critical thinking about the crime problem and its control through criminal justice institutions and public cooperation. Students receive comprehensive criminal justice education with courses taken in the areas of criminal law, criminology, policing, courts, corrections and crime prevention, in the context of a general and liberal arts education with background in the social sciences. The main aim of the department is to help students develop the knowledge and analytical abilities to become agents of change in criminal justice organizations and serve well the communities in which they are located.

The learning objectives of the Department of Criminal Justice for the students are to:

1. Develop the knowledge of criminal justice theories and practices and professional abilities to address criminal justice issues for crime control.
2. Gain a liberal arts education to help understand
human behavior and cultural diversity, and follow ethically fair practices and integrative values to serve and live in a democratic society.
3. Develop abilities and skills to analyze crime and criminal justice issues in a disciplined and critical manner for policy-making and problem-solving.

## DEGREE REQUIREMENTS

## MAJOR IN CRIMINAL JUSTICE

Upon completion of all requirements students will be awarded a Bachelor of Science in Criminal Justice (BSCJ) degree with a major in criminal justice.

University Core Curriculum
Requirements
51 hours
Complete the core curriculum requirements as shown on pages 103-107 of this catalog.

NOTE: Under Humanities and Visual and Performing Arts, the Criminal Justice Department strongly advises students to take Philosophy 2390 - Professional Ethics.

## College Core and

Social Science Support Courses
27 Hours
Modern Language 3 hours
Same language as taken to complete University core curriculum requirements.

Introductory Statistics
3 Hours
Select one course only:
SOCI 2301 Statistics for Behavioral Sciences
PSY 2401 Basic Statistics for Psychologists
QUMT 2341 Elementary Business and Economic Statistics
MATH 2330 Elementary Statistics and Probability

Political Science
6 hours
Select one course only from each group:
Group One:
POLS 4321
POLS 4367

Group Two:
POLS 3314

POLS 3316 American Public Policy

Introduction to Public Administration
POLS 3324 Government Organization and Administrative Theory
POLS 3325 Public Personnel Administration
POLS 4384 Seminar in Local Government Problems

Psychology
3 hours
Advanced elective.
Sociology
6 hours
Advanced electives.

Free Electives
6 hours
Criminal Justice Core
21 hours
CRIJ 1301
CRIJ 1306
CRIJ 2313
CRIJ 2328
CRIJ 3303
CRIJ 3304
CRIJ 4399
Introduction to the Criminal Justice System
Court Systems and Practices Correctional Systems and Practices
Police Systems and Practices Criminology
Criminal Justice Research Methods
Criminal Justice System-Capstone

Criminal Justice Electives 15 hours
You must have 12-15 advanced hours, depending on
the selected minor, from the following:
CRIJ 1307 Crime in America
CRIJ 1310 Fundamentals of Criminal Law
CRIJ 1313 Juvenile Justice System
CRIJ 2314 Criminal Investigation
CRIJ 2323 Legal Aspects of Law Enforcement
CRIJ 2326 Police-Community Relations
CRIJ 2335 Legal Aspects of Corrections
CRIJ 3341 Probation and Parole
CRIJ 3344 Gender, Crime and Criminal Justice
CRIJ 3355 Criminal Evidence and Proof
CRIJ 4311 Criminal Justice Administration
CRIJ 4312 Civil Liability in Criminal Justice
CRIJ 4313 Current Issues in Law Enforcement
CRIJ 4314 Private Security and Loss
Prevention
White-Collar and Organized Crime
Current Issues in Corrections
Current Issues in the Courts
Law and Society
Crime Prevention Techniques
Comparative Criminal Justice Systems
Special Topics in Criminal Justice
Independent Studies in Criminal Justice
Field Internship Experience

Each student must complete a minor selected from a discipline other than criminal justice. The specific minor should be selected in consultation with a faculty advisor. Departments vary in the number of required total semester hours and number of required advanced hours in their respective minors. Some departments offer minors requiring only six advanced hours but allow additional advanced hours to be selected from electives.

- Summary of Degree Requirements

General Education Core
51 hours
College Core and
Social Science Support Courses 27 hours
Criminal Justice
36 hours
Minor
18 hours
Total
Advanced Coursework Should Total
132 hours
51 hours

## Minor in Criminal Justice

The criminal justice minor requires the completion of 18 semester hours in criminal justice. Nine semester hours must be advanced. Criminal justice majors cannot minor in criminal justice.

| Required Criminal Justice Courses | 9 hours |  |
| :---: | :---: | :--- |
| CRIJ | 1301 | Introduction to Criminal Justice |
| CRIJ | 2328 | Police Systems and Practices |
| CRIJ | 2313 | Correctional Systems and Practices |


| Criminal | Ele |  | 9 hours |
| :---: | :---: | :---: | :---: |
| Selec | e cours | ses fr |  |
| CRIJ | 3303 |  | ustice |
| CRIJ | 3304 | Crim | Methods |
| CRIJ | 3341 | Pro |  |
| CRIJ | 3355 | Crim |  |
| CRIJ | 4311 | Crim | ation |
| CRIJ | 4312 | Civi | ustice |
| CRIJ | 4313 | Cur | rcement |
| CRIJ | 4314 |  |  |
| CRIJ | 4321 | Wh | ed Crime |
| CRIJ | 4343 | Cur |  |
| CRIJ | 4355 | Cur |  |
| CRIJ | 4356 | Law |  |
| CRIJ | 4357 | Crim | ogies |
| CRIJ | 4361 |  |  |
| CRIJ | 4362 | Spe | Justice* |
| CRIJ | 4363 |  |  |
| (RIJ | 4364 | Fiel |  |

*Can be taken only once for credit.

## COURSE PREREQUISITES

Enrollment in advanced courses (3000 and 4000) requires successful completion of 45 semester hours or more (nine of which must be in criminal justice) for 3000-level courses; and completion of 60 semester hours or more ( 12 of which must be in criminal justice) for 4000-level courses; or permission of instructor.

## * Course Descriptions

A listing of courses offered by the Department of Criminal Justice can be found on page 281.

## MILITARY SCIENCE

LTC André E. Dean, Department Chair ROTC
Lamar Building B, Room 104
1201 W. University Drive
Edinburg, TX 78539-2999
Telephone: 956/381-3600
Fax: 956/381-3603
E-mail: rotc@utpa.edu
Full-time Faculty
Rivers, Christopher, Col., Assistant Professor Ruiz, Arturo, Maj., Assistant Professor Maloy, Lee R., Master Sgt., Senior Military Instructor Miles, Michael G., Master Sgt. (Retired), Enlisted Instructor

## * General Overview

The departmental objective is to develop selected men and women with potential to serve as commissioned officers in the Active Army, National Guard or Army Reserve. The leadership and management experience gained through the ROTC and service as a commissioned officer will benefit the student in civilian as well as in military service and national defense pursuits. Students in the program have the opportunity to:


1. Enhance leadership and managerial potential.
2. Attain basic understanding of military fundamentals and national security.
3. Attain clear understanding of the concept of military art and science.
4. Develop a strong sense of personal honor, integrity and individual responsibility.

## - ROTC Faculty Advisory Committee

The ROTC Faculty Advisory Committee, composed of nine advisors from different departments, serves as liaison with the Department of Military Science and helps provide guidance on career opportunities with the Army, Army Reserve or National Guard for students of other departments at The University of Texas-Pan American.

## * ARMY SCHOLARSHIP PROGRAM

Students who meet prerequisites may compete for nationally or state-awarded U.S. Army scholarships that pay for tuition, books, fees and other purely educational costs and provide a tax-free monthly subsistence allowance for 10 months of each year the scholarship is in effect. Free room and board is available on campus for a limited number of students, with priority going to ROTC scholarship winners. Several application deadlines exist. Contact the Department of Military Science for details.

## - Veterans Assistance

Veterans who enroll in upper-level military science receive a tax-free monthly subsistence allowance for 10
months each of the two years, in addition to benefits provided by the Veterans Administration, Army Reserve or National Guard.

- Simultaneous Membership Program (SMP) Eligible students are allowed to participate with Army Reserve units or the National Guard combined with College ROTC. In addition to Reserve or National Guard pay, the student receives ROTC pay. In the Simultaneous Membership Program, the student's pay will be elevated to the rank of E-5 (sergeant) and the student will fill the position of a junior leader in that unit. Upon completion of a bachelor's degree and the ROTC program, the student may be commissioned in the Active Army, Army Reserve or National Guard in the rank of second lieutenant.


## - Departmental Activities

The Department of Military Science sponsors several extracurricular activities such as the annual Military Ball, Dining-Out, JROTC Day, Field Training Exercises and Guadalupe River canoe trip. Additional opportunities to participate in team events are available in Color Guard, Bronc Club and Ranger Challenge.

## - Army Training

Selected cadets enrolled in the course may be eligible to compete for attendance to either the Airborne, Air Assault, Northern Warfare, Mountain Warfare or Cadet Troop Leadership Training. Selection is based upon motivation, physical condition and performance in military science.

## Minor in Military Science

The Department of Military Science offers a minor in military science and a commission as an officer in the Active Army, Army Reserve or Army National Guard through the ROTC program on the Edinburg campus.

- No Commitment or Obligation for Lower-Level Courses

Students need not seek a career in the U.S. Army to enroll in lower-level courses such as marksmanship and first aid, survival and land navigation training, and basic leadership, which provide the opportunity to increase individual skills and knowledge in leadership and management techniques in and outside the classroom. Lower-level courses also fulfill the physical education requirement for the University core curriculum requirement.

## - Requirements for Advanced Military Science

Standing and Commissioning

1. Complete four semesters of lower-level ROTC courses or have advanced credit as a veteran, or from USAR/ARNG Basic Training, ROTC Basic Camp, or have JROTC credit and approval.
2. Maintain full-time student status.
3. Pass a military physical examination.
4. Pass the ROTC Physical Aptitude Examination.
5. Maintain an overall GPA of 2.0.
6. Sign an Advanced ROTC and Commissioning Agreement.
7. Successfully complete four semesters of advanced ROTC courses.
8. Successfully complete ROTC Leadership Camp.
9. Successfully complete an undergraduate degree program.
10. Complete at least one departmentally approved Professional Military Education course from each of the areas listed: written communication skills, human behavior, computer literacy, mathematics and military history.

- Minor Requirements

18 hours: ROTC 3202 plus 16 hours of advanced military science courses. (ROTC 3401, ROTC 3402, ROTC 4401, ROT(4403).

## $\star$ Course Descriptions

A listing of courses offered by the Department of Military Science can be found on page 370.

## 3 Political SCIENCE

Dr. J.L. Polinard, Department Chair<br>Social and Behavioral Sciences Building, Room 208<br>1201 W. University Drive Edinburg, TX 78539-2999<br>Telephone: 956/381-3341<br>Fax: 956/381-2805<br>E-mail: polinard@utpa.edu<br>Full-time Faculty<br>Alianak, Sonia, Assistant Professor<br>Baik, Ellen, Assistant Professor<br>Bokina, John, Professor Cardona, Debra, Lecturer Chen, Xi, Assistant Professor<br>Freeman, Samuel, Associate Professor<br>Guzman, Priscilla, Lecturer<br>Hayes, Robert, Lecturer<br>Jackson, Ed, Lecturer<br>McAdams, Glynn, Assistant Professor<br>Monforte, Jessica Lavariega, Assistant Professor<br>Morgan, Glynn, Associate Professor<br>Mounce, Gary, Associate Professor Polinard, J.L., Professor<br>Turk, William, Assistant Professor<br>Wenzel, James P., Associate Professor Wrinkle, Robert, Professor

## A GENERAL OVERVIEW

Political Science majors and minors take courses in six fields:

- American Government and Politics,
including local, state and national
- Comparative Government and Politics
- International Relations
- Methods of Political Science Research
- Political Theory
- Public Administration

Political science faculty and students are actively involved in such campus activities as pre-law advising, student government and other student political activities. Students majoring in political science may pursue active careers in public administration, law,
national, state and local government, diplomatic services, journalism, and teaching.

## Pre-LAW

Although pre-law advising at UT Pan American is located in the Department of Political Science, any undergraduate major will offer a student the opportunity to prepare for law school. Students interested in a career in law should obtain the pre-law handout, available in the main office of the Department of Political Science (Social and Behavioral Sciences Building, Room 208). For additional information, please contact Dr. J.L. Polinard at 956/381-3341.

## - Certificate of Legal Reasoning

As part of UTPA's pre-law program, the University offers a Certificate in Legal Reasoning. Students can obtain this certificate by completing the following courses:
\(\left.$$
\begin{array}{lcl}\text { PHIL } & 1320 & \begin{array}{c}\text { Introduction to Logic } \\
\text { or }\end{array}
$$ <br>
PHIL \& 2330 \& Ethics <br>
ENG \& 4325 \& \begin{array}{l}Composition Techniques <br>
American Constitutional Law: <br>

POLS\end{array} 4320\end{array} $$
\begin{array}{c}\text { Federalism }\end{array}
$$\right]\)| American Constitutional Law: |  |
| :---: | :---: |
| COLS | 4321 |

## * Degree Requirements

## Major in Political Science <br> 124 hours

 University Core Curriculum Requirements 48 hoursComplete the University core curriculum requirements as shown on pages 103-107 of this catalog, including POLS 2313 and 2314 or POLS 2387 and 2388.

College and Departmental
Core Requirements
15 hours
Three hours of modern language in the same language as taken to complete the University core curriculum requirements.

Three hours of social science in a discipline other than the discipline taken to meet the core curriculum social science requirement.

Three hours of Introductory Statistics (MATH/STAT 2330, PSY/ANTH 2401, SOCI 2301, or QUMT 2341. MATH/ STAT 2330 satisfies the core curriculum mathematics
requirement).
Six hours from two of the following three areas:
a. Introduction to Political Science (POLS 1333).
b. Introduction to Political Economy (POLS 2334).
c. Economics (ECON 2301 or ECON 2302).

Designated Advanced Coursework 27 hours
Six hours in American Government and Politics
Three hours in Comparative Government
Three hours in International Relations
Three hours in Methods of Political Science Research (POLS 3331)
Three hours in Political Theory
Three hours in Public Administration
Six hours of advanced Political Science electives
Hours for Minor and Advanced Electives 34 hours

- Minor in Political Science

Eighteen hours in political science, of which nine hours must be advanced.

Required Courses
POLS 2313

POLS 2314
U.S. and Texas

Government and Politics
U.S. and Texas

Government and Politics

Designated Electives
POLS 1333

POLS 2334 Political Economy
Nine advanced hours in political science.

- Teacher Certification
in Social Sciences: 129 hours
Seventy-five hours in social sciences and education.
This is an interdisciplinary program designed specifically for students seeking certification in the social sciences in order to teach government, history and economics at the high school level.

University Core Curriculum Requirements 48 hours
Complete the University core curriculum
requirements as shown on pages 103-107 of this catalog.
College of Social and Behavioral
Sciences Requirements
6 hours
Three hours of modern language (in the same
language as taken to satisfy the University core
curriculum language requirements).

Three hours of social science in a discipline other than political science or the discipline taken to satisfy the University core curriculum requirements.

*Part of the 48-hour University core curriculum requirements.

| Required | vanc | 30 hours |
| :---: | :---: | :---: |
| HIST | 3303 | Geography and Environment in History |
| HIST | 3330 | A General Survey of the History of Texas |
| HIST | 3332 | Historiography and Methods |
| EDHS | 4301 | Foundations of Education |
| EDHS | 3305 | Instructional Methods for English Language Learners with Exceptionalities in High Schools |
| EDHS | 4302 | Instructional Planning and Assessment |
| EDHS | 4303 | Instructional Strategies and Classroom Management |
| EDHS | 4398 | Integrated Internship II: 8-12 |
| EDHS | 4399 | Supervised Internship II: 8-12 |
| READ | 4351 | Developmental Reading in Secondary Schools |

Designated Advanced Electives
33 hours
History: Select 12 advanced hours in history. Three hours must be selected from each of the three following history fields: American, Latin American, European.

Political Science: Select 15 advanced hours in political science. Nine hours must be from the following designated courses:

| POLS | 3314 | American State and Local <br> Government |
| :---: | :---: | :---: |
| POLS | 3316 | American Public Policy |
| POLS | 3333 | Classical Political Theory |
| POLS | 4320 | American Constitutional Law: |
|  | Federalism* |  |


*Only one course from POLS 4320, 4321 and 4367 may be counted toward fulfilling the nine-hour requirement.

Economics: Select six hours from the following designated courses:

| ECON | 3351 | Macroeconomic Theory |
| :--- | :--- | :--- |
| ECON | 3352 | Microeconomic Theory |
| ECON | 3355 | Economic Development |
| ECON | 4359 | History of Economic Thought |

Total Required for Graduation 129 hours

Additional Requirements

1. Students must have a 2.5 cumulative GPA in their history, political science and economics courses.
2. Students must have a "C" or better in each of their history, political science and economics courses.

## * Course Descriptions

A listing of courses offered by the Department of Political Science can be found on page 359.


# PSYCHOLOGY AND ANTHROPOLOGY 

Dr. Valerie James-Aldridge, Department Chair Social and Behavioral Sciences Building, Room 356 1201 W. University Drive Edinburg, TX 78539-2999<br>Telephone: 956/381-3329<br>Fax: 956/381-3333<br>E-mail: psyanthdept@utpa.edu<br>Web site: http://www.utpa.edu/dept/psych-anth<br>Dr. Thomas Pozorski, Anthropology Coordinator Social and Behavioral Sciences Building, Room 322 1201 W. University Drive Edinburg, TX 78539-2999 Telephone: 956/381-2865<br>Fax: 956/381-3333<br>E-mail: psyanthdept@utpa.edu<br>Web site: http://www.utpa.edu/dept/psych-anth/ anthindex.html

Full-time Faculty
Aldridge, James W. Jr., Professor
Benham, Grant, Assistant Professor
Cain, Roy E., Associate Professor
Croyle, Kristin, Assistant Professor
Eisenman, Russell, Associate Professor Ernst, Fred, Professor
Gasquoine, Philip, Associate Professor
Gonzalez, Genaro, Professor
James-Aldridge, Valerie G., Associate Professor Jou, Jerwen, Professor
Kendrick, Sherrill, Assistant Professor
Montgomery, Gary T., Professor
Rogers, Darrin, Assistant Professor
Weimer, Amy, Assistant Professor
Winkel, Mark H., Associate Professor
Wisener, Robert H. III, Assistant Professor

## * GENERAL OVERVIEW OF PSYCHOLOGY PROGRAM

A major is offered in psychology with either a Bachelor of Arts or a Bachelor of Science degree. A demand exists for baccalaureate psychology graduates in public and private agencies dealing with human relations.

However, the more challenging and specialized fields in psychology usually require further study beyond the bachelor's degree. High academic standards are required of those students planning to do graduate work, and the program is designed to ensure that students planning further study acquire a background that will maximize their chances of success in graduate school. Training in research methods, statistics and theory are required of all majors. According to their own interests, majors take further courses in the areas of clinical, experimental, social and developmental psychology. Students pursuing the bachelor's degree also take further courses in the natural sciences and computer science.

Whenever possible, students are involved in the many ongoing research programs of the department, giving them practical experience in the discipline.

In addition, the department offers a minor in psychology.

## $\star$ Mission Statement

The Department of Psychology and Anthropology is an academic administrative unit within the College of Social and Behavioral Sciences at The University of Texas-Pan American. The department has been established to facilitate accomplishing the University mission to meet the higher education needs of the citizenry of South Texas and the state of Texas. The department is committed to excellence in instruction, student performance, research, scholarly accomplishment and professional service in the disciplines constituting psychology and anthropology.

The Department of Psychology and Anthropology strives to fulfill its responsibilities by providing quality undergraduate academic programs in anthropology and psychology. At the graduate level, the department provides opportunities for students with baccalaureate degrees to pursue advanced study in clinical and experimental psychology. (More information on graduate programs is available in the Graduate (atalog.) The department is committed to providing an environment of academic freedom and responsibility so that faculty may develop and implement successful teaching activities that ensure high standards of
instruction and student performance.
The Department of Psychology and Anthropology recognizes that its faculty has a commitment to those research and creative activities indicative of scholarly excellence. The department attempts to nurture and support such activities so that faculty may maintain currency in their knowledge of subject matter, vibrancy in their teaching, dedication to their respective disciplines and interest in extending the boundaries of human knowledge and understanding.

The Department of Psychology and Anthropology is also committed to providing effective instructional opportunities for all students at the University, regardless of their major area of concentration. The department attempts to meet this goal by providing students with instruction in several areas of study that ground the liberal arts tradition. To this end, the department provides instructional opportunities for all students to develop further the following characteristics indicative of a university-educated person:

1. An inquiring attitude that acknowledges the manysided nature of most important questions, recognizes the need to examine inherited judgments and reveals a desire for continued learning and creative expression.
2. The ability to use words accurately and effectively, and to communicate clearly in oral and written formats.
3. The ability to analyze complex problems and to synthesize facts and ideas.
4. An appreciation for the responsibilities of the individual to family and society; skill in serving as a constructive member in groups and organizations; sensitivity to the need for informed, independent, moral and ethical decisions.
5. Knowledge of political and social systems in the United States and other nations, and their interrelationships.
6. An understanding of self, along with an empathy for the strengths, weaknesses, rights and needs of others, as well as the ability to relate to others with human understanding.

The Department of Psychology and Anthropology is also committed to sponsoring service activities that meet the intellectual and cultural interests of the University and the community that the University serves.

## * Degree Requirements

## MAJOR IN PSYCHOLOGY

University Core Curriculum Requirements 48 hours
Complete the University core curriculum
requirements as shown on pages 103-107 of this catalog.

College Core 9 hours
Six hours in two separate social science disciplines outside the major.

Three additional hours in either the same language as core curriculum language or three hours of communication.

Core Courses

| PSY | 1310 |
| :--- | :--- |
| PSY | 2401 |
| PSY | 3325 |
| PSY | 3343 |
|  |  |
| PSY | 3353 |

Electives
Select 15 hours of psychology courses, nine of which must be advanced.

Other Requirements for BA or BS Degree in Psychology
Please be aware of the "Requirements for a Bachelor's Degree" enumerated on pages 70-71. These include completion of a total of 124 hours of coursework, completion of a minor and completion of a minimum of 51 hours of upper-level (3000/4000) coursework.

## Major in Psychology (BS Degree)

University Core Curriculum Requirements 48 hours
Complete the University core curriculum
requirements as shown on pages 103-107 of this catalog.
College Core
9 hours
Six hours in two separate social science disciplines outside the major.

Three additional hours in either the same language as University core curriculum language or three hours of communication.

Core Courses
13 hours
PSY 1310
PSY 2401
PSY 3325
PSY 3343

PSY 3353
Introduction to Psychology
Basic Statistics for Psychologists
Research Methods in Psychology
Tests and Measurements
in Psychology
Physiological Psychology
Designated Electives
Select one course from each of the following four areas (12 hours):
a). Cognitive Foundations

PSY 3373 Sensation and Perception
PSY 4319 Cognitive Processes

| PSY | 4320 | Memory |
| :---: | :---: | :---: |
| PSY | 3345 | Psychology of Learning |
| b). Theoretical Foundations |  |  |
| PSY | 4318 | Theories of Learning |
| PSY | 4363 | Systems and Theories in Psychology |
| PSY | 4333 | Theories of Personality |
| C). Developments/Social/Cultural Foundations |  |  |
| PSY | 3324 | Social Psychology |
| PSY | 3332 | Infancy Through Adolescence |
| PSY | 3333 | Psychology of Adulthood: Maturity and Old Age |
| PSY | 3337 | Developmental Psychology: <br> Lifespan |
| PSY | 3338 | Gender Development |
| PSY | 4326 | Cross-Cultural Psychology |
| PSY | 4328 | Psychological Issues in the Mexican-American Community |
| d). Applications |  |  |
| PSY | 3340 | Stress Management |
| PSY | 3405 | Behavior Modification |
| PSY | 4313 | Abnormal Psychology |
| PSY | 4342 | Psychology and Law |
| PSY | 4343 | Human Factors |

## Electives

Nine hours of psychology.

## Other Requirements

Any eight hours of science in addition to the University core curriculum science requirement from the following can be taken in different disciplines: astronomy, biology, anatomy and physiology, chemistry, geology, physical science, and physics.

Please be aware of the "Requirements for a Bachelor's Degree" enumerated on pages 70-71. These include completion of a total of 124 hours of coursework, completion of a minor, and completion of a minimum of 51 hours of upper-level (3000/4000) coursework.

## MINOR IN PSYCHOLOGY

Eighteen hours in Psychology, of which six must be advanced.

Required Course
PSY 1310
Introduction to Psychology

## * Course Descriptions

A listing of psychology courses can be found on page 363.

# ANTHROPOLOGY 

Full-time Faculty<br>Glazer, Mark, Professor<br>Hinojosa, Servando, Assistant Professor<br>Pozorski, Shelia, Professor<br>Pozorski, Thomas, Professor

## $\star$ General Overview of ANTHROPOLOGY PROGRAM

The primary focus of both the major and minor is on anthropology as a broad-based discipline, with special emphasis on cultural anthropology, physical anthropology, archaeology and folklore. Special topic courses are also available in advanced folklore, anthropological theory and methods and New World archaeology.

A major or minor in anthropology is particularly appropriate for professionals who plan to practice in South Texas or a comparable area made special by the meeting of different cultures. Anthropology also provides an excellent preparation for careers in international business, government, politics, criminal justice, social work and medicine or other health-related professions. The more specialized fields in anthropology usually require further study beyond the bachelor's degree.

## * Mission Statement

The Anthropology Program is an academic unit within the College of Social and Behavioral Sciences at The University of Texas-Pan American. The program has been established to facilitate accomplishing the University's mission to meet the higher education needs of the citizenry of South Texas and the state of Texas. The program is committed to excellence in instruction, student performance, research, scholarly accomplishment and professional service in the discipline of anthropology.

The Anthropology Program strives to fulfill its responsibilities by providing quality undergraduate academic programs in anthropology. Emphasis is placed on exposing students to a holistic approach to anthropology that incorporates the three major subfields - cultural anthropology, physical anthropology and archaeology. At the graduate level, the program
provides opportunities for students with baccalaureate degrees to fulfill an anthropology concentration for an interdisciplinary master's degree and to fulfill required graduate hours outside one's field of study to earn a master's degree in various disciplines at the University. The Anthropology Program is committed to providing an environment of academic freedom and academic responsibility so that faculty may develop and implement successful teaching activities that ensure high standards of instruction and student performance.

The program recognizes that its faculty has a commitment to those research and creative activities indicative of scholarly excellence. The program attempts to nurture and support such activities so that faculty may maintain currency in their knowledge of subject matter, vibrancy in their teaching, dedication to their respective disciplines, and interest in extending the boundaries of human knowledge and understanding.

The Anthropology Program is also committed to providing effective instructional opportunities for all students at the University, regardless of their major area of concentration. The program attempts to meet this goal by providing students with instruction in several areas of study that ground the liberal arts tradition. To this end, the program provides instructional opportunities for all students to develop further the following characteristics indicative of a university-educated person:

1. Learning about anthropology fosters an inquiring attitude that acknowledges the many-sided nature of most important questions, recognizes the need to examine inherited judgments and reveals a desire for continued learning and creative expression.
2. A holistic approach to anthropology hones a person's ability to use words accurately and effectively and to communicate clearly in oral and written formats.
3. Anthropological thinking nurtures the ability to analyze complex problems and to synthesize facts and ideas.
4. Exposure to the field of anthropology encourages an appreciation for the responsibilities of the individual to family and society; skill in serving as a constructive member in groups and organizations; and sensitivity to

the need for informed, independent, moral and ethical decisions.
5. Learning about anthropology increases knowledge about political and social systems in the United States and other nations, and their interrelationships; such multicultural perspectives can foster greater understanding, tolerance and respect for different lifestyles and viewpoints.
6. Anthropology encourages an understanding of self, along with an empathy for the strengths, weaknesses, rights and needs of others, as well as the ability to relate to others with human understanding.

The Anthropology Program is also committed to sponsoring service activities that meet the intellectual and cultural interests of the University and the community that the University serves.

## * Degree Requirements

The department offers a major in anthropology leading to the Bachelor of Arts degree.

MAJOR IN ANTHROPOLOGY
University Core Curriculum Requirements 48 hours
Complete the University core curriculum
requirements as shown on pages 103-107 of this catalog.
College Core 9 hours
Six hours in two separate social science disciplines outside the major.

Three additional hours in either the same language or three hours of communication.

| Core Courses |  |  |
| :---: | :---: | :---: |
| ANTH | 1323 | Introduction to Cultural <br> Anthropology |
| ANTH hours |  |  |
| ANTH | 1324 | 1342 | | Human Evolution |
| :---: |
| Introduction to Archaeology |
| ANTH |
| ANTH | 1353 Introduction to Folklore 4345 Anthropological Theory and | Methodology |
| :---: | :---: |

Designated Electives
21 hours
Select 21 hours from anthropology; a substitution for one three-hour course may be chosen from the following list of related courses.

Related courses
$\begin{array}{lll}\text { ENG } & 3319 & \text { Descriptive Linguistics } \\ \text { ENG } & 3321 & \text { Language and Culture }\end{array}$

## $\mathcal{H}^{\wedge}$ OTHER REQUIREMENTS

A minimum of 18 hours in anthropology must be at the advanced level.

Please be aware of the "Requirements for a Bachelor's Degree" enumerated on pages 70-71. These include completion of a total of 124 hours of coursework, completion of a minor and completion of a minimum of 51 hours of upper-level (3000/4000) coursework.

## MINOR IN ANTHROPOLOGY

Eighteen hours in anthropology, of which six hours must be advanced.

| Required Courses <br> ANTH <br> 1323 | Introduction to Cultural <br> Anthropology |  |
| :---: | :---: | :---: |
| ANTH | 1324 | Human Evolution <br> ANTH |
| 4345 | Anthropological Theory and <br> Methodology |  |

## MINOR IN FOLKLORE

The minor in folklore requires 18 credit hours* as delineated below:

Required Courses 3 hours
ANTH 1353 Introduction to Folklore
15 Hours from:
15 hours
ANTH 1354
The Anthropology of Expressive Culture or
MUS 1308 Mexican Folk Music
ANTH 3344
ANTH 4353
ANTH 4355
Archive Studies
Folklore of the Rio Grande Valley
Psychology and Mythology or
PSY 4355 Psychology and Mythology
ANTH 4350 Mexican-American Folk Medicine
"Only six hours can be taken in courses at the 1300 level.

## Course Descriptions

A listing of anthropology courses can be found on page 248.

## SOCIOLOGY

Dr. Guang-zhen Wang, Department Chair Social and Behavioral Sciences Building, Room 344 1201 W. University Drive Edinburg, TX 78539-2999 Telephone: 956/381-3321

Fax: 956/381-2343 E-mail: gzwang@utpa.edu

Dr. Kelly F. Himmel, Advisor Undergraduate Program
Social and Behavioral Sciences Building, Room 338
Telephone: 956/381-2367 3321
Fax: 956/381-2343
E-mail: kellyh@utpa.edu
Full-time Faculty
Bastida, Elena, Professor
Guerra, Ramon S., Associate Professor Himmel, Kelly F., Associate Professor
Liebowitz, Stephen W., Associate Professor
Raajpoot, Uzzer A., Associate Professor Richardson, D. Chad, Professor Su, Dejun, Assistant Professor Wang, Guang-zhen, Professor

## * General Overview

The Department of Sociology offers a major in sociology leading to the Bachelor of Arts degree, as well as a minor in sociology.

Students majoring and minoring in sociology receive excellent preparation for careers in public and private agencies dealing in human relations. The more challenging and specialized fields in sociology usually require further study beyond the bachelor's degree. Sociology also provides excellent background for those persons considering careers in such fields as education, health, law, law enforcement, business and journalism.

## * Degree Requirements

H MAJOR IN SOCIOLOGY
University Core Curriculum Requirements 48 hours
Complete the University core curriculum
requirements as shown on pages 103-107 of this catalog. Students are strongly recommended to take SOCI 1313 or 1387 as part of this requirement.

College of Social and Behavioral Sciences Requirements

Six additional hours of social science courses in two separate social science disciplines (anthropology, criminal justice, economics, political science or psychology) outside sociology.

Three hours in the same modern language used to satisfy the University core curriculum requirement or three hours of communication (COMM 1303, 1313).

Core Courses
18 hours
SOCI 1313 Principles of Sociology
SOCI 2301 Statistics for the Behavioral Sciences
SOCI 3301 Quantitative Social Research
SOCI 4333
Social Theory

Select two from the following three courses:
SOCI 3302 Qualitative Social Research
SOCI 4334 Contemporary Social Theory
SOCI 4352 Social Inequality

Designated Electives
15 hours
Select 15 hours of sociology, of which at least nine hours must be advanced.

Other Requirements for BA in Sociology
Please be aware of the "Requirements for a Bachelor's Degree"enumerated on pages 70-71. These include completion of a total of 124 hours of coursework, completion of a minor, and completion of a minimum of 51 hours of upper-level (3000/4000) coursework.

## MINOR IN SOCIOLOGY

Eighteen hours in sociology, of which nine hours must be advanced; must include the following:

| SOCI | 1313 | Principles of Sociology <br> Social Theory <br> or |
| :---: | :---: | :---: |
| SOCI | 4333 |  |
| SOCI | 4352 | Social Inequality |

## $\star$ Course descriptions

A listing of courses offered by the Department of Sociology can be found on page 372.



## d Course CoDes

Every course at The University of Texas-Pan American is identified by a subject code with a maximum of four letters and a four-digit number that specifies the level and the number of hours of credit for the course.

Course numbers show both the collegiate level at which they are offered and the semester hour value of the course. The first digit shows the level and the second digit shows the credit hours. The last two digits are departmental designations. For example, SPAN 1301 is a Spanish course given in the freshman year that carries three hours of credit per semester. All undergraduate courses ending in the numbers 87 and 88 are honors courses.

For more information on course numbering, see pages 27-30. The subject codes listed below correspond to the following subjects and departments:

| Code | Subject |
| :---: | :---: |
| ACC | Accounting |
| ANTH | Anthropology |
| ART | Art |
| ASTR | Astronomy |
| BIBL | Bible |
| BIOL | Biology |
| BLAW | Business Law |
| CHEM | Chemistry |
| CIS | Computer Information Systems |
| CLSC | Clinical Lab Sciences |
| CMPE | Computer Engineering |
| COMD | Communication Disorders |
| COMM | Communication |
| CRIJ | Criminal Justice |
| CSCI | Computer Science |
| DANC | Dance |
| DIET | Dietetics |
| ECO | Economics |
| ED | Education |
| EDAC | Education: |
| EDAK | Education: |
| EDAL | Education: |
| EDBE | Education: |
| EDCI | Education: |
| EDEC | Education: |
| EDMS | Education: |
| EDHS | Education: |
| ELEE | Electrical Engineering |
| EMAT | Math |
| ENG | English |
| ENGR | General Engineering |


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| Art | 251 |
| Physics and Geology | 255 |
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| Communication | 274 |
| Criminal Justice | 281 |
| Computer Science | 284 |
| Health and Kinesiology | 289 |
| Dietetics | 292 |
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| Educational Psychology | 299 |
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| Curriculum and Instruction | 295 |
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| All-Level Education | 297 |
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| Curriculum and Instruction | 298 |
| Curriculum and Instruction |  |
| Curriculum and Instruction | 299 |
| Early Childhood |  |
| Curriculum and Instruction | 301 |
| Middle School |  |
| Curriculum and Instruction | 302 |
| High School |  |
| Curriculum and Instruction | 301 |
| Engineering | 303 |
| Foundations of Math | 332 |
| English | 306 |
| Engineering | 312 |

## COURSE DESCRIPTIONS

| Code | Subject |
| :---: | :---: |
| FINA | Finance |
| FORL | Foreign Language |
| FREN | French |
| GEOG | Geography |
| GEOL | Geology |
| GEOP | Geophysics |
| GERM | German |
| HIST | History |
| HLTH | Health |
| HONR | Honors |
| HRP | Health-Related Programs |
| INTB | International Business |
| KIN | Kinesiology |
| LEAD | Leadership |
| MANA | Management |
| MANE | Manufacturing Engineering |
| MARK | Marketing |
| MATH | Mathematics |
| MECE | Mechanical Engineering |
| MMAT | Mathematics |
| MUS | Music |
| NURS | Nursing |
| PHAS | Physician Assistant Studies |
| PHIL | Philosophy |
| PHR | Pharmacy |
| PHYS | Physics |
| POLS | Political Science |
| PSCI | Physical Science |
| PSY | Psychology |
| QUMT | Quantitative Methods |
| READ | Reading |
| REHS | Rehabilitation |
| ROTC | Reserve Officers' Training Corps |
| SCIE | Science |
| SOCI | Sociology |
| SOCW | Social Work |
| SPAN | Spanish |
| SPED | Special Education |
| STAT | Statistics |
| UNIV | UTPA |
| WMST | Women's Studies |

Department, College or Program ..... Page
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Modern Languages and Literature ..... 314
Physics and Geology ..... 315
Physics and Geology ..... 315
Physics and Geology ..... 316
Modern Languages and Literature ..... 317
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Health and Kinesiology ..... 320
Honors Studies Program ..... 321
College of Health Sciences and Human Services 322
Management, Marketing and International Business ..... 323
Health and Kinesiology ..... 323
Leadership ..... 326
Management, Marketing and International Business ..... 327
Engineering ..... 329
Management, Marketing and International Business ..... 331
Mathematics ..... 332
Engineering ..... 337
Foundations of Math ..... 336
Music ..... 341
Nursing ..... 348
Physician Assistant Studies ..... 350
History and Philosophy ..... 353
College of Health Sciences and Human Services 356
Physics and Geology ..... 356
Political Science ..... 359
Physics and Geology ..... 363
Psychology and Anthropology ..... 363
Computer Information Systems and Quantitative Methods ..... 366
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Modern Languages and Literature ..... 378
Educational Psychology ..... 382
Mathematics ..... 382
Learning Framework ..... 383
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## $\checkmark$ <br> ACCOUNTING

ACC 2301
Introduction to Financial Accounting
fall, spring, summer
The course discusses the accounting environment, the accounting model, business transaction analysis and financial statement preparation, financial statement analysis, accounting for assets, liabilities and owners' equity in proprietorships and corporations. Prerequisites: MATH 1340 or MATH 1341 with a grade of "C" or better.

## ACC 2302 Fundamentals of Managerial Accounting

## fall, spring, summer

This course discusses the contemporary management tools and techniques consistent with the evolving role and responsibilities of the management accountant in today's manufacturing, service and merchandising enterprises.
Activity-based costing, just-in-time inventory systems and quality costing along with cost classifications, mixed cost analysis and short-term decision-making are among the topics covered in the course. Prerequisite: ACC 2301 with a grade of "C" or better.

## ACC 3300 Internship in Accounting [3-0]

## fall, spring, summer

This course is designed to give students an opportunity to gain real world experience in their chosen career field by working with a participating employing firm or organization. The students will be supervised by a faculty member acting as a liaison between the employing organization and the academic department to assure compliance with specific learning and experience requirements for the assignment. The employment can be either paid or unpaid, and must be at least 10 hours of work each week over the period of one academic term. Prerequisites: Upper-division standing and approval by both department chair and employer providing internship experience.

ACC 3320 Cost Accounting
fall, spring, summer
This course complements the coverage in ACC 2329, and focuses on product costing, cost allocation and budgeting techniques. Specifically, it emphasizes master and flexible budgets, and job order and process costing, joint cost allocation, and standard costing and analysis. Prerequisite: ACC 2302 with a grade of "C" or better.

ACC 3321 Intermediate Accounting I
fall, spring, summer
A study of the accounting process and financial statements, including a thorough examination of the procedures involved in financial statement presentation as well as the underlying theory; a detailed study of current assets and current liabilities. Prerequisite: ACC 2302 with a grade of "C" or better.

ACC 3322 Intermediate Accounting II [3-0] fall, spring, summer
Continuation of the examination of the accounting process with emphasis on non-current assets and liabilities including pensions and leases. Prerequisite: ACC 3321 with a grade of "C" or better.

ACC 3323 Individual Income Tax
fall, spring
This course provides an analysis of federal tax laws, with emphasis being placed on the determination of net taxable income and the preparation of income tax returns for individuals. Prerequisite: Junior standing.

ACC $3325 \quad$ Fund Accounting
spring
The special features of fund accounting as applied to not-for-profit entities, municipalities, school districts and other governmental units. Prerequisite: ACC 2301 with a grade of "C" or better.

ACC 3326 Accounting Information Systems [3-0] fall, spring, summer
This course prepares the student to succeed in upper-level accounting and business courses that require computer use proficiency. It emphasizes the contemporary computer skills demanded of an accounting professional. It also solidifies the student's knowledge of the accounting cycle and accounting controls. Prerequisite: ACC 2302 with a grade of "C" or better.

ACC 3327 Fundamentals of Auditing
[3-0]
fall, spring, summer
A survey of auditing standards and procedures applied by public accountants and internal auditors in examining financial statements and verifying underlying data. The scope of this course includes elements of operational auditing. Prerequisite: ACC 3322 with a grade of "C" or better and credit or concurrent enrollment in ACC 3326 or CIS 3390.

ACC 3328 Quantitative Methods in Accounting
fall or spring
Topics include cost allocations, process costing with
spoilage and scrap losses, decentralization, inventory control, mix-and-yield variance analysis and quantitative subject areas such as linear programming and regression analysis. Prerequisites: ACC 2302 and QUMT 2341 or QUMT 3343.

ACC 3329 Intermediate Accounting III [3-0] fall, spring
This course continues the examination of the accounting process with emphasis on equity accounts of corporations and partnerships; coverage also includes accounting for income taxes, and comprehensive income. Prerequisite: ACC 3322 with a grade of "C" or better.

ACC 3350 International Accounting [3-0] fall, spring
This course examines the similarities and differences between selected U.S. and International Accounting Standards. It also examines the effects of socio-economic and cultural factors on the development of accounting standards in different regions of the world. Finally, this course explores the role of IASB in the international standard setting process. Prerequisites: ACC 3321 and INTB 3330.

ACC 4323 Contemporary Accounting Theory [3-0] fall or summer
A study of the theory and techniques of accounting for investments in the stock of other companies with emphasis on long-term investments with consolidated financial statements. Prerequisite: ACC 3322 with a grade of "C" or better.

ACC 4329 Corporate and Partnership Taxation [3-0] fall, spring
Comprehensive analysis of federal income tax consequences applicable to business entities. Tax law topics for regular Subchapter $C$ and Subchapter $S$ corporations and partnerships will be discussed. Multistate and international tax topics may also be covered. Prerequisite: ACC 3323.

ACC 4330 Advanced Accounting I [3-0] fall, spring
A study of the theory and techniques of accounting for investments in the stock of other companies with emphasis on long-term investments with consolidated financial statements. Prerequisite: ACC 3322 with a grade of "C" or better.

## ACC 4331 Advanced Accounting II [3-O] <br> fall, spring

A study of selected accounting topics. This course will have variable content and may be repeated for credit with consent of instructor. Prerequisite: ACC 3322 with a grade of "C" or better.

ACC 4332 Advanced Income Tax Research [3-0]
fall, spring
A course to acquaint the student with the organization of the Internal Revenue Service and its relation to practice, tax research techniques and ethical tax advice and reporting. Prerequisite: ACC 3323.

ACC 4333 Estate and Gift Taxation [3-0]
fall, spring
Topics related to estate, gift and trust taxation will be included. Integration of these taxes with income taxes and personal financial plans also will be explored.
Prerequisite: ACC 3323.


## ANTHROPOLOGY

ANTH 1323

> Introduction to Cultural Anthropology

## fall, spring

An introduction to cultural anthropology. Major aspects of culture (social organization, economics, religion, etc.), cultural patterns, cultural processes, cultural diversity and sociocultural change are examined in the context of historical development, contemporary societal conditions and multiculturalism using appropriate methodological and theoretical analyses.

ANTH 1324 Human Evolution [3-0]
fall, spring
An introduction to human biological and cultural evolution, hominid morphology, human variation and prehistoric development, done in the context of historical development and multiculturalism using appropriate scientific methodologies and theoretical bases.

ANTH 1342 Introduction to Archaeology [3-0] fall, spring
General introduction to the field of archaeology. Emphasis on methodology of data collection and analysis plus a comprehensive review of major archaeological discoveries as they reflect understanding of diverse historical and cultural development of both ancient and modern societies.

ANTH 1353 Introduction to Folklore [3-0]
fall, spring
General introduction into the field of folklore. Emphasis on data collection, preservation, analysis and interpretation
of such themes as folk music, narrative, drama, art, ethics, medicine and material culture, accomplished using appropriate social sciences methodologies and theories of folklore set in a historical and multicultural context.

## ANTH 1354 The Anthropology of Expressive Culture

[3-O]

## fall, spring and as scheduled

The examination of language of human expressive culture in a multicultural perspective. The course reviews such topics as human tradition, folkways, folk literature and poetry, folk drama, indigenous literature, architecture and religious expressions. The objective of this course is to expand the student's knowledge of the human condition and human cultures, especially in relation to behaviors, ideas and values articulated in the language of expressive behavior.

## ANTH 2323 <br> Mexican-American Culture <br> [3-0]

 fall, springAn introduction to the culture and tradition of MexicanAmericans. The cultural history, organization of the family, traditions, lifestyle, kinship patterns, values and social organization of Chicano culture will be examined using appropriate methodologies and theoretical perspectives set within a multicultural context.

## ANTH 2401 Basic Statistics for Anthropologists

fall, spring and as scheduled
A practical study of the procedures used in handling psychological and sociological data including descriptive statistics, central tendency, variation, correlation and inference. Equivalent course: may be counted as PSY 2401; a student may receive credit in only one course. Prerequisites: MATH 1340 and six hours from the following: ANTH 1323, ANTH 1324, ANTH 1342, PSY 1310.

## ANTH 3333 United States and Other World Cultures

## fall, spring and as scheduled

This course is concerned with the many aspects of human culture - including traditions, customs, folkways and religious beliefs - on local, national and worldwide levels. It explores topics ranging from roles and responsibilities within the family unit to the interaction of different cultures with their social and physical environment. As the course assesses important contributions of various past and present cultures, considerable emphasis is placed on similarities and differences between the United States and other world cultures. Prerequisite: Three hours from any of these areas: anthropology, economics, psychology or sociology, or consent of instructor.

ANTH 3343 Museum Studies
fall, spring, summer
Provides students with practical, "hands-on" experience through active participation in museum work alongside museum professionals. While performing a variety of tasks, each student will receive instruction concerning key features common to all museums such as policies and procedures; artifact cataloging, care and conservation; exhibit preparation; and education programs and publicity. May be repeated for a total of six hours credit, but no more than 12 hours credit may be earned through any combination of internship courses. Prerequisite: Six hours of anthropology or consent of instructor.

## ANTH 3344 Archive Studies

fall, spring, summer
Students have the opportunity to gain practical, firsthand experience by actively working alongside professionals within a variety of archival situations. While working with collections as diverse as photographic archives, historic documents and newspapers and the computerized Rio Grande Valley Folklore Archive, each student will receive instruction in proper policies and procedures for the collection, study, cataloging and conservation of archive materials. May be repeated for a total of six hours credit, but no more than 12 hours credit may be earned through any combination of internship courses. Prerequisite: Six hours of anthropology or consent of instructor.

ANTH 3345 Anthropology Community Internship
fall, spring, summer
Students have the opportunity to gain practical experience working in a community organization, government agency or business enterprise related to their career goals. Students work closely with agency staff and perform a variety of tasks essential to the mission and goals of the organization. Interns are considered professional staff and participate in staff meetings, conduct research, analyze data or other tasks deemed useful by the organization. By working closely with other professionals at the site, students learn firsthand how anthropological concepts and skills can be used to understand social problems in their community. Student evaluation by weekly journal, agency report and meetings with internship coordinator. May be repeated for a total of six hours credit, but no more than 12 hours credit may be earned through any combination of internship courses. Prerequisite: Six hours of anthropology or consent of instructor.

ANTH 3363 Archaeological Method and Theory
spring, even years
Reviews major theoretical orientations from a historical
perspective with an emphasis on current approaches. Examines major aspects of archaeological methodology including excavation and laboratory procedures, sampling strategy, dating techniques and floral and faunal analysis. Prerequisite: ANTH 1342 or consent of instructor.

## ANTH 3368 Peoples of South America [3-0]

 spring, even yearsA study of societies native to the South American continent from the time of the first Western contact to the present. Considerable emphasis is placed on their interactions with environments as diverse as the high Andes and the Amazon basin. Prerequisite: ANTH 1323 or consent of instructor.

ANTH 3375
Mexican-American Folklore
[3-0] spring
This course is designed to introduce Mexican-American folklore. The course includes the study of Chicano legends, folk tales, riddles, folk music, ballads and festivals. Students have the opportunity to learn how to collect and archive folklore materials. Prerequisite: ANTH 1353 or consent of instructor.

## ANTH 3380 Social Anthropology

fall, spring and as scheduled
A cross-cultural review of kinship, economic and political organization. The course will review rules of marriage, descent groups, reciprocity, bands, tribes and chiefdoms, among other topics. Prerequisites: ANTH 1323 or ANTH 2323 or consent of instructor.

ANTH 4302 Primate Behavior
spring, odd years
A review of the behavior of selected representatives of the order primates, based upon research conducted both in the laboratory and in the field. In addition, students will collect and analyze data on a representative primate group at the Gladys Porter Zoo in Brownsville. Equivalent course: may be counted as PSY 4302; a student may receive credit for only one course. Previous course number: ANTH 3384; a student may receive credit for only one course. Prerequisites: PSY 1310 and PSY 3383, or ANTH 1324 or consent of instructor.

## ANTH 4309 Anthropology of Women [3-0] <br> fall

This course is concerned with anthropological studies done by women and about women, and studies of gender roles and gender inequality beginning in the late 19th century. Employing a historical perspective, it encourages critical assessment of gender studies and uses cross-cultural studies to focus on gender in certain aspects of social life. Prerequisites: ANTH 1323 or consent of instructor.

ANTH 4345 Anthropological Theory and Methodology

## fall, spring

Instruction in the methodology (interviewing, participant observation, network analysis, etc.) and theoretical perspectives of anthropology. Prerequisite: Six hours of anthropology.

ANTH 4348 Peoples and Cultures of Mexico [3-0] spring, odd years
This course provides an introduction to the diverse peoples and cultures of Mexico and Central America. The traditions, beliefs and practices of different cultures will be examined through an emphasis on the ethnography and ethno-history of indigenous cultures of the region. Prerequisite: Six hours of anthropology or consent of instructor.

ANTH 4350 Mexican-American Folk Medicine [3-0] as scheduled
This course is concerned with popular medical traditions found among Mexicans and Mexican-Americans. It identifies influences from European and Native American sources, and examines ongoing changes in the folk medical landscape. Prerequisites: ANTH 1323 or ANTH 2323 or ANTH 1353 or consent of instructor.
$\begin{array}{ll}\text { ANTH } 4353 & \begin{array}{l}\text { Folklore of the Lower } \\ \text { Rio Grande Valley }\end{array}\end{array}$
fall, even years on an arranged basis
A field research approach to the folklore of the Valley. A review of the legends, fairy tales, ballads, proverbs, riddles and folklife of the Lower Rio Grande Valley. Prerequisites: ANTH 1353 or ANTH 3375 and consent of instructor.

ANTH $4355 \quad$ Psychology and Mythology [3-0] fall, spring and as scheduled
This course will study the impact and interrelationships of psychological thought and mythological theory. The impact of the theories of Freud, Adler, Jung, Levi-Strauss and others on mythology will be studied. Equivalent course: PSY 4355; a student may receive credit in only one course. Prerequisite: ANTH 1323, ANTH 1353, PSY 1310 or consent of instructor.

ANTH 4365 Archaeology of South America [3-0] fall, odd years
A study of the prehistory of South America, with an emphasis on the Andean area. Cultural development will be traced from the time of the first inhabitants through the Incas. The development of complex societies leading up to the Incas will be emphasized. Prerequisite: ANTH 1342 or consent of instructor.

ANTH $4369 \begin{aligned} & \text { Archaeology of Mexico } \\ & \text { and Central America }\end{aligned}$

## fall, even years

A study of the prehistory of Mexico and Central America beginning with the first cultures to inhabit the area and ending with the arrival of the Spanish. Major civilizations of the area, including the Olmecs, Mayas and Aztecs, will be emphasized. Prerequisite: ANTH 1342 or consent of instructor.

ANTH 4373 The Archaeology of Ancient Egypt

## spring

A study of the prehistory and history of ancient Egypt from the time of the first inhabitants in the area to the arrival of the Romans. Emphasis will be placed on the architectural and artistic achievements of Egypt during the time of the pharaohs. Aspects of ancient Egyptian social classes and religious beliefs and practices will also be explored. Prerequisite: ANTH 1342 or consent of instructor.

ANTH 4374 Archaeology of North America [3-0] spring, odd years
A study of the prehistory of North America north of Mexico. The course deals with cultural development from the time of the initial peopling of the New World until the arrival of Columbus. Major cultural developments in the southwestern and eastern United States will be emphasized. Prerequisite: ANTH 1342 or consent of instructor.

ANTH 4385 Topics in Anthropology
as arranged
Topics are varied according to availability of faculty and student interest. Course can be repeated as topics change. Prerequisites: Six hours of anthropology and consent of instructor.

ANTH 4395 Fieldwork in Anthropology [3-0] as arranged
Students gain practical experience by participating in anthropological research projects that involve fieldwork. Each student will work closely with one or more professionals. This will enable students to receive both instruction about the specific topic under investigation and practical experience in applying appropriate field research methods. May be repeated for a total of nine hours credit as topics change. Prerequisites: Six hours of anthropology and consent of instructor.

ART 1301 Art Appreciation [3-0]
(Texas Common Course Number is ARTS 1301.) fall, spring, summer
Values and meanings in the visual arts. This is a general art lecture course concentrating on development and differences in artistic style.

ART 1311 Drawing 1 [3-0]
(Texas Common Course Number is ARTS 1316.) fall, spring, summer
Introduction to drawing, including work in a variety of drawing media. Basic concepts are explored. A minimum of three hours of outside assignments per week is required. $\$ 4$ laboratory fee.

ART 1331 Design I
(Texas Common Course Number is ARTS 1311.)
fall, spring, summer
Principles of design and development of design structures on two-dimensional surfaces. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

ART 1332 Typography I
fall, spring
An introduction to the study of letter forms and their application in design. This course will utilize type as the basic material of graphic communications taking the place of image, design, illustration or photography to convey a message. Development of concept, content and execution is stressed. A minimum of three hours of outside assignments per week is required. $\$ 4$ laboratory fee.

ART 1333 Introduction to Digital Media Imaging fall, spring
Students will work with a wide range of digital imagemaking processess including but not limited to Adobe Photoshop, Adobe Illustrator, integrated digital photography technologies, time-based imagery and computer-animated imagery. Use of story boarding, computer systems and the integration of photography, drawing and video may be covered. A color component will engage students in color theories and applications using digital color management.

ART 2303 Jewelry/Metalworking I [3-0]
(Texas Common Course Number is ARTS 2341.)
fall, spring
Instruction is given in the use of hand tools, metals
handling and creative use of shop equipment. Emphasis is on creative artistic expression focusing on jewelry as a portable art form. Other materials are considered. A minimum of three hours of outside assignments per week is required. $\$ 4$ laboratory fee.

## ART 2312 Drawing II <br> [3-0]

(Texas Common Course Number is ARTS 2380.)

## fall, spring

The human figure as expressive subject matter in drawing. A minimum of three hours of outside assignments per week is required. Prerequisite: ART 1311. \$4 laboratory fee.

ART 2321 Painting I
as scheduled
Introduction to water painting media involving individual development and invention. A minimum of three hours of outside assignments per week is required.

## ART 2322 Painting II

[0-3]
(Texas Common Course Number is ARTS 2317.)
fall, spring, summer
An introduction to oil and/or acrylic painting techniques working from nature and the living model. Observation and interpretation are stressed. A minimum of three hours of outside assignments per week is required. Prerequisites: ART 1311 and ART 1331 and ART 2321. $\$ 4$ laboratory fee required.

## ART 2332 Design II

[3-○]
(Texas Common Course Number is ARTS 1312.) spring, summer //
Three-dimensional design includes investigation into the phenomena existing in the three-dimensional arts. A variety of materials handling and creative methods for the purposes of creating a three-dimensional form are considered. A minimum of three hours of outside assignments per week is required. Prerequisite: ART 1331. \$4 laboratory fee.

ART 2341 Sculpture I [3-0]
(Texas Common Course Number is ARTS 2326.)

## fall

Introductory course in sculptural concepts through basic sculptural media. A minimum of three hours of outside assignments per week is required. Prerequisite: ART 2332. \$4 laboratory fee.

## ART 2351 Art Survey I

[3-○]
(Texas Common Course Number is ARTS 1303.)

## fall

Historical survey of art from Paleolithic through the Middle Ages.

ART 2352 Art Survey II [3-0]
(Texas Common Course Number is ARTS 1304.)
spring
Historical survey of art from the Renaissance through modern times.

ART 2361 Printmaking I [3-0]
(Texas Common Course Number is ARTS 2333.)

## fall, spring

Introduction to printmaking as a means of personal expression and aesthetic communication. Relief printing in several forms, as well as mono-printing and silk screen printing will be emphasized. Other printmaking processes will be discussed. Prerequisites: ART 1311 and ART 1331. §4 laboratory fee.

ART 2371 (3-0]
(Texas Common Course Number is ARTS 2346.) fall, spring
Introduction to ceramic design concentrating on handbuilding. Some work with potter's wheel, glazing and firing. A minimum of three hours of outside assignments per week is required. \$4 laboratory fee.

ART 3302 Jewelry/Metalworking II [3-0] fall, spring
Continuation of jewelry/metalworking processes with an emphasis on advanced techniques. A minimum of three hours of outside assignments per week is required. Prerequisite: ART 2303. \$4 laboratory fee.

ART 3303 Jewelry/Metalworking III [3-0] fall, spring
Introduction of additional techniques in silversmithing such as raising and production methods. These are pursued in the production of expressive metalworks. Additional materials are considered. A minimum of three hours of outside assignments per week is required. Prerequisite: ART 3302. \$4 laboratory fee.

ART 3311 Drawing III [3-0]
fall, spring
Advanced experience in drawing; these may include mixed mediums, experimental surfaces and other nontraditional directions. Prerequisites: ART 1311 and ART 2312. \$4 laboratory fee.

ART 3321 Painting III
fall, spring
Advanced studio problems in painting. (May be repeated for a total of 12 hours credit.) A minimum of three hours of outside assignments per week is required.
Prerequisites: ART 1311 and ART 1331. \$4 laboratory fee.

ART 3330 Image and Illustration [3-0]
fall, spring, summer
This course extends drawing and design skills by teaching image-making with an emphasis on shape, value, color and communication. The design process is followed from concept through completion including the development of hand skills with design tools, systems and production methods.

## ART 3331 Visual Communications I [3-0]

 fallThe translation of verbal language into visual language through a variety of media. A minimum of three hours of outside assignments per week is required. Prerequisite: ART 3333. \$4 laboratory fee.

ART 3333 Design and Production
fall
Introduction to graphic design and production. This course offers the opportunity to develop the awareness of graphic images and teaches the tools and techniques of preparing camera-ready duplication. A minimum of three hours of outside assignments per week is required. Prerequisites: ART 1331 and ART 1332. \$4 laboratory fee.

ART 3334 Photography as an Art Form [0-3] spring
Introduction to photography as a means of personal expression. The history of art photography is covered.
Emphasis is on black and white processes. Students must provide own 35 mm camera. A minimum of three hours outside work per week is required. Prerequisite: ART 1331. \$4 laboratory fee.

ART 3335 Computer Graphics [3-0] fall, spring
A study of the basic technology necessary for the use of the graphic computer for processing visual elements. Students will have the opportunity to produce handson computer graphics in an interactive creative environment. A minimum of three hours of outside assignments per week is required. Prerequisite: ART 1331 or consent of instructor.

ART 3336 Computer Graphics II
fall, spring
A continuation of the basic skills learned in computer graphics. Additional software is introduced and emphasis will be on design production via the computer. Prerequisite: ART 3335.

ART 3341 Sculpture II [3-0] fall, spring
Emphasis on individual development. Consideration
of additional mediums for sculptural expression. A minimum of three hours per week of outside class work. Prerequisite: ART 2341. \$4 laboratory fee.

## ART 3352 Contemporary Art

Every third non-summer semester
Art history from the 19th Century in Europe to the present. Development and growth of today's arts and aesthetics. Prerequisites: ART 2351 and ART 2352.

ART 3353 Art of the Ancient World [3-0]
Every third non-summer semester
An in-depth historical study of art styles from 5000 B.C. to 325 A.D. Prerequisites: ART 2351 and ART 2352.

## ART 3354 Renaissance and Baroque Art [3-0]

 Every third non-summer semesterThis is an in-depth survey of the painting, sculpture, architecture and graphics of the Renaissance and Baroque periods. Focus will be on the artists, techniques and media and on social, historical and religious influences that affected the art of the 15th, 16th, 17th and 18th centuries in Europe.

## ART 3361 Printmaking II

spring
Work in the lithographic printmaking process. Emphasis on the planographic system of producing multiple images within the framework of the printmaking process.
Prerequisite: ART 2361. \$4 laboratory fee.
ART 3362 Printmaking III
fall, spring
Introduction to intaglio printmaking process. The student will learn etching and drypoint technique, along with the use of different ground. A minimum of three hours outside work per week is required. Prerequisite: ART 2361. \$4 laboratory fee.

ART 3371 Ceramics II
[3-0]
(Texas Common Course Number is ARTS 2347.)
fall, spring, summer
Emphasis on basic wheel-thrown shapes and introduction to laze calculation. A minimum of three hours outside assignments per week is required. Prerequisite: ART 2371. \$4 laboratory fee.

ART 3372 Ceramics III
fall, spring, summer
Advanced studio problems in ceramics. A minimum of three hours of outside assignments per week is required. Prerequisite: ART 3371. \$4 laboratory fee.

ART $3381 \quad$| Perception and Expression |
| :--- |
| in Art I |

[3-0]

## fall, spring, summer

A course designed to strengthen visual perception and divergent thinking through visual and conceptual stimuli with primary emphasis on studio activities. Prerequisite: Junior standing.

ART 3382 Perception and Expression in Art II
[3-0]

## spring and as scheduled

Emphasis on further in-depth studio development. Prerequisite: ART 3381 or permission of instructor. Recommended for certification requirements.

ART 3383 Creative and Critical Thinking [3-0] fall
The course offers discussion and exercises in synectics, brainstorming and analytical thinking. A topology of creative behavior development is presented along with spatial exercises. Mini-workshopsdealing with studio areas not regularly taught at this campus are offered. This may include serigraphy, fiber, textiles, photography and collograph. Prerequisite for student teaching.
Prerequisite: Junior standing.
ART 4193 Senior Exhibit [1-0]
fall, spring
A one- or two-person studio show. Prerequisite: Senior standing.

ART 4303 Jewelry/Metalworking IV [3-0] as scheduled
Personal development in metals/jewelry. A minimum of three hours of outside assignments per week is required. (May be repeated for a total of 12 hours credit). \$4 laboratory fee.

ART 4311 Advanced Drawing [3-0] as scheduled
Topics covered include pastel portraiture, advanced figure drawing and other advanced drawing problems. (May be repeated for a total of 12 hours credit.) A minimum of three hours of outside assignments per week is required. Prerequisites: ART 1311 and ART 2312 or consent of instructor. \$4 laboratory fee.

ART 4321 Painting IV as scheduled
Advanced study in painting. A minimum of three hours outside work is required. (May be repeated for a total of 12 hours credit.) Prerequisite: ART 3321. \$4 laboratory fee.

ART 4333 Graphic Design I [3-0]
spring
Asy
A systematic approach to design problem solving, with a series of studio assignments and critiques relating directly to two- and three-dimensional graphic design. The course offers the opportunity to develop creative and technical ability by the production of professional assignments. A minimum of three hours of outside assignments per week is required. Prerequisite: ART 3333. $\$ 4$ laboratory fee.

ART 4334 Graphic Design II [3-0] fall
A series of advanced problems and intensive critiques relating to graphic design to condition students to think in terms of "client-designer" relationships in simulated working conditions. Assignments criticized by professional standards will ideally result in portfolio pieces. A minimum of three hours of outside assignments per week is required. Prerequisite: ART 4333. \$4 laboratory fee.

ART 4336 Multimedia Production and Design [6-0] as scheduled
An introduction to basic hardware/softwaretools needed to design and create multimedia productions. Skills taught include program logic and problem solving techniques within the context of an authoring tool. Extensive use is made of flow charts, 2-D/3-D animation, motion graphics and storyboarding to create Web and CD-ROM multimedia products. Prerequisites: ART 1332, 3336, 4337, 4338.

ART 4337 Digital Photography [3-0] fall, spring
An introduction to the study of digital image processing using Adobe Photoshop as an editing tool, linking the Kodak digital camera directly to the small portfolio of computer-printed photographs addressing both the technical and aesthetic issues of this medium. A minimum of three hours of outside assignments per week is required.

ART 4338 Web Page Design [3-0] summer
Learning current Web page design software, students will have the opportunity to design actual Web pages using a variety of electronic effects. The course will focus on the design possibilities. A minimum of three hours of outside assignments per week is required. Prerequisites: 24 hours of art completed. $\$ 4$ laboratory fee.

ART 4339 Portfolio
fall, spring
This course focuses on the compiling of the professional portfolio. Students will have the opportunity to prepare and organize work into a presentable dossier for use in
their future graphic design career. A minimum of three hours of outside assignments per week is required. Prerequisite: Senior-level standing. $\$ 4$ laboratory fee.

> ART 4341 Sculpture III fall, spring Continuation of the student's personal direction in sculpture. A minimum of three hours outside work per week is required. (May be repeated for a total of 12 hours credit.) Prerequisite: ART 3341. \$4 laboratory fee.

## ART 4351 Latin American Art: Pre-Conquest <br> fall

An in-depth historical study of the arts of Mexico, Central America and South America prior to the Spanish Conquest. Prerequisite: junior standing.

ART 4352 Latin American Art:
Post-Conquest [3-o]

## spring

Mexican art under the Spanish influence is discussed from the Colonial period to the present. Prerequisite: Junior standing.

## ART 4361 Printmaking IV <br> [3-0]

fall, spring
This course will provide the student with more advanced printmaking processes. The student may pursue previously learned processes in greater depth, or may pursue more experimental directions. This course may be repeated for 12 hours credit. Prerequisite: ART 2361. \$4 laboratory fee.

ART 4371 Ceramics IV
fall, spring
Continuation of Ceramics III. Student is expected to be involved in a personal direction in the use of clay/glaze. May be repeated for a total of 12 hours credit. A minimum of three hours of outside assignments per week is required. Prerequisite: ART 3372. \$4 laboratory fee.

ART 4383 Art Curriculum
spring [3-0] spring
This course reviews structures of art curriculum at the secondary level. Students will design an art curriculum for the class. There will be an emphasis on curriculum implementation. Prerequisite: senior standing.

ART 4391 Individual Problems/Internship/Co-op fall, spring, summer
Advanced problems in an art area of the student's choice and/or internship with an art professional in the field of interest. (May be repeated for a total of 12 hours of
credit.) Prerequisites: senior standing (for Internship/Coop); all courses in the area chosen.

ART 4392 Individual Problems
fall, spring, summer
Advanced problems in the area of student's choice.
Prerequisite: ART 4391.

ASTR 1401 General Astronomy
(Texas Common Course Number is PHYS 1411.)
fall
A study of basic concepts in astronomy and of the solar system. Telescopes and other instruments, including the planetarium, are used as an integral part of the course. \$4 laboratory fee.

ASTR $1402 G e n e r a l$ Astronomy
(Texas Common Course Number is PHYS 1412.) spring
A study of the stellar universe. Telescopes and other instruments, including the planetarium, are used as an integral part of the course. Prerequisite: ASTR 1401. \$4 laboratory fee.

## BIBL 1310 Old Testament Survey

 as scheduled A survey of the history and literature of the Old Testament. Particular emphasis is placed upon the teachings concerning God, man, salvation and social relations; especially those teachings that deal with the preparation for the coming of Christ.BIBL 1311 New Testament Survey as scheduled
A brief survey of the Christian movement in the Mediterranean world during the first Century, the life of Christ, the beginning of the Christian church, the life and letters of Paul and the general development of the New Testament as considered from the historical viewpoint.

## B BTOLOOY

## BIOL 1401 General Biology I <br> (Texas Common Course Number is BIOL 1411.) fall, spring, summer

[3-3]

A study of the basic principles of biology. Topics will include biological chemistry, cell structure and function, photosynthesis and respiration, DNA structure and function, mitosis, meiosis, Mendelian genetics and evolution. Credit Restriction: Credit may be received in only one of BIOL 1401 or BIOL 1487. \$3 laboratory fee.

BIOL 1402 General Biology II
(Texas Common Course Number is BIOL 2401.)

## fall, spring, summer

A continuation of Biology 1401. Topics include evolution and diversity of prokaryotes invertebrate and vertebrate animals; mechanisms of support and movement, digestion and nutrition, respiration, circulation, homeostasis, hormonal control, nervous control, sexual reproduction, development, behavior and ecology. Credit Restriction: Credit may be received in only one of BIOL 1402 or BIOL 1488. \$3 laboratory fee.

## BIOL 1487 Honors Biology <br> fall

An accelerated study of the basic principles of biology. Topics covered include cellular biology, photosynthesis, respiration, protein synthesis, cellular reproduction, genetics and microbial genetics. Open to students enrolled in the Honors Studies Program or by consent of instructor. Credit Restriction: Credit may be received in only one of BIOL 1401 or BIOL 1487. \$3 laboratory fee.

BIOL 1488 Honors Biology

## spring

An accelerated study of the basic concepts of biology. Topics covered include reproduction and development, digestion and nutrition, transport, homeostasis, the nervous system, ecology and evolution. Open to students enrolled in the Honors Studies Program or by consent of instructor. Credit Restriction: Credit may be received in only one of BIOL 1402 or BIOL 1488. \$3 laboratory fee.

BIOL 2201 Special Problems in Biology [1-2] as scheduled
Study of special topics in biology for freshman- and sophomore-level students. The course will involve the independent study of a specific problem through conferences and activities directed by the instructor. Student must receive approval of instructor for study of specific problem prior to registration.

BIOL 2305 Environmental Biology [3-3] as scheduled
A consideration of the biological problems of population expansion, environmental destruction and resource conservation as they relate to man's past, present and future. $\$ 3$ laboratory fee.

BIOL 2401 Vertebrate Zoology
as scheduled
A basic introductory course dealing with fundamental biological principles and concepts. Designed to acquaint the student with structure, physiology and life histories of representative vertebrate types. Prerequisite: BIOL 1401. \$4 laboratory fee.

BIOL 2402 Comparative Vertebrate Anatomy [3-3] (Texas Common Course Number is BIOL 2428.) as scheduled
Comparative studies of the morphological, embryological and physiological relationships among vertebrates, with inclusion of histological and paleontological information. Prerequisite: Consent of instructor. \$5 laboratory fee.

BIOL 2403 Anatomy and Physiology I [3-3] (Texas Common Course Number is BIOL 2401.) fall, spring, summer
A study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous system and special senses. Prerequisite: Consent of instructor. \$4 laboratory fee.

BIOL 2404 Anatomy and Physiology II [3-3] (Texas Common Course Number is 2402.)
fall, spring, summer
A continuation of BIOL 2403. Includes endocrine, circulatory, respiratory, digestive, urinary and reproductive systems. Other topics include metabolism, acid-base balance, development and heredity. Prerequisite: BIOL 2403. \$4 laboratory fee.

BIOL 2405 Principles of Plant Systems [3-3] fall, spring, summer
A study of the morphology, physiology, reproduction, adaptions and systematics of plants. The laboratory will provide an opportunity for observations and experimental investigation of the concepts covered in lecture.

BIOL 3301 Biological Evolution [3-0] as scheduled
Genetic, ecological and paleontological aspects of evolution. Includes review of evolutionary history and thought, species concepts, speciation, and other evolutionary processes. Emphasis is on evolutionary
mechanisms. Prerequisites: BIOL 1401 and BIOL 1402, or consent of instructor.

> BIOL $3302 \quad$ Biological Writing
> fall, spring
> Describes, analyzes, critiques and applies the biological writing styles. Writing topics include vitas, professional letters, research/laboratory reports and research proposals. Also focuses on manuscript editing, literature searches and referencing, reviewing published research papers, and data analysis and interpretation.

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\begin{aligned}
& \text { BIOL } 3310 \quad \text { Neurobiology } \\
& \text { as scheduled } \\
& \text { Studies of nervous systems. Topics range from physiology } \\
& \text { of single neurons to neural bases of behavior in intact } \\
& \text { animals. This course emphasizes comparative methods, } \\
& \text { with examples drawn from a wide range of invertebrates } \\
& \text { and vertebrates. Prerequisite: BIOL } 2403 \text { or } 3411 \text {. }
\end{aligned}
$$

## BIOL 3401 General Microbiology

fall, spring
A general survey of the field of microbiology with emphasis on bacteria. Topics will include structure, growth, reproduction, metabolism, genetics and taxonomy of bacteria; a general survey of fungi, algae, protozoa and viruses and microbiology of soil, water, foods and industry. Laboratory work will include staining, growing, biochemistry, characterization and control of bacteria with a general survey of other microorganisms. Prerequisites: BIOL 1401 and BIOL 1402; CHEM 1301, CHEM 1101, CHEM 1302 and CHEM 1102. \$4 laboratory fee.

## BIOL 3403 Medical Microbiology and Immunology

## spring

A study of microorganisms that cause disease and immune responses of the host to these pathogens. Emphasis will be on principles of immunology and selected infectious disease processes. Laboratory exercises will include a study of basic serologic procedures and cultural characteristics of related pathogenic microorganisms. Prerequisite: BIOL 3401. \$4 laboratory fee.
BIOL 3405 Histology
as scheduled
Lectures will place major emphasis on the structure
and function of major tissue types and their cellular
components. The laboratory will provide an opportunity
for firsthand experience in examining the microscopic
structure of the major tissue types and their relationships
in organ structure. Prerequisites: Twelve hours of biology
including four hours from BIOL $2401, \mathrm{BIOL} 2402$ or BIOL
2403. $\$ 4$ laboratory fee.

BIOL 3407 Comparative Embryology [3-3]
as scheduled
Developmental studies from the zygote through embryological stages (chiefly concerned with amphibians, birds and mammals). Prerequisites: nine hours of biology, including four hours from BIOL 2401, BIOL 2402 or BIOL 2403. BIOL 3413 recommended. $\$ 4$ laboratory fee.

BIOL 3408 Plant Morphology
as scheduled
A study of the morphology, development and relationships of fungi, algae, liverworts, mosses, ferns, gymnosperms and angiosperms. Particular attention is given to the evolution of these groups. Prerequisite: nine hours of biology, including BIOL 1402. \$4 laboratory fee.

BIOL 3409 Ecology
fall, spring
A study of the basic environmental factors affecting plants and animals, and their relation to economic and conservation problems. Fieldwork. Prerequisite: Twelve hours of biology. \$4 laboratory fee.

BIOL 3410 A Survey of the Plant Kingdom [3-3] as scheduled
A study of the anatomy and physiology of plants, based on the study of higher plants, together with a correlative and comparative survey of the plant kingdom. Emphasis will be placed on the development and reproduction of plants and their relationships to man. \$4 laboratory fee.

BIOL 3411 Mammalian Physiology as scheduled
A survey of the physiological mechanisms of the organs and organ systems of mammals with emphasis on man. The laboratory will provide experiences with modern techniques. Topics will include muscle, nerve, digestive, urinary, respiratory, circulatory and reproductive systems. Prerequisites: Twelve hours of biology, including four hours from BIOL 2401, BIOL 2402 or BIOL 2403 and eight hours of chemistry. \$5 laboratory fee.

BIOL 3412 Cell Biology as scheduled
A study of cell structure and function with emphasis on bioenergetics, membranes, genes and genetic control, cell division and its regulation and cellular differentiation. Prerequisites: BIOL 1401 and BIOL 1402; CHEM 2102 and CHEM 2302. \$4 laboratory fee.

BIOL 3413 Genetics
fall, spring
Introductory lectures and laboratories in classical genetics. Topics will include Mendelian genetics, cell mechanics, sex
determination, sex linkage, DNA structure and function, genetic linkage, crossing over, gene mapping, mutation, regulation of gene expression, chromosomal variations, population genetics and evolution. Prerequisites: BIOL 1401 and BIOL 1402; CHEM 1301, CHEM 1101, CHEM 1302 and CHEM 1102. \$5 laboratory fee

BIOL 3414 Invertebrate Zoology
fall
Study of the comparative morphology, evolution, systematics and natural history of the invertebrates. Recommended as a preparatory course for BIOL 4402, BIOL 4407, BIOL 4415 and BIOL 5316. Prerequisites: six hours of biology and junior standing. \$4 laboratory fee.

BIOL 3415 Introduction to Molecular Biology [3-3] as scheduled
An introduction to the structure and function of biological macromolecules. Topics include structure of nucleic acids and proteins, DNA replication and repair, transcription, translation, bacteriophages, mobile genetic elements, genetic engineering and gene regulation. Prerequisites: BIOL 1401 and BIOL 1402; CHEM 1301, CHEM 1101, CHEM 1302 and CHEM 1102.

BIOL 4100 Biology Seminar
fall, spring
A study of current biological literature and the discussion of research in progress. Required of all biology majors in their senior year; open to non-majors only by permission.

BIOL 4201 Biology Problems I [1-2] as scheduled
A course adapted to the study of special topics in biology. For advanced students capable of developing a problem independently through conference and activities directed by the instructor. The problem is chosen by the student with the approval of the instructor prior to registration. This course is a prerequisite for BIOL 4202. This course may be repeated up to four times.

BIOL 4202
as scheduled Biology Problems II [1-2]
A course adapted to the study of special topics in biology and a continuation of BIOL 4201. For advanced students capable of developing a problem independently through conference and activities directed by the instructor. The problem is chosen by the student with the approval of the instructor prior to registration. Prerequisite: BIOL 4201. This course may be repeated up to four times for credit.

## BIOL 4303 Mammalogy <br> [2-3] <br> spring

A study of anatomy, evolution, distribution, systematics, ecology and physiology of mammals of North America,
with special emphasis on local forms. Prerequisite: nine hours of biology. $\$ 4$ laboratory fee.

BIOL 4304 Ichthyology
fall
A study of ecology, distribution, adaptations, physiology, systematics and evolution of freshwater and marine fishes, with an emphasis on local forms. Laboratories will stress identification and other practical applications of modern ichthyological techniques. Prerequisite: nine hours of biology. \$4 laboratory fee.

## BIOL 4314 Plant Taxonomy

as scheduled
Identification of vascular plants, with emphasis on native flowering plants. Prerequisite: Nine hours of biology, including BIOL 1402. \$4 laboratory fee.

BIOL 4315 Inquiry-Based Science
and Laboratory Techniques [2-3]
as scheduled
Designed for students interested in teaching secondary life sciences to provide additional preparation and skills to become an effective high school life sciences teacher. The course will emphasize the inquiry-based approach to science and cover mechanisms to apply this approach in lecture, lab and in assessment of content. Prerequisite: Students should enroll in the course during the semester in which they are finishing degree plan coursework and prior to the internship. Consent of instructor required.

BIOL 4317 Disease Epidemiology [3-0]
fall, spring, summer
An introduction to the principles of epidemiology.
Emphasis on ecological and evolutionary factors affecting disease processes. Both historical and current epidemics will be examined. Prerequisites: BIOL 3301 or BIOL 3413.

| BIOL 4318 | Ethnobotany |
| :--- | :--- |
| 5318 | Advanced Topics |
| in Ethnobotany |  |

fall, spring, summer
Surveys on the historical uses of plants and their impacts on the evolution of human civilizations, natural sciences and natural environments. Emphasis is placed on the practice of artificial selection and the exploitation of plant-based foods, medicines, stimulants, psychoactive compounds, fibers, spices, aromatics, bio-fuels and construction materials. The promise of new and powerful biotechnological tools will be considered in light of economic and environmental concerns.

BIOL 4387 Inquiry-Based Science
(Honors $\quad$ Plan)

## fall, spring, summer

Applications of inquiry in science, and an interdisciplinary approach to problem-solving.Consent of instructor required.

## BIOL 4402 Marine Zoology

## summer

A study of the common marine animals, especially invertebrates in coastal waters. Particular attention is given to structural and physiological relationships. Strenuous field work required. Students must provide their own transportation to and from South Padre Island or other field trip sites. Prerequisites: Nine hours of biology (BIOL 3414 recommended) and junior standing. \$4 laboratory fee.

## BIOL 4403 Introduction to Remote Sensing Technology <br> spring

This course provides training in the use of electromagnetic radiation for monitoring environmental conditions and resources. Emphasis will be placed on the operation of various remote sensors, collection of analog and digital data, and use of computer software for image processing, interpretation and integration of imagery into geographic information systems. Prerequisite: Consent of instructor.

## BIOL 4404 General Virology

This is a comprehensive course covering aspects of human, animal and plant virology. The course emphasizes current research on the genome and replication of viruses, functions and regulations of viral genes, molecular mechanisms of virus-host and virus-vector interactions and novel molecular control strategies. The course will also cover prions and several sub-viral pathogens including viroids, virusoids and satellite RNA. Prerequisite: BIOL 3401. \$10 laboratory fee.

BIOL 4405 Plant Physiology

## as scheduled

An introduction of the basic principles of the physiology, growth and development of plants. Prerequisite: Six hours of biology. \$5 laboratory fee.

BIOL 4406 Mycology
as scheduled
This course will provide training in the following areas: fungal morphology and taxonomy, structure and function relationships, physiology and genetics, molecular biology, parasitism of animals and plants, applied and environmental mycology. Prerequisites: BIOL 1401 and 1402; BIOL 3401, 3412 or 3413. \$5 laboratory fee.

BIOL 4407 Animal Parasitology
spring
Introduction to study of parasitic protozoa and worms (especially trematodes, cestodes, nematodes and acanthocephala). Prerequisites: Nine hours of biology, including four hours from BIOL 2401, BIOL 2402, BIOL 2403 or BIOL 3414, and junior standing. \$4 laboratory fee.

BIOL 4408 Plant Pathology
as scheduled
An introductory course on the causes, nature and control of plant diseases. Emphasis will be given to diseases of plants of economic importance. Prerequisite: Six hours of biology. \$4 laboratory fee.

BIOL 4409 Herpetology
A study of anatomy, evolution, distribution, systematics, ecology and physiology of amphibians and reptiles; primarily of North American species, with special emphasis on local forms. Prerequisites: Eight hours of introductory biology (1401-1402) and BIOL 2401 or BIOL 2402.

BIOL 4410 Marine Botany [3-3] as scheduled
A study of the common local marine flora including microscopic and macroscopic algae, sea grasses and terrestrial angiosperms. Students are expected to furnish their own transportation to field laboratory sessions at South Padre Island. Prerequisite: Nine hours of biology, including BIOL 1402. \$4 laboratory fee.

BIOL 4411 Ecological Physiology
of Animals
as scheduled
A comparative study of the physiological adaptations of vertebrate animals to their environments. Emphasis is placed on the physiological basis of animal distribution and evolution. Prerequisite: Twelve hours of biology, including BIOL 2401 or BIOL 2402.

BIOL 4412 Ornithology
as scheduled
Principles of avian classification, morphology and ecology, including migration, distribution and relationships to man. Fieldwork. Prerequisite: Nine hours of biology, including four hours from BIOL 2401, BIOL 2402 or BIOL 2403. \$4 laboratory fee.

BIOL 4415 Entomology
spring
An introduction to the study of insects and other
arthropods of agricultural, medical and veterinary importance. Includes basic insect morphology, physiology, classification and pest management. Laboratory
consists of insect identification supported by field trips. Prerequisite: BIOL 3414 . $\$ 5$ laboratory fee.

## BIOL 4416 Environmental Toxicology <br> fall

A survey of interaction of environmental pollutants with living systems. Laboratory consists of toxicological evaluation of selected environmental chemicals.
Prerequisites: BIOL 3412 and six hours of organic chemistry or biochemistry. \$5 laboratory fee.

BIOL 4417 Bacterial Genetics
This course will cover bacterial genetics from both classical and molecular perspectives. Topics will include transcription, translation, mutagenesis, transduction, transformation, conjugation and transposition. The lab will include techniques related to those topics, and will include Northern blotting, DNA sequencing and the polymerase chain reaction. Prerequisites: BIOL 1401 and BIOL 1402, CHEM 1301, CHEM 1101, CHEM 1302, CHEM 1102 and BIOL 3415. BIOL 3401 recommended. \$20 laboratory fee.

BIOL 4418 Electron Microscopy
This course will provide an opportunity to learn scanning and transmission electron microscopy. Topics include the principles of electron microscopes, cell ultrastructure, specimen preparation, microtomy, immunocytochemistry, operation of electron microscopes, darkroom techniques and graphic arts. Prerequisites: BIOL 1401 and 1402, CHEM 1301 and 1101, and two hours computer literacy.

BIOL 4419 Aquatic Entomology
[3-3]
This course will cover the identification, taxonomy and ecology of aquatic insects. Emphasis will be on local aquatic environments. Laboratories will consist of field trips and identification of specimens. This course replaces BIOL 4414 and cannot be taken for credit if BIOL 4414 has already been taken. Prerequisites: Nine hours of biology, including BIOL 1402. \$20 laboratory fee.

BIOL 4420 Biotechnology as scheduled
This course will utilize the computational methods, online databases and Internet resources present in the biological sciences and apply them to answer questions in biology ranging from organism development to human disease. The laboratory portion of the class will be computer and Internet-based. Students will explore online database resources to answer questions in a wide variety of areas relating to cellular and molecular biology. Prerequisites: BIOL 1401 and 1402.

BIOL 4422 Neurobiology Methods [2-6] as scheduled
An intensive introduction for studying neural anatomy and physiology, including staining, labeling and extracellular and intracellular recording. Invertebrates are used as subjects. Prerequisites: consent of instructor and BIOL 3310.

BIOL 4424 Microbial Ecology
fall, spring, summer
An introduction to the diversity of microbes found in nature. Emphasis is placed on the ecological significance of bacterial communities found in terrestrial, aquatic and extreme ecosystems, as well as their metabolic activities, interactions and survival strategies. The effects of microbial activities in areas such as bioremediation and biogeochemistry are also addressed. Prerequisites: BIOL 3401 - General Microbiology.

BIOL 4426 Marine Ecology
fall, spring, summer
This course is an introduction to marine ecology. It will include discussion of marine ecosystems and processes with a focus on the marine environment of South Texas. Prerequisite: Biology 3409 - Ecology.

## BUSINESS LAW

BLAW 3337 Business Law I [3-0] fall, spring
The study of the development and functioning of our legal environment. The development of case law and precedents; the application of procedural and substantive law pertaining to civil and penal matters and the study and analysis of cases and rules of law relating to basic business practices. Governmental regulations of business, property rights and business ethics. Course also includes torts, contracts, commercial transactions and agency. Relevant ethical considerations are included in each topic.

BLAW 3338 Business Law II [3-0]
fall, spring
A continuation and expansion of the study of rules of law in a business society including sales, commercial paper and credit transactions with emphasis on the Uniform Commercial Code; business organizations; and government regulations, property, wills and trusts, consumer protection and bankruptcy. Prerequisite: BLAW 3337.
BLAW 4331 Topics in Business Law [3-0] fall
Each course will address a separate business law topic as determined by the instructor and based on student demand. Possible topics include real estate law, cyber law and entrepreneurial law. This course may be repeated for credit with different topics. Prerequisite: BLAW 3337.

CHEM 1101 General Chemistry Lab I [0-3] fall, spring, summer
An introduction to basic laboratory techniques using experiments to understand chemical concepts of reactions, stoichiometry and titrations. Prerequisite: CHEM 1301; can be taken concurrently with CHEM 1301. \$4 laboratory fee.

## CHEM 1102 General Chemistry Lab II [0-3]

 fall, spring, summerA continuation of CHEM 1101 using more advanced laboratory techniques such as volumetric, gravimetric and spectrophotometric methods of analysis and qualitative inorganic analysis to reinforce topics covered in CHEM 1302. Prerequisite: CHEM 1302; can be taken concurrently with CHEM 1302. \$4 laboratory fee.

CHEM 1300 Introductory Chemistry [3-0] fall, spring
Designed for students with little or no chemistry background. It introduces basic vocabulary, fundamentals of chemical mathematics, scientific laws, chemical formulas and equations. This course will not satisfy a laboratory science requirement.

CHEM 1301 General Chemistry I [3-0] (Texas Common Course Number is CHEM 1411.) fall, spring, summer
Fundamentals of atomic structure, electronic structure and periodic table, nomenclature, the stoichiometry reactions, gas laws, thermochemistry, chemical bonding, and structure and geometry of molecules. Prerequisite: CHEM 1300 or one year of high school chemistry.

CHEM 1302 General Chemistry II [3-0] (Texas Common Course Number is CHEM 1412.) fall, spring, summer
This course presents the properties of liquids and solids, solutions' acid-base theory, chemical kinetics, equilibrium,
chemical thermodynamics, electrochemistry, nuclear chemistry and representative organic compounds. Prerequisite: CHEM 1301.

CHEM 2101 Analytical Chemistry Lab [0-3] fall
A laboratory hands-on experience in quantitative inorganic analytical methods including gravimetric, titrimetric, colorimetric and electroanalytical methods.
Prerequisite/co-requisite: CHEM 2301.
CHEM 2102 Organic Chemistry Lab I [0-3]
fall, spring, summer
An introduction to organic synthesis. Fundamental techniques such as crystallization, distillation, extraction and chromatography are discussed and applied to the preparation of organic compounds. Prerequisite: CHEM 2302; can be taken concurrently with CHEM 2302. \$4 laboratory fee.

CHEM 2103 Organic Chemistry Lab II [0-3] fall, spring, summer
Syntheses are more advanced, with greater emphasis on aromatic compounds. Grignard and diazonium salt preparations are included. Compounds are characterized by spectroscopic techniques. Prerequisite: CHEM 2102. \$4 laboratory fee.

CHEM 2301 Analytical Chemistry
fall
An introduction to principles of quantitative inorganic analytical methods including gravimetric, titrimetric, colorimetric and electroanalytical methods. Prerequisite: CHEM 1302.

CHEM 2302 Organic Chemistry I
fall, spring, summer
An introduction to the fundamentals of organic chemistry. Study of covalent bonding, molecular structure, acid-base theory, conformational analysis and stereochemistry. Relations between structure and reactivity: functional groups and their interconversions. Mechanistic studies with emphasis on reactive intermediates. Prerequisite: CHEM 1302.

CHEM 2303 Organic Chemistry II
fall, spring, summer
This course is a continuation of CHEM 2302 and includes an introduction to aromaticity and aromatic compounds. The study of functional groups and the mechanisms of their reactions is continued. Physical methods of structure determination: UV-Vis, IR and NMR.
Prerequisite: CHEM 2302.

CHEM 3103 Biochemistry Lab
[0-3]
fall, spring
Introduction to the application of various techniques such as column chromatography, electrophoresis to study macromolecules such as protein estimation, enzyme kinetics and chemistry of carbohydrate, lipids and nucleic acids. Prerequisite: CHEM 3303; can be taken concurrently with CHEM 3303. \$4 laboratory fee.

CHEM 3104 Physical Chemistry Lab I [0-3] fall
Experiments are designed to demonstrate and reinforce the concepts developed in physical chemistry lectures. Emphasis is given to error analysis and statistical treatment of data. Prerequisite: CHEM 3304; can be taken concurrently with CHEM 3304. \$4 laboratory fee.

CHEM 3105 Physical Chemistry Lab II [0-3] spring
This course is a continuation of CHEM 3104. Experiments are performed to reinforce concepts in quantum mechanics, spectroscopy and chemical kinetics. Prerequisite: CHEM 3305; can be taken concurrently with CHEM 3305. $\$ 4$ laboratory fee.

CHEM 3202 Inorganic Chemistry Lab [1-3] spring
Microscale synthesis and characterization of inorganic, organometallic, coordination and bioinorganic compounds employing advanced laboratory techniques. Prerequisite: CHEM 3301; can be taken concurrently with CHEM 3301. \$4 laboratory fee.

CHEM 3301 Inorganic Chemistry spring
A descriptive study of modern topics in inorganic chemistry that includes periodicity, acid-base theories, structure, bonding and reactivity of inorganic compounds and chemistry of nontransition elements and their compounds. (Writing intensive.) Prerequisite: Twelve hours of chemistry, including CHEM 2302.

CHEM 3303 Biochemistry [3-0]
fall, spring
A discussion of the structural and functional viewpoint of biological macromolecules including proteins, carbohydrates and nucleic acids and the techniques used in their study. The course material will also include study of energy yielding metabolic pathways such as glycolysis, the Krebs cycle, fatty acid oxidation and oxidative phosphorylation. Prerequisite: CHEM 2302.

CHEM 3304 Physical Chemistry I [3-0] fall
An introduction to the properties of gases, the kinetic
molecular theory and the study of thermodynamics, including an in-depth coverage of the first, second and third laws of thermodynamics and equilibrium. Statistical mechanics is used in the development of energy related concepts. Prerequisites: MATH 1401, MATH 1402 and 12 hours of chemistry.

CHEM 3305 Physical Chemistry II [3-0] spring
The second half of physical chemistry investigates concepts in quantum mechanics, group theory and symmetry and spectroscopy. Studies of chemical kinetics and electrochemistry are also included. Prerequisite: CHEM 3304.

CHEM 3306

> Polymer Science and Engineering

## fall

A general introduction to the theories and industrial practices for polymeric materials. The course includes synthesis, physical characterization and structureproperty relationships of polymers. Emphasis is given to industrially important polymers as materials.
Prerequisite: CHEM 1302.
CHEM 4101 Chemistry Seminar [1-0] fall, spring
An introduction to the use of current chemical literature and periodicals. Each student is expected to conduct an in-depth study of a chemical topic that will serve as a basis for a presentation in a seminar. Required of all chemistry majors. Prerequisite: Chemistry major with senior standing or consent of instructor.

CHEM 4104 Instrumental Analysis Lab [0-3] spring
A laboratory hands-on experience in instrumental analysis. Includes application of modern instrumentation and scientific software in solving analytical problems. Prerequisite/Co-requisite: CHEM 4304.

CHEM 4201 Chemistry Problems I [0-2] fall, spring
A course adapted to the study of special topics in chemistry through research. Students are allowed to select the research problem through individual conferences with faculty members, who develop one- or two-semester research projects for the course. Students must have the approval of the instructor prior to registration. Prerequisite: Chemistry major with junior standing or consent of instructor. \$4 laboratory fee.


CHEM 4202 Chemistry Problems II
[0-2] fall, spring
A continuation of CHEM 4201. Prerequisite: CHEM 4201. \$4 laboratory fee.

CHEM 4301 Advanced Inorganic Chemistry [3-0] fall
Study of nomenclature, structure and reactivity of coordination compounds, Ligand field theory and chemistry of transition elements.

## CHEM 4302 Advanced Biochemistry

## fall, spring

The course is a continuation of CHEM 3303. This course reviews the mechanisms of biosynthesis of macromolecules, particularly amino acids, proteins, fatty acids, lipids, polysaccharides, purines, pyrimidines and nucleic acids. Emphasis will be given to how these processes are controlled and integrated with the metabolism of the cell and molecular basis of disorders related to intermediary metabolism. Prerequisites: CHEM 3103 and CHEM 3303.

CHEM 4303 Advanced Organic Chemistry [3-0] fall
The course describes the advanced organic synthetic methods and mechanisms and illustrations of their applications in the synthesis of biologically active molecules such as chiral medicinal drugs and insect pheromones. Prerequisites: CHEM 2302 and CHEM 2303. No lab required.

CHEM 4304 Instrumental Analysis spring
A study of principles of instrumental analysis measurements and techniques. Components and operation of basic and modern instrumentation will be covered. Prerequisites: CHEM 2301 and CHEM 2101.

CHEM 4378 Special Topics in Chemistry
fall, spring
A course designed to cover specialized areas in the science of chemistry. It can be repeated when topic changes. However, a maximum of four credit hours is applicable to the degree requirement. Prerequisite: Chemistry major with junior standing.

# COMPUTER INFORMATION SYSTEMS 

CIS 1101 Introduction to Office Software [1-0]
fall, spring, summer
A hands-on approach to different software packages for word processing, spread sheets, database, e-mail and Internet.

CIS 1201 Introduction to Information Systems and Technology [2-0]
fall, spring, summer
This course includes a study of computer-based technology in communicating, solving problems, acquiring information and conducting business. Students will be presented the history and development of computer information systems, the social implications and ramifications of these developments along with the limits, possibilities, problems and careers associated with the use of technology. Students will be introduced to the skills/ tools necessary to evaluate and learn new technologies as they become available. Students with no or limited computer experience are advised to concurrently enroll in CIS 1101 or enroll in CIS 1301 instead of CIS 1201.

CIS $1301 \quad$ Computer Information Systems [3-0] (Texas Common Course Number is COSC 1305.) fall, spring, summer
This course serves as an introduction to the primary components of a business computer system and to the primary application software packages used to increase productivity of business professionals. These topics will be reinforced with microcomputer laboratory exercises.

CIS 2308 Introduction to Programming with Visual Basic
fall, spring
Students will be introduced to developing business
applications using Visual Basic. Topics include fundamentals Basic programming, Windows user interface design, Windows and Visual Basic controls, data controls, and integration with applications. Prerequisites: CIS 1301 or consent of department chair.

## CIS 2310 [3-0]

(Texas Common Course Number is COSC 1332.)

## fall, spring

A programming course designed to emphasize structured programming concepts using COBOL programming language. Concepts will be reinforced with programming exercises that include COBOL syntax, data and file structures, input and output devices and operating systems facilities for support of batch programs. Prerequisite: Grade of "C" or better in CIS 2308 or CSCl 1380 or consent of department chair.

CIS 3300 Internship in CIS
[3-0]
fall, spring, summer
This course is designed to give students an opportunity to gain real world experience in their chosen career field by working with a participating employing firm or organization. The students will be supervised by a faculty member acting as a liaison between the employing organization and the academic department to assure compliance with specific learning and experience requirements for the assignment. The employment can be either paid or unpaid, and must be at least 10 hours of work each week over the period of one academic term. Prerequisites: Upper-division standing and approval by both department chair and employer providing internship experience.

CIS 3308 Advanced Programming with Visual Basic
[3-0]

## fall, spring

This course is a continuation of CIS 2308 using advanced features of visual basic for business applications. Students will develop applications such as payroll, accounts receivable, inventory, point of sale and online purchases. Prerequisite: Grade of "C" or better in CIS 2308.

CIS 3310 Advanced Programming Techniques

## fall, spring

This course is a continuation of CIS 2310 and is designed to thoroughly familiarize the student with advanced design techniques, binary table searches, variable length record techniques and hashing. This course also includes the introduction to the basics of data structures needed for online retrieval, which include ordered lists, file structures, pointers and linkages, directories, memory management and data access methods. Prerequisite: "C" or better in CIS 2310.

CIS 3312
Introduction to Web Programming

## fall, spring

A study of the concepts and principles of programming Web pages and delivery of business content on the Web using HTML, JavaScript, and other tools. Handson projects and exercises will be used to emphasize various tools and techniques used in Web programming. Prerequisite: CIS 2308 with a "C" or better or consent of department chair.

CIS 3335 Database Management [3-0] fall, spring
This course is an introduction to the foundations of database technology. Basic knowledge in data structures, normalization of data and data modeling will be included. Relational, hierarchical and network models will be covered. The student will be introduced to the rudiments of the construction of database schema via laboratory experiences stressing application development through advanced programming techniques and a database language. Prerequisites: CIS 2308 and CIS 2310 with a "C" or better or consent of department chair.

CIS 3336 Systems Analysis [3-0]
fall
This course examines the analysis of business information systems and their redesign vis-á-vis automated applications. Student teams will be required to initiate, plan and analyze a real-life project within an organization. Team projects will result in a system proposal.
Prerequisites: CIS 2308 and CIS 2310 with a "C" or better or consent of department chair.

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\text { CIS } 3338 \quad \text { Networking } \quad[3-0]
$$ fall, spring

An introduction to the characteristics, feasibility and design of networks and distributed data processing. Focus is on the business and elementary technical aspects of distributed processing involving digital communication. The business aspects will include implementation strategies, security, control and selection of distributed data processing. Elementary technical aspects will include data communication technology, hardware configuration and application software. Prerequisite: Six hours of CIS or CSCl above computer literacy with grade of "C" or better or consent of department chair.

CIS $3380 \quad G l o b a l$ Information Systems [3-0] fall, spring, summer
The purpose of this course is to investigate the role of information technologies in multinational settings. This course will examine the international business
environment and how information systems and technology can be effectively utilized in multinational environments. Prerequisites: MANA 3361, computer literate and junior standing.

## CIS 3390 Management Information Systems

## fall, spring, summer

This course is a study of the use of current technology in strategic decision-making and operations of the modern organizations, both public and private. The course examines how organizations plan, develop, implement and maintain information systems to take advantage of recent technological advances in information technology. Prerequisites: CIS 1301 or consent of department chair.

## CIS 4308 IT Project Management [3-0] <br> fall, spring

This course presents the specific concepts, system and technologies for managing projects effectively. IT leads the students through a complete project life cycle, from requirements analysis and project definition to start-up, reviews and phase-out. The role of the project manager as team leader is examined together with important techniques for controlling project costs, schedules and performance. Lectures, case studies, a research project and group discussions are combined to develop the skills needed by project managers in today's environment. Prerequisites: CIS 3390 or consent of department chair.

CIS 4312 Application Development for E-commerce
[3-O]

## spring

This course introduces the development of electronic commerce applications using object-orientedprogramming. Students will develop business applications and applets for web-based systems using Java and/or more current objected-oriented programming languages. Prerequisite: CIS 3312 with a grade of " $C$ " or better.

## CIS 4336 Systems Design and Development

## spring

This course is a continuation of CIS 3336. Students will be required to design, develop and implement a reallife project from a system proposal. Students will be organized into teams and will be required to apply the concepts learned in earlier courses. Prerequisites: Grade of "C" or better in CIS 3335 and CIS 3336.

CIS 4391 Information Security [3-0] spring
The objective of this course is to provide students with a
balanced understanding of the technical and organizational issues related to information security. Students will receive theoretical and practical instructions in both technical and managerial aspects of securing information in organizations. Representative topics covered in the course include key topics such as Internet and network security, encryption, cryptography, symmetric and public key algorithms, digital signatures, authentication, key database security, secure communications and industry best practices for information assurance. The course will be helpful to the students who aim to pursue Certified Information Systems Security Professional certification and/or careers in information security.
$\begin{array}{ll}\text { CLSC } 2429 & \text { Clinical Microbiology in } \\ & \text { Health Care }\end{array}$
as scheduled
This course will focus on the immunology, diagnosis, treatment and prevention of infectious diseases. The major categories of microbial pathogens such as viruses, bacteria, fungi and parasites will be discussed in relationship to human disease processes. Utilization and interpretation of laboratory findings in the health care setting will be emphasized. Students will have the opportunity to acquire skills in the use of universal precautions and infection control techniques. Recommended for preprofessional students interested in health professions. Prerequisite: Eight hours of biology.

## CLSC 3100 Introduction to Clinical Laboratory Science [1-o]

fall
Introduction to the clinical laboratory science profession including professional ethics, certification and licensure issues, laboratory safety, regulatory requirements and basic concepts in quality control. Open to all interested students. Prerequisites: Eight hours of biology and eight hours of chemistry.
CLSC $3227 \quad$ Clinical Laboratory Methods
fall
Lecture-laboratory course that introduces the student
to the medical laboratory. Emphasizes appropriate laboratory studies for specific diseases, normal laboratory values and procedures for obtaining samples. Students are given the opportunity to perform waivered and PPM lab studies. Prerequisite: PHAS (grade of "C" or better).

CLSC 3310 Hematology I [3-2-3] fall
Formation, function and identifying characteristics of the cellular elements of blood. Lecture and laboratory emphasize the enumeration, morphology and staining characteristics of normal and abnormal blood cells in healthy and diseased states. Coagulation physiology and methods of detecting defects will also be introduced. Prerequisite: Admission into the Clinical Laboratory Sciences Program or special approval.

## CLSC 3420 Clinical Chemistry I

## fall

Studies in clinical chemistry and urinalysis with concentration on the physiology of normal and abnormal metabolism as they relate to those techniques commonly performed in the general chemistry laboratory. Basic clinical chemistry and urinalysis instrumentation and methodology along with a discussion of diagnostic applications and clinical correlation of laboratory results will be emphasized. Prerequisite: Admission into the Clinical Laboratory Science Program or approval of the instructor.

CLSC 3513 Clinical Immunology and Immunohematology [4-3]

## fall

Basic aspects of the immune response and its relationship to the diagnosis and treatment of disease. Lecture and laboratory stress the basic concepts of the human immune system as well as clinical applications in the detection and diagnosis of disease processes by common serological tests including immunohematology applications. Prerequisite: Admission into the Clinical Laboratory Sciences Program or special approval.

CLSC $3530 \quad$ Clinical Microbiology I 5] fall
Lecture and laboratory studies of human pathogens including common bacteria and parasites. Emphasis on staining, cultural and differential biochemical characteristics, as well as methods of isolation. Prerequisite: Admission into the Clinical Laboratory Sciences Program or special approval.

CLSC 4100 Seminar
fall
The student will be introduced to the broader role of the clinical laboratory scientist through seminars, case
studies and activities designed to prepare the student for professional practice. Included in this course are review and practice examinations as well as a comprehensive exam encompassing the major areas of the clinical laboratory science field. Prerequisites: Admission to the Clinical Laboratory Sciences Program and completion of CLSC 4340 and 4341.

CLSC 4122 Method Development and Research

## fall

Students will be introduced to the principles, regulatory requirements and statistical procedures used in developing and implementing new methods in the clinical laboratory. The principles of research will also be introduced to enable students to review and evaluate the medical literature related to new laboratory techniques.

CLSC $4144 \quad$ Clinical Practicum V 0 -0-6] fall
Clinical application of theory and techniques in affiliated institutions. Prerequisites: Admission into Clinical Laboratory Sciences Program and successful completion of on-campus coursework.

CLSC 4303 Medical Laboratory Leadership [3-0]
fall
An introduction to the leadership roles and responsibilities of the clinical laboratory scientist in management, supervision and education as well as regulatory and legal aspects of laboratory medicine. Prerequisite: Admission into the Clinical Laboratory Sciences Program.

CLSC 4314 Advanced Immunohematology [2-5] spring
Lecture and laboratory stress the detection, identification and characterization of rarer and atypical antigens and antibodies, compatibility testing, blood component therapy and problem-solving techniques. Prerequisites: Admission into the Clinical Laboratory Sciences Program and CLSC 3513.

CLSC $4315 \quad \begin{aligned} & \text { Advanced Immunology and } \\ & \\ & \text { Molecular Diagnostics }\end{aligned}$
fall
This course introduces the student to advanced concepts in immunology as well as the principles of molecular diagnostics as applied to the practice of laboratory medicine. Students will be introduced to the theory and techniques used in paternity testing, autoimmune disorders, tissue transplantation, the diagnosis of infectious disease states and clinical correlation with abnormal and normal conditions.

CLSC $4340 \quad$ Clinical Practicum I-0-12] summer /
Clinical application of theory and techniques in affiliated institutions. Prerequisites: Admission into the Clinical Laboratory Sciences Program and successful completion of on-campus coursework.

CLSC 4341 Clinical Practicum II [1-0-12]

## summer //

Clinical application of theory and techniques in affiliated institutions. Prerequisites: Admission into the Clinical Laboratory Sciences Program and successful completion of on-campus coursework.

CLSC 4342 Clinical Practicum III [1-0-12] fall
Clinical application of theory and techniques in affiliated institutions. Prerequisites: Admission into the Clinical Laboratory Sciences Program and successful completion of on-campus coursework.

## CLSC 4343 Clinical Practicum IV <br> fall

Clinical application of theory and techniques in affiliated institutions. Prerequisites: Admission into the Clinical Laboratory Sciences Program and successful completion of on-campus coursework.

CLSC 4411 Clinical Hematology II
[3-3]
Continuation of hematology I with an emphasis on abnormal morphology and related disease states. Coagulation abnormalities and associated clinical correlation will also be covered as well as the more specialized techniques in hematology and coagulation. Prerequisites: CLSC 3310 or permission of the instructor.

CLSC $4521 \quad$ Clinical Chemistry II [4-5]
spring
Continuation of Clinical Chemistry I with an emphasis on more advanced concepts and procedures including acid base balance, endocrine testing, toxicology, therapeutic drug monitoring as well as the associated normal and abnormal physiology and the appropriate clinical correlation of results. Alternate specimen types such as body fluids and fecal samples will also be addressed. Prerequisite: CLSC 3420 or permission of the instructor.

CLSC 4631 [ Clinical Microbiology II spring
Continuation of Clinical Microbiology I with an emphasis on fastidious bacteria, fungi, viruses and rickettsia.
Disease processes, therapy and prevention as they relate to microbiology will also be emphasized. Prerequisites:
Admission into the Clinical Laboratory Sciences Program and CLSC 3530.

# COMPUTER ENGINEERING 

CMPE 1170 Engineering Computer Science I Laboratory

fall, spring, summer
The course includes hands-on instruction and laboratory exercises in developing programs written in a highlevel object-oriented programming language applying the principles taught in the CMPE 1370 lecture course. Corequisite: CMPE 1370. Equivalent Course: CSCI 1170. A student may receive credit in only one course.

CMPE 1370 Engineering Compupter Science I [3-0] fall, spring, summer
An introduction to computer science and computer engineering. The fundamentals of a high-level programming language will be introduced. Methods of problem solving, techniques of algorithmic development and concepts of procedural and object-oriented programming will be emphasized. Societal and social issues related to computer engineering will be introduced. Prerequisites: CSCl 1300 or equivalent experience and grade of "C" or better in MATH 1340 or placement in a higherlevel math course. Corequisite: CMPE 1170. Cannot receive credit for both CSCI 1380 and CMPE 1370. Will replace a grade received in CSCl 1380. Equivalent Course: CSCI 1380. A student may receive credit in only one course.

CMPE 2120 Electrical Circuits I
fall, spring, summer
This course covers fundamental circuit measurement techniques and reinforces concepts from CMPE 2320, Electrical Circuits I. Topics include basic instrumentation; measurement of voltage, current, resistance, power, frequency and phase; analysis of experimental data; and reporting of technical results. Prerequisite: Credit or registration for CMPE 2320. Equivalent Course: ELEE 2120. A student may not receive credit for both CMPE 2120 and ELEE 2120.

CMPE 2130 Digital Systems Engineering I Laboratory [0-3]
fall, spring, summer
Basics of digital logic and hardware; combinational circuits, flip-flops, registers, sequential circuits and state machines. Corequisite: Credit or registration for CMPE 2330. Equivalent Course: ELEE 2130. A student may not receive credit for both CMPE 2130 and ELEE 2130.

CMPE 2320 Electrical Circuits [3-0]
fall, spring, summer
This course covers fundamentals of electrical circuits, including basic definitions, Kirchoff's laws, nodal and loop analysis, superposition, Thevenin and Norton equivalents, time-varying circuits, simple transient response, sinusoidal steady state analysis using phasors and power in sinusoidal steady state circuits. Prerequisites: MATH 1470. Equivalent Course: ELEE 2320. A student may not receive credit for both CMPE 2320 and ELEE 2320.

CMPE 2322 Signals and Systems
[3-0]
fall, spring, summer
Fourier and Laplace transforms with applications to circuit analysis; transfer functions and impulse response; discrete time systems including sampling and z transforms. Prerequisites: ELEE 2420 with a grade of " $C$ " or better, credit or enrollment in MATH 3349.

CMPE 2330 Digital Systems Engineering [3-0] fall, spring, summer
Boolean algebra; analysis and synthesis of combinational and sequential switching network; applications to computer design. Corequisite: Credit or registration in MATH 1460 is recommended but not required. Equivalent Course: ELEE 2330. A student may not receive credit for both CMPE 2330 and ELEE 2330.

CMPE 2333 Computer Organization and Assembly Language

## fall, spring, summer

An introduction to computer organization, use of assembly language programming, basic instruction sets, arithmetic and logical operations, addressing modes and macro definition. Several computer programming projects are included. Prerequisite: CMPE 1370 or CSCI 1381 or 1387. Equivalent Course: CSCI 2333. A student may receive credit in only one course.

CMPE 2380 Computer Science II
fall, spring, summer
A second programming course includes problem solving by structured design; provides an introduction to elementary data structures, including linked lists, stacks queues, trees and graphs and advanced programming techniques, including recursion, sorting and searching. Prerequisite: CSCI 1381 or CSCl 1388 or CMPE 1370 or consent of instructor. Equivalent Course: CSCl 2380. A student may receive credit in only one course.

CMPE 3226 Instrumentation Lab I
[0-6]
fall, spring, summer
Intermediate-level measurements, instrumentation and data acquisition; limitations of ideal models; design
projects in areas of digital logic and electronics; technical communication. Corequisites: Credit or registration for CMPE 3403 and CMPE 2322.

CMPE 3331 Microcontroller and Embedded Systems Lab

## fall, spring, summer

Design projects of progressively increasing complexity including mixed signal design, computer interfacing, embedded microcontrollers and distributed systems. Prerequisites: CMPE 3226, CMPE 3403 and CMPE 3437 with a grade of "C" or better.

CMPE 3333 Algorithms and Data Structures [3-0]
fall, spring, summer
This course is a continuation of data structures topics covered in CMPE 2380. Content includes theoretical topics in algorithmic efficiency and complexity, along with abstract data types, including graphs, networks, trees and priority queues. Search topics, including hashing, trees, external search trees (B-trees) and sorting algorithms including external sorting are introduced and compared. Computational complexity topics include the Class P and NP, NP-completeness and reducibility, NP-completeness proofs and NP-complete problems. Prerequisites: CMPE 2380 and concurrent enrollment in MATH 2346. Equivalent Course: CSCI 3333. A student may receive credit in only one course.

CMPE 3334 Systems Programming [3-0] fall, spring, summer
This course covers the design and implementation of system software. It investigates the relationship between software design and machine architecture. Topics may include assemblers, macroprocessors, compilers, loaders, debugging environments, program development and archival tools, command language interpreters (shells), file systems, I/O support, processes, threads and inter-process communication. Equivalent Course: CSCl 3334. A student may receive credit in only one course. Prerequisites: CSCI 2333 or CMPE 2333 or ELEE 3435 or CMPE 3435.

CMPE 3340 Software Engineering [3-0]
fall, spring, summer
A formal approach to the state-of-the-art techniques in software design and development. Emphasis will be on project planning, requirements, specification and system design and includes object design, testing and implementation. Provides the student with the opportunity to work on large projects in a group situation. Prerequisite: CMPE 2380 and three advanced hours in CSCl courses. Equivalent Course: CSCl 3340. A student may receive credit in only one course.

CMPE 3341 Software Engineering II [3-0]
fall, spring, summer
The course will cover the analysis of requirements and software architecture and with a major emphasis on object design, implementation, testing and validation, maintenance and software re-engineering. It will provide the student with the opportunity to work on large projects in a group situation. Prerequisite: CMPE 3340 or CSCl 3340. Equivalent Course: CSCl 3341. A student may receive credit in only one course.

CMPE 3342 Probability and Statistics for Computer Engineers [3-0]

## fall, spring, summer

Probability, random variables, distribution and density functions, statistical estimators, correlation, regression techniques, system response to random inputs.
Prerequisite: ELEE 2321 or CMPE 2322. Equivalent Course: ELEE 3340. A student may not receive credit for both ELEE 3340 and CMPE 3342.

CMPE 3403 Electronics for
Computer Engineering

## fall, spring, summer

An intensive one-semester introduction to electronics, emphasizing topics specific to computer engineering. Basic semiconductor devices, device characteristics and models, amplifier circuits, device level design of switching and logic circuits, operational amplifiers and power supplies. Prerequisites: CMPE 2420 or ELEE 2420 and CMPE 2330 or ELEE 2330 with a grade of "C" or better.

## CMPE 3437 Microprocessor Systems [3-3]

fall, spring, summer
Basic microprocessor programming and principles of assembly language programming; microprocessor organization and interfacing; applications, including data acquisition, control and communication. Prerequisites: CMPE 2330 and CMPE 1370. Equivalent Course: ELEE 3435. A student may not receive credit for both ELEE 3435 and CMPE 3437.

CMPE 4301 Digital Image Processing [3-0]
fall, spring, summer
The course presents fundamental concepts and applications of digital image processing. Topics include basic color, image perception and transformation, image enhancement and compression, image analysis and computer vision.
Prerequisite: CSCI 3333 or CMPE 3333. Equivalent Course: CSCl 4301. Students may receive credit for only one.

CMPE 4303 Digital Systems Engineering II [3-0] fall, spring, summer
Hardware implementation of arithmetic and other
algorithmic processes; organization, design and simulation of digital systems; asynchronous sequential switching networks. Prerequisite: CMPE 2330. Equivalent Course: ELEE 4303. A student may not receive credit for both CMPE 4303 and ELEE 4303.

CMPE 4327 Compiler Construction [3-0]
fall, spring, summer
Syntax analysis and semantic processisng for a blockstructured language. Compilation vs. interpretation; lexical analysis based on finite automata; syntaxdirected translation; symbol tables; run-time storage allocation; error detection and recovery; code generation and optimization. Students are required to write a compiler. Prerequisites: CSCI 3334 or CMPE 3334 or consent of instructor. Equivalent Course: CSCI 4327. A student may receive credit in only one course.

## CMPE 4333 Database Design and Implementation

fall, spring, summer
Study of logical (hierarchical, network, relational) and physical (sequential, indexed, relative) organization of databases. Database management systems and their features, querying databases, distributed databases and data compression. Prerequisite: CSCI 3333 or CMPE 3333. Equivalent Course: CSCl 4333 . A student may receive credit in only one course.

CMPE 4334 Operating Systems
fall, spring, summer
This course provides a study of the basic concepts of operating systems; process management, memory management, file systems, resource allocation and protection. A student may receive credit in only one of the courses CSCI 3344 and CSCl 4334. Prerequisites: CMPE 3333 and CMPE 3334. Equivalent Course: CSCI 4334. A student may receive credit in only one course.

CMPE 4335 Computer Architecture [3-0] fall, spring, summer
A study of the operational units and their interconnections of a modern computer as well as the theory behind the design of the instruction set, control unit, registers, memory hierarchy and addressing modes, bus structures, input/output and storage units. Similarities between CISC and RISC architectures and related issues such as instruction level parallelism and superscalar processors are discussed. Prerequisites: CSCI 2333 or CMPE 2333 or CMPE 3437 and CSCl 3333 or CMPE 3333. Students may receive credit for ony one of CSCl 4335, CMPE 4335, CMPE 4380 or ELEE 4380. Equivalent Course: CSCl 4335.

CMPE $4336 \begin{aligned} & \text { Parallel and Distributed } \\ & \text { Computing }\end{aligned}$ Computing [3-0]

## fall, spring, summer

Presents principles and practices of parallel and distributed computing. Topics include parallel and distributed computation models and architectures; design, analysis and implementation of parallel algorithms; and methods of parallel and distributed programming. Prerequisite: CSCl 4335 or CMPE 4335 or CMPE 4380. Equivalent Course: CSCI 4336. A student may receive credit in only one course.

CMPE 4341 Topics in Computer Engineering [3-0] fall, spring, summer
Topics selected from current issues in computer engineering. May be repeated for credit when topics vary. Prerequisite: Consent of instructor.

## CMPE 4343 Software Verification, Validation and Quality Assurance

## fall, spring, summer

Course topics include: Methods for evaluating software for correctness and reliability including code inspections and their role in software verification; program proofs and testing methodologies; formal and informal proofs of correctness; unit and system testing techniques, testing tools and limitations of testing; statistical testing; and reliability models. Prerequisites: CMPE 3340. Equivalent Course: CSCI 4343. A student may receive credit in only one course.

## CMPE 4345 Computer Networks

fall, spring, summer
An introduction to data communication topics, including data transmission, encoding, data link control, switching, network topologies, protocols, Internet working and data security. Examples of existing networks and network architectures are studied. Prerequisite: CMPE 3333. Equivalent Course: CSCI 4345. A student may receive credit in only one course.

CMPE 4350 Artificial Intelligence [3-0]
fall, spring, summer
Study of intelligent machines and machine learning. Includes problem solving and heuristic search, natural language understanding, game playing, database and expert systems. Artificial Intelligence projects will be implemented using an AI language such as Lisp, Prolog, C++ or Ada. Prerequisite: CSCI 3333 or CMPE 3333. Equivalent Course: CSCl 4350. A student may receive credit in only one course.

CMPE 4363 Digital Signal Processing [3-0]
fall, spring, summer
This course examines the internetworking architecture
and routing, design and implementation issues related to secure and reliable networks, cryptography, firewalls, digital signatures, worms, viruses, logic bombs and spyware. Prerequisite: CMPE 4345 or CMPE 4390. Equivalent Course: CSCI 4363. A student may receive credit in only one course.

CMPE 4365 Digital Signal Processing [3-0]
fall, spring, summer
Sampling theory, discrete processing of analog signals, discrete Fourier transforms, signal analysis, z-transforms, digital filter design, real-time digital signal processing, applications. Prerequisites: ELEE 2321 or CMPE 2322 and credit for or enrollment in MATH 3349. Equivalent Course: ELEE 4365. A student may not receive credit for both ELEE 4365 and CMPE 4365.

CMPE 4366 Introduction to Image Processing [3-o] fall, spring, summer
This course provides an introduction to image processing topics and design of image processing software. The course covers methods for computer analysis of images, and processing of images including image formation, spatial resolution, preprocessing techniques, image filtering, image enhancement and image segmentation methods. Prerequisites: CSCI 1370 or equivalent. Equivalent Course: ELEE 4366. A student may not receive credit for both CMPE 4366 and ELEE 4366.

CMPE 4367 Fiber Optics Communication [3-0] fall, spring, summer Introduction to optics, photonics and optoelectronics, fiber optics devices and communication systems. Topics include ray optics, electromagnetic optics, resonator optics, dielectric waveguides and fibers, semiconductor and laser light sources and detectors, modulators, amplifiers, connectors and optical fiber communication systems. Prerequisite: CMPE 2321 or CMPE 2322. This course is equivalent to course ELEE 4367. A student will not receive credit for both.

CMPE 4371 Senior Design I Software Track

## fall, spring, summer

Apply the knowledge and skills gained in previous courses to synthesize a solution to a significant and realistic problem, integrating software and hardware design. Participate in team project activities including problem formulation and proposal, project analysis, software and hardware requirements specification, project planning and software and hardware design. Software design documentation and oral presentation are an integral part of the course. Prerequisites: CSCI 3340 or CMPE 3340 and senior standing in computer engineering. Can receive credit for only one of CSCl 4390, CMPE 4371 and CMPE 4373.

CMPE 4372 Senior Design II Software Track
[1-6]

## fall, spring, summer

Continuation of CMPE 4371. Team project activities include software and hardware design reviews, implementation, quality assurance, software and hardware testing, integration, project documentation, presentations and demonstration. Also covers social and ethical implications of the computer engineering profession. Prerequisite: CMPE 4371 in the previous semester. Cannot receive credit for both CMPE 4372 and CMPE 4374.
$\begin{array}{ll}\text { CMPE } 4373 & \begin{array}{l}\text { Senior Design I } \\ \text { Hardware Track }\end{array}\end{array}$

## fall, spring, summer

Apply the knowledge and skills gained in previous courses to synthesize a solution to a significant and realistic problem integrating software and hardware design. Participate in team project activities including problem formulation and proposal, project analysis, software and hardware requirements, specifications, project planning and software and hardware design. Software design documentation and oral presentation are an integral part of the course. CMPE 4373 should be taken in the last two semesters before graduating. Cannot receive credit for both CMPE 4371 and CMPE 4373.

CMPE $4374 \begin{array}{ll}\text { Senior Design II } \\ \text { Hardware Track }\end{array}$
fall, spring, summer
Team project activities include software and hardware design reviews, implementation, quality assurance, software and hardware testing, integration, project documentations, presentations and demonstrations. Also covers social and ethical implications of the computer engineering profession. Prerequisite: CMPE 4373 in the previous semester. Cannot receive credit for both CMPE 4372 and CMPE 4374.

CMPE 4375 Introduction to VLSI
fall, spring, summer
This course provides an introduction to the area of CMOS VLSI design and design of VLSI circuits, including CMOS logic circuits, integrated circuit layout and design tools and overview of integrated circuit fabrication.
Prerequisites: CMPE 2330 and CMPE 3403. Equivalent
Course: ELEE 4375. A student may not receive credit for both CMPE 4375 and ELEE 4375.
$\begin{array}{ll}\text { CMPE } 4378 & \text { Signal Integrity and } \\ & \text { Electromagnetic Compatibility [3-0] }\end{array}$

## fall, spring, summer

Distortion of digital signals analyzed via lumped element and transmission line models, power distribution in

electronic systems, printed circuit layout guidelines, basic electromagnetic principles as applied to shielding and grounding, EMI regulations. Prerequisite: ELEE 2321 or CMPE 2322. Equivalent Course: ELEE 4378. A student may not receive credit for both ELEE 4378 and CMPE 4378.

CMPE 4380 Computer Architecture
fall, spring, summer
This course presents an overview of digital computer architecture, including architectural issues for processors, instruction sets, microprogramming, memory hierarchy and interleaving, cache and virtual mapping. RISC principles and principles of pipelining and pipeline hazards, as well as input/output devices. Prerequisite: CMPE 3437 or ELEE 3435. Equivalent Course: ELEE 4380. A student may receive credit for only one of the following: CMPE 4380, ELEE 4380, CSCI 4335, CMPE 4335.

CMPE 4381 Interactive Systems and User Interface Design
fall, spring, summer
Presents principles and practice of information communication between user and system. The course examines results of past research, as well as evolving trends in interface design and implementation.
Prerequisite: CSCI 3333, CMPE 3333 or consent of the instructor. Equivalent Course: CSCl 4381. A student may receive credit in only one course.

CMPE 4390 Computer Networks
fall, spring, summer
This course covers engineering principles of data communications, including the following topics: communication media and signal encoding schemes, point-to-point communication standards, layering concepts, data-link protocols, network protocols, transport layer protocols, error control, flow control, congestion control, routing algorithms, virtual circuits, call setup procedure, TCP/IP protocol, internetworking, switching and switching fabric, frame relays, ATM and emerging technologies. Prerequisite: CMPE 4337 or junior standing. Equivalent Course: ELEE 3290. A student may not receive credit for both CMPE 4390 and ELEE 4390.


## COMMUNICATION DISORDERS

NOTE: The American Speech-Language-Hearing Association (ASHA) defines areas within Communication Disorders for the purpose of describing programs and requirements. If applicable, the corresponding ASHA area is shown following each course.

COMD 1310 Beginning Sign Language [3-0] fall, spring, summer
This course raises awareness of basic knowledge about American Sign Language and deaf people. Emphasis in the course is upon acquisition of both comprehension and production skills and knowledge of the deaf community interaction. The students will begin with visual readiness activities and then progress through group targeted lexical items taught within meaningful contexts that stress use of questions, commands and conversational rules such as attention-getting and turntaking and basic finger-spelling skills also will be stressed. ASHA Standards /// C, D.

COMD 1320 Intermediate Sign Language [3-0] fall, spring, summer
This course is a continuation of Beginning Sign Language (COMD 1310) and emphasizes expansion and refinement of the fundamental comprehension and production skills covered in Beginning Sign Language, with the acquisition of additional functional grammatical structure and targeted lexical items. Spontaneous, interactive use of American Sign Language is stressed through discussion of the deaf community and other activities being held by the deaf community. The students will continue to study information related to everyday life experiences of deaf Americans and deaf people anywhere in the world. Prerequisite: COMD 1310 or departmental approval. ASHA Standards /// C, D.

COMD 2310 Introduction to Speech-Language Pathology
fall, spring
This course acquaints the prospective major with the profession of speech-language pathology, which will include requirements for entering the profession and professional issues. The course will also introduce students to five basic types of communication disorders and their
etiologies. Prerequisites: None. ASHA Standards /// B, C, D, $I V, G a, b$.

COMD 2320 Phonetics
[3-O]
fall
This course is an introduction to the International Phonetic Alphabet and application of this symbol system to analyze various languages. The course will acquaint students with the subset of phonetic symbols that are used to transcribe various dialects of general American English. This course is designed for communication disorders majors and education majors. The course will acquaint students with transcription techniques to analyze speech production. Prerequisites: Formal acceptance to COMD Program. ASHA Standards /// B, C, D, IV Ga.

COMD 3310 Normal Language Development [3-0]
fall
A study of the theories of language development and language sampling. A description of language, sensory and motor development is presented. Prerequisites: Formal acceptance to COMD Program. ASHA Standards /// B, C, D.

COMD 3315 Anatomy and Physiology of the Speech and Hearing Mechanism [3-0]

## fall

A detailed study of the anatomical and physiological structure and function of the speech and hearing mechanism. Prerequisites: Formal acceptance to COMD Program. ASHA Standards /// B, C, D.

COMD 3330 Articulation Development [3-0] fall
The course is a study of the theories of normal articulation and phonological development with emphasis on the practical applications of theory. Prerequisites: Formal acceptance to COMD Program. ASHA Standards /// B, C, D, $I V G a, b, c$.

COMD 3340 Audiology I [3-0] spring
Basic orientation to audiology including physics of sound, anatomy and physiology of the hearing mechanism, pathology of hearing, and evaluation of hearing, which includes emphasis on pure tone and impedance audiometry. Prerequisites: "C" or higher in COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330 and junior standing. ASHA Standards $/ / / B, C, D, I V G a, b, c$.

COMD 3350 Introduction to Speech Science spring
The course is a study of the structure and function of neuroanatomical parts that contribute to production and perception and processing of speech and language.


Prerequisites: "C" or higher in COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330. ASHA Standards /// $B, C, D$.

COMD 3360 Neuroanatomy and Physiology for Speech, Language and Hearing

## spring

The course is a study of the structure and function of neuroanatomical parts that contribute to production and perception and processing of speech and language. Prerequisites: "C" or higher in COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330. ASHA Standards /// $B, C$.

## COMD 4310 Behavior Management for

Speech-Language Pathology [3-0]

## fall

The course is a practical study of behavior management as it relates to and underlies speech and language intervention procedures. Prerequisites: "C" or higher in COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3350 and COMD 3360. ASHA Standards /// C, D.

## COMD 4330 Audiology (Re)Habilitation [3-o] fall

The course presents methods and techniques utilized in the aural (re)habilitation of individuals who are hard of hearing and deaf. Prerequisites: "C" or higher in COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3350 and COMD 3360. ASHA Standards /// C, D.

COMD 4350 Clinical Applications spring
This course is designed to provide exposure to speechlanguage pathology in various settings, analysis of client assessment and treatment profiles and journal research. This course may include observations, volunteer work in schools, or health care settings or assisting in the
therapy process. Prerequisites: "C" or higher in COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3350, COMD 3360, COMD 4330, COMD 4360, COMD 4365 and COMD 4310. ASHA Standards /// D, IV G a, b, c.

COMD 4360 Language Disorders in Children I [3-0] fall
The course is a study of the characteristics of language development in children at risk. A sampling of three to five special populations will be presented. Students will be introduced to basic techniques for the clinical management of children with language disorders.
Prerequisites: "C" or higher in COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3350 and COMD 3360. ASHA Standards /// C, D, IV, G b, c.

COMD 4365 Functional Speech Disorders
fall
The course is an introduction to functional disorders of speech, which may include those that impact articulation, fluency, and voice. Prerequisites: "C" or higher in COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3350 and COMD 3360. ASHA Standards I// C, D, IV G b, c.
$\begin{array}{ll}\text { COMD 4370 } & \begin{array}{l}\text { Professional Report Writing } \\ \text { in Speech-Language Pathology }\end{array} \\ \text { spring } & \end{array}$ spring
A study of basic writing skills, scientific writing and professional writing, particularly for assessment reports, treatment plans, progress, reports and professional correspondence in speech-language pathology and other health professions. Prerequisites: "C" or higher in COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD COMD 3350, COMD 3360, COMD 4330, COMD 4360, COMD 4365 and COMD 4310. ASHA Standards I/I D, IV G a, b, c.

## COMD $4380 \quad$ Clinical Problem-Solving

 springThe course is an orientation to the basic principles fundamental to clinical practice speech-language pathology. Prerequisites: "C" or higher in COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3350, COMD 3360, COMD 4330, COMD 4360, COMD 4365 and COMD 4310. ASHA Standards /// C, D, IV G a, b, c.

COMD 4390 Principles in Assessment of Speech-Language Pathology [3-0]
spring
The course is a study of diagnostic techniques and
specific testing instruments utilized in the evaluation of articulation and language disorders. Prerequisites: "C" or higher in COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3350, COMD 3360, COMD 4330, COMD 4360, COMD 4365 and COMD 4310. ASHA Standards I// C, D, IV G a, b, c.


## COMMUNICATION

Following each entry in the course inventory is a code that lists the option to which the course can be applied. If a course has two codes, it is cross-listed between option areas. The code is as follows:

> CS = Communication Studies
> TH = Theatre/TV/Film
> JO = Journalism
> $\mathrm{GE}=$ General Education

Students must seek advisement from the Department of Communication on a regular basis to discover when specific courses are to be scheduled and taught.

COMM 1303 Presentational Speaking (CS) [3-0] as scheduled
Instruction and practice in speech preparation and delivery. Includes audience analysis, selecting and developing the topic, drafting the speech outline, arranging and intensifying the speech, use of visual aids and supporting materials, effective delivery techniques and speech evaluation. Stresses logical thinking as a basis for formulation of the communication message.

COMM 1305
Acting I (TH)
[3-0]
as scheduled
Improvisational acting techniques and the application of these principles to stage, television and film.

COMM 1308 Photography [3-0]
as scheduled
This course is an introduction to the techniques of taking photographs and the process of developing, printing, enlarging, cropping and dodging. Students cannot count these hours toward their major.

COMM 1310 Oral Interpretation (CS)(TH) [3-O] as scheduled
Introduction and practice in the principles of speech as applied to the oral presentation of various literary forms. Includes prose and poetry, dramatic and duo-dramatic interpretation as well as storytelling.

COMM 1311 Technical Production I (TH) [3-0] as scheduled
This course gives instruction and practice in the methods of construction, painting, rigging, shifting stage scenery and properties, as well as the application of these techniques to television production.

COMM 1312 Technical Production II (TH) [3-0] as scheduled
This course is a continuation of COMM 1311. It consists of instruction and practical experience in production problems, including lighting and sound.

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COMM 1313 Applied Oral Communication (CS)
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## as scheduled

Theory and application of the various elements of the speech communication process; through lecture, class discussion and active participation, students have the opportunity to develop skills in specific types of communication behavior including listening, interviewing, small group interaction and public speaking.

COMM 1315 Survey of The Media (JO) [3-0]
(Texas Common Course Number is COMM 1335.) as scheduled
This class will provide an overview of traditional and non-traditional media with an emphasis on the history and evolution of the different media in society.

COMM 1387 Speech Communication
(Honors Plan) (CS) [3-O]
as scheduled
Theory and intensive application of various elements of the speech communication process. Through lecture, class discussion and active participation, students have the opportunity to develop skills in communication behavior including listening, interviewing, small group interaction, audiovisual aid use and public speaking. Credit Restriction: Credit may not be received for both COMM 1387 and COMM 1313.

COMM 1615 Summer Theatre Workshop (TH) [6-o] Designed to introduce beginning students to basic techniques of theatre staging through practical situations, this workshop requires students to participate in a series of productions for public viewing. Because
of the intensive nature of this course, students are not allowed to take other studies or outside employment during their workshop enrollment period without permission of the instructor.

## COMM 1616 Summer Television <br> Workshop (JO) (TH)

[3-0]
An intensive workshop course in which students are responsible for all aspects of the production of a major dramatic work that will be produced for television and that will embody the principles of dramatic production in television form.

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COMM 2101 Practicum -
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    Theatre-TV-Film (TH) [1-O]
    Participation in theatre, television or film programs sponsored by the department. One hour of credit requires a minimum of 60 hours of satisfactory participation plus any additional requirements set by the advisor. May be repeated for credit a maximum of four times.

## COMM 2304 Television Production (JO) (TH) [3-0] as scheduled <br> This course is an introduction to television studio operations with emphasis on television production. It covers cameras, microphones, lights, setting and performers.

COMM 2306 Acting II (TH) [3-0] as scheduled
Intensive study of the techniques of building and developing a characterization.

COMM 2312 Theatre Appreciation (TH) (GE) [3-1] as scheduled
An introduction to the theatre, how to enjoy and understand plays, an appreciation and understanding of the various factors that make up a live theatre performance. Designed for non-majors.

COMM 2313 Readings in Dramatic Literature (TH) [3-0]

## as scheduled

Critical review and analysis of selected classic plays from Greek antiquity to the present time, designed to clarify the nature and major achievements of Western dramatic art. Equivalent Course: ENG 2313; may be counted as English or Communication in satisfying degree requirements. Credit may be received for only one course.

COMM 2315 Interpersonal
Communication (CS) [3-0]

## as scheduled

Instruction and activities in the principles of human
communication and interaction. Includes self-concept, self-disclosure and risk, defensiveness, perception, empathy, semantics and abstraction, emotions and behavior, nonverbal communication, listening and feedback, relational communication, assertiveness and conflict management. Previous course number: COMM 1307; a student may receive credit in only one course.

COMM 2319 Make-Up (TH)

## as scheduled

This course is a study of make-up for stage, film and television camera. It includes the study of make-up design and application and special effect make-up. Students must provide their own make-up for the course.

COMM 2320 Costume Technology (TH) [3-0] as scheduled
This course is a study of costume construction and technology with emphasis on problems encountered in patterning, draping, construction and fitting of costumes for the theatre and television.

COMM 2321 Drawing and Rendering for the Theatre (TH)

## as scheduled

This course covers the processes of communicating design ideas through drafting, drawing and rendering and modeling. This course needs to be taken before any of the design classes or concurrently with the student's first class in design.

COMM 3302 Speech for Stage
and Screen (TH)
as scheduled
An intensive course in high quality diction for those planning to speak professionally on stage, TV, radio or film. Work on diction, foreign accents and dialects. Some voice work included.

COMM 3303 Writing for the Mass Media (JO) [3-0] as scheduled
This course will focus on the various writing techniques required for different media. Student must pass skill test of grammar, spelling and punctuation.

COMM 3304 Advertising (JO)
as scheduled
Principles of advertising as they are applied and used in radio, television, film, print media and theatre. Practice in writing advertising copy, layout and design.

COMM 3305 Copy Editing (JO) as scheduled
This course focuses on copy editing and headline writing
using the Associated Press Style Manual as a guide. Prerequisites: COMM 3303 or consent of instructor.

COMM 3306 Feature Writing (JO)
spring
Interpreting trends in reader appeal; analyzing feature story structure; finding ideas for gathering materials; and writing and selling feature articles. Prerequisites: COMM 3327 or consent of instructor.

COMM 3308 Creative Drama (TH)

## as scheduled

A study of informal drama in its application to the elementary classroom. Development of creativity through original dramatizations by children. Of special interest to the elementary teacher.

COMM 3309 Scene Design (TH)
[3-0]
as scheduled
This course teaches the principles of design as applied to modern stage and television production.

COMM 3310 Lighting for the Stage,
Film and TV (TH)

## as scheduled

Problems of lighting design and execution as applied to the various media - stage, film and television.

COMM 3311 Contemporary Drama (TH) [3-0] as scheduled
A study of trends and movements in 20th century American, British and European drama with emphasis on works of major playwrights. Equivalent Course: ENG 3311; can be counted as English or Communication in satisfying degree requirements. Credit may be received for only one course. Prerequisite: Twelve hours of English.

COMM 3312 Costume Design (TH)

## as scheduled

This course teaches the principles of designing as applied to costumes for the various media - stage, television and film.

COMM 3314 Persuasive Communication (CS) [3-0] as scheduled
Persuasive techniques and rhetorical principles as they apply to verbal and nonverbal communication where the goal is social influence. In-class speeches and projects stress practical application of persuasive strategies. Persuasive characteristics of contemporary culture, structure and content of persuasive messages, source credibility, propaganda, ethics and role of attitudes, belief systems and values in persuasive communication.

| COMM 3315 | Communication in |
| :--- | :--- | :--- |
|  | Human Behavior (CS) |

as scheduled
Application of the speech communication perspective as a dynamic process of human interaction. Significant issues and topics in interpersonal relationships, such as family communication, health communication, gender communication, social conflict and crisis communication and supervisory communication. May be repeated twice for credit.

COMM 3316 Intercultural Communication (CS)
as scheduled
Study of the symbolic and relativistic nature of culture and the resultant problems in attempting to communicate meaning across cultural lines.

COMM 3317 Speech for the
Classroom Teacher (CS) [3-0]
as scheduled
This course emphasizes methods for establishing a positive communication climate in the classroom and for enhancing instruction through effective communication. Topics will include active listening, critical listening, storytelling and assessment of oral communication competencies.

COMM 3318 Great American Oratory (CS) [3-0] as scheduled
A study of the most influential speakers in American history including Jonathan Edwards, Daniel Webster, Abraham Lincoln, William Jennings Bryan, Henry Ward Beecher, Mark Twain, Billy Sunday, Clarence Darrow, Franklin D. Roosevelt, Frederick Douglas, Martin L. King, Ronald Reagan, Jesse Jackson and Cesar Chavez.

COMM 3323 World Drama (TH) [3-0] as scheduled
Study of trends and movements in dramatic literature from ancient Greece through World War I. Emphasis on the works of major playwrights. Equivalent Course: ENG 3323; can be counted as English or Communication in satisfying degree requirements. Credit may be received for only one course. Prerequisite: Twelve hours of English.

COMM 3324 Cinematography/
Videography (TH)
as scheduled
Principles of single camera "film style" location video production. Using video equipment, students will produce short productions based on careful preproduction planning (scripting and storyboarding). Major stress on post-production editing and quality of finished product.

COMM 3325 Motion Picture History and Significance (TH)
[3-0] as scheduled
Historical survey of motion pictures from 1890 to the present. Students will view, study and review major motion pictures from various periods, noting important periods, styles, genres and movements in the dramatic film (including foreign films and TV). Viewing lab arranged.

COMM 3327 Reporting (JO)
[3-0]

## as scheduled

An introduction to reporting focusing on writing articles in journalism style for print media, the course examines information gathering, interviewing techniques and reporting skills. Classes are conducted in computer lab rooms when available. Prerequisites: COMM 3303 or consent of instructor.

COMM 3328 Writing for Publication (JO)
[3-0] as scheduled
This course stresses writing for a variety of publications, both print and electronic, with emphasis on in-depth research and writing. Prerequisites: COMM 3327 or consent of instructor.

COMM 3329 Specialized Reporting (JO) [3-0] as scheduled
This course focuses on analytical and investigative reporting. It outlines the quantitative and qualitative techniques required to produce accurate and comprehensive assessments of social, political and scientific issues. Prerequisites: COMM 3303, COMM 3327.

COMM 3330 Argumentation and Debate (CS) [3-0] as scheduled
Instruction and practice in the principles of argumentation and debate. Includes philosophies and concepts, forms of argument, analysis by issues and logical form, evidence and reasoning, positions of advocacy, refutation and rebuttal, cross-examination, ethics of argument and persuasion and communication strategies in contemporary society. Previous course number: COMM 2303; a student may receive credit for only one course.

COMM 3331 Principles of Interviewing (CS) [3-0] as scheduled
Theory, application and selected practice of the interview process in a variety of situations. Students have the opportunity to develop basic skills in selection, appraisal, counseling, discipline, exit, persuasive and focus interviews; interviews in mass media contexts, in data analysis and in other important techniques. Ethical guidelines stressed throughout.

as scheduled
The study of the role of communication in organizational contexts. Previous course number: COMM 4306; a student may receive credit for only one course.

COMM 3333 Communication Theory (CS) [3-0] as scheduled
Comprehensive overview and analysis of the various significant theories of communication, with an historical grounding but emphasizing modern themes and perspectives.

COMM 3334 Communication through Group Process (CS)

## as scheduled

Instruction and practice in group theory and technique.
Includes principles and methods of discussion, interpersonal relations in groups, problem-solving and decision-making processes, conflict management in groups, sources and philosophies of group leadership, quality circles, preparation of agendas, rules of order and committee procedures and regulations. Previous course number: COMM 2302; a student may receive credit for only one course.

COMM 3335 Advanced Public Speaking (CS) [3-0] as scheduled
Theory and intensive application of various public speaking situations - informative, persuasive and special occasion speeches. Critical thinking, analysis, reasoning, support for assertions, humor and clear organization are stressed. Ethical communication and an audience-centeredapproach are central issues. Prerequisite: COMM 1313 or COMM 1303.

COMM 3341 Acting III (TH)
as scheduled
This course is a study of work with partners in scenes. It gives the students practice in the techniques of working
in large and small groups, working for specificity of character and developing responsive and responsible rehearsal techniques.

## COMM 3342 Acting IV (TH)

as scheduled
This course consists of working with particular acting problems, such as characterization in the musical, individuation in group scenes, commercials, supporting partners, etc.

COMM 3350 Research in
Communication (CS) (JO) [3-O]
as scheduled
Major methods of research used in the concentration areas of communication: speech communication and journalism/mass media. Each student is responsible for the successful completion of a research project. Required of all communication majors. Previous course numbers: COMM 4324 and COMM 4325; a student may receive credit for only one course.

COMM 3401 Broadcast News Writing (JO) [4-0] fall
Development of skills and practice in the art of writing news for radio and television. Scripts will be written and evaluated as related to audience, medium and structure.

COMM 3403 Television News Production and Reporting (JO)

## spring

Methods of gathering facts, words and images, then developing them into professional video newscasts, including audio and video recording, editing, production, delivery and transmission, within the scope of standard electronic journalistic ethics and practices. Prerequisite: COMM 2404.

COMM 3623 Professional Internship Cooperative Education - Theatre (TH)
A planned program of half-time ( 20 hours per week) work, for a minimum of one semester or two continuous summer sessions, related to the field. Enrollment must be completed prior to the work period. Students should be classified as seniors. Credit will be determined on the basis of satisfactory employer's evaluation and the student's written report.

COMM 3625 Professional Internship Cooperative Education - Print Media (JO)
A planned program of half-time ( 20 hours per week) work, for a minimum of one semester or two continuous summer sessions, related to the field. Enrollment must be completed prior to the work period. Students should
be classified as seniors. Credit will be determined on the basis of satisfactory employer's evaluation and the student's written report.

COMM 3626 Professional Internship Cooperative Education - Radio-TV-Film (JO)
A planned program of half-time (20 hours per week) work, for a minimum of one semester or two continuous summer sessions, related to the field. Enrollment must be completed prior to the work period. Students should be classified as seniors. Credit will be determined on the basis of satisfactory employer's evaluation and the student's written report.

COMM 3627 Professional Internship Cooperative Education - Advertising-Public Relations (JO)
A planned program of half-time ( 20 hours per week) work, for a minimum of one semester or two continuous summer sessions, related to the field. Enrollment must be completed prior to work period. Credit will be determined on basis of employer's evaluation and student's written report.

COMM 4101 Practicum - Theatre-TV-Film
(TH)
(JO)
[1-०]
Participation in theatre, television or film programs sponsored by the department or other programs approved by the instructor. One hour of credit requires a minimum of 60 hours of satisfactory participation, plus any additional requirements set by the instructor. May be repeated for credit a maximum of four times.

COMM 4103 Practicum - Forensics (CS)
Participation in the forensics program of the University. One hour of credit requires a minimum of 60 hours of satisfactory participation, plus any additional requirements set by the instructor. May be repeated for credit a maximum of four times.

COMM 4301 Directing I (TH) [2-0] as scheduled
Study, observation and practice in selecting scripts and working with problems, methods and techniques of direction and production.

COMM 4302 Directing II (TH)
as scheduled
A continuation of COMM 4301 with stress upon student direction and production of plays and television programs.

COMM 4303 Special Topics (CS)
as scheduled
For the advanced undergraduate, this course may be taken more than once if the topic changes. The class
is designed to give students an opportunity to study a special advanced theatre topic not required in the undergraduate curriculum.

## COMM 4304 Scriptwriting for Stage and Screen (TH)

## as scheduled

Advanced-level course in the art and craft of scriptwriting for stage and screen (motion picture and/or television). Course would be repeatable for credit with new work or work with different medium.

## COMM 4306 Advanced Interpersonal Communication

## as scheduled

Examines various theoretical approaches for understanding human interaction in person-to-person settings. In addition, the following topics are covered: strategies, interaction, influence and language in conflict management approaches and stages in the development of interpersonal communication.

## COMM 4307 Social and Political <br> Movements (CS)

as scheduled
Communication as an instrument of change within current political and social protest movements. Analysis of strategies and tactics of agitation and control. Study of pamphlets, speeches, underground publications, files, music, nonverbal symbols and body rhetoric. Includes such movements as the Far Right, New Left, Black Power, Chicano Movements and Women's Liberation.

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COMM 4308 Special Problems in
    Rhetorical Criticism (CS) [3-0]
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## as scheduled

Significant issues and topics in rhetorical criticism. Principles of criticism applied to political and social communication behavior. May be repeated once for credit.

## COMM 4309 Nonverbal Communication [3-0] as scheduled

This course offers an examination of the effects of human nonverbal behavior on human communication. Emphasis on specific nonverbal behaviors including touch, time, environmental contexts, physical appearance cues and social communication cues.
COMM 4312
as scheduled Video and Film Editing

From news stories to feature films, the video film editing step is the last rewrite of the material before it is shown or broadcast. The student will learn professional software and acquire both the arts and crafts of assembling sound and visuals into a finished viewable product including
sound effects, music, dialogue replacement and titles as well as DVD authoring. Prerequisite: COMM 2304.

COMM 4313 Media Law and Ethics (JO) [3-0] as scheduled
This course will cover freedom of the press, libel, invasion of privacy and the conflict between free press and fair trial. Media cases will also be examined as they relate to questions of ethics.
$\begin{array}{ll}\text { COMM } 4314 & \begin{array}{l}\text { Advanced Television/Film } \\ \text { Production (JO) (TH) }\end{array}\end{array}$
as scheduled
Advanced-level course stressing the application of basic arts and media developed in COMM 2404 and making use of advanced students in directing, technical crafts, performance and scriptwriting. May be repeated for credit with new production.

COMM 4315 History of the Theatre I (TH) [3-0] as scheduled
A thorough study of the history of theatre from its origins until the end of the Jacobean era.

COMM 4316 History of the Theatre II (TH) [3-0] as scheduled
A thorough study of the history of theatre from the Restoration to the present.

COMM 4317 Children's Theatre Workshop (TH) as scheduled
This is an intensive workshop course in which students are responsible for all aspects of the production of a major dramatic work that will be produced for children and that will embody the principles of dramatic production in forms suitable for elementary school audiences.

COMM 4318 Theory and Styles of Acting (TH) as scheduled
This course covers techniques of period acting and exploration of major theories of acting techniques.

COMM 4319 Problems in Acting (TH) as scheduled
This course teaches acting techniques to adapt performance to varying situations such as large and small proscenium, film and television. It also includes preparation of audition material and problems in developing range of characterization.

COMM 4321 Public Relations (JO)
as scheduled
Planning and preparation of publicity materials for
media, application of public relations techniques and
clinical study of current public relations campaigns. Some laboratory work in the Department of Communication.

## COMM 4322 Public Relations Writing (JO) <br> as scheduled

This is an intensive writing course. Student will be given the opportunity to research and write for a variety of formats such as news releases, backgrounds and pitch letters. Prerequisite: COMM 3303 or consent of instructor.

COMM 4326 Photojournalism (JO) [3-O] as scheduled
Principles and practices of photojournalism. Topics include news photography and interrelationship with text. Participation in campus publications is encouraged. Students must furnish 35 mm camera and equipment. Prerequisite: COMM 1408 or consent of instructor.

## COMM 4327 Mass Communication and Society (JO)

as scheduled
This course will provide an overview of the relationship between the mass media and society from a historical perspective and will examine current trends such as the impact of media technology on society. The different theories of the press as well as theories of mass communication will also be examined.

COMM 4330 Communication Training (CS) [3-0] as scheduled
Methods, techniques and practice in communication training programs and human resource development workshops will be addressed.
$\begin{array}{ll}\text { COMM } 4331 & \begin{array}{l}\text { Senior Synthesis Seminar } \\ \\ \text { in Speech Communication (CS) [3-0] }\end{array}\end{array}$
as scheduled
Students are provided the opportunity to integrate principles, ideas and information covered in lower- and upper-division Speech Communication coursework and to apply theories, research methods and intervention techniques in various analytical and experimental situations. Prerequisites: COMM 1301 and 24 hours in speech communication, including nine advanced hours.

[^4]situation analysis, research to final execution. Students will also be given the opportunity to evaluate the effectiveness of campaigns. Prerequisites: COMM 3304, 4321, 3350, 4335 or consent of instructor.

COMM 4335 Creative Strategies
and Media Planning (JO) [3-0]
as scheduled
This course will focus on the development of effective creative strategies based on solid research and clear objectives. Media planning, buying and placing will also be covered. Prerequisites: COMM 3304 or consent of instructor.

COMM 4336 Applied Leadership Communication (CS)
as scheduled
In this course theoretical models used to identify different leadership styles employed in organizations are studied. The various leadership styles and their associated communicative behaviors are closely examined. Prerequisite: COMM 3332.

COMM 4337 Professional Internship - Cooperative Education - Communication Studies (CS)
A planned program of half-time work (10 hours per week), for a minimum of one semester or two continuous summer sessions, related to the field. Enrollment must be completed prior to the work period. Students should be classified as seniors. Credit will be determined on the basis of satisfactory employer's evaluation and the student's written report. May be repeated once for credit.

## COMM 4417 Radio and Television <br> Advertising Production (JO) [3-3]

## as scheduled

Application of principles of advertising to production of radio and television commercials. Prerequisites: COMM 2404 and COMM 3304.

COMM 4615 Summer Theatre Workshop (TH)
For the advanced undergraduate, experience in all areas of theatrical presentation. Students assume responsibility for one or more of the following areas: technical theatre production problems in acting and directing, or theatre business management. Because of the intensive nature of this course, students are not allowed to take other studies or outside employment during the workshop enrollment period without permission of the instructor.

## COMM 4616 Summer Film and <br> Television Workshop (TH)

For the advanced undergraduate, an intensive workshop in which students are responsible for the production of a
major dramatic work that will be produced for television and that will embody the principles of dramatic production in television form. Journalism students taking the course will produce a documentary concerning the production.

COMM 4624 Professional Internship - Cooperative Education - Communication Studies A planned program of half-time (20 hours per week) work, for a minimum of one semester or two continuous summer sessions, related to the field. Enrollment must be completed prior to the work period. Students should be classified as seniors. Credit will be determined on the basis of satisfactory employer's evaluation and the student's written report. Previous course number: COMM 3624; a student may receive credit for only one course.

## CRIMINAL JUSTICE

NOTE: The entire course inventory is not offered each semester. Students are advised to plan ahead when making decisions about their semester schedules.

> CRIJ $1301 \quad$ Introduction to the (Texasinal Justice System The history, development and philosophy of the criminal justice system; an overview of law enforcement, courts and corrections subsystems.

CRIJ 1306 Court Systems and Practices [3-0] (Texas Common Course Number is CR/J 1306.) The judiciary in the criminal justice system; right to counsel; pre-trial release; grand juries; adjudication process; types and rules of evidence; sentencing. Previous course number: CRIJ 2333; a student may receive credit in only one course.

CRIJ 1307 [3-0]
(Texas Common Course Number is CR/J 1307.)
American crime problems in historical perspective; social and public policy factors affecting crime; crime impact and trends; social characteristics of specific crimes; prevention of crime. Previous course numbers: CRIJ 2301 and CRIJ 3361; a student may receive credit in only one course.

CRIJ $1310 \quad$ Fundamentals of Criminal Law $\quad$ [3-0] (Texas Common Course Number is (R/J 1310.)
A study of the nature of criminal law; philosophical
and historical development; major definitions and concepts; classification of crime; elements of crime and penalties using Texas statutes as illustrations; criminal responsibility. Previous course number: CRIJ 2331; a student may receive credit in only one course.

## CRIJ 1313 Juvenile Justice System <br> [3-O]

(Texas Common Course Number is CR/J 1313.)
An overview of the nature of juvenile delinquency; the theory and practice of juvenile courts; juvenile case law; juvenile crime prevention; treatment of juvenile offenders; juvenile justice system. Previous course number: CRIJ 2303; a student may receive credit in only one course.

CRIJ $2313 \quad \begin{aligned} & \text { Correctional Systems } \\ & \text { and Practices }\end{aligned}$
(Texas Common Course Number is CR/J 2313.)
Corrections in the criminal justice systems; correctional role; institutional operations, alternatives to institutionalization; treatment and rehabilitation; current and future issues. Previous course number: CRIJ 2342; a student may receive credit in only one course.

CRIJ 2314 Criminal Investigation
(Texas Common Course Number is CR/J 2314.)
An introduction and analysis of current criminal investigation procedures; philosophy of the crime scene investigation; an advanced study of important areas involved in criminal investigation, such as proper handling of physical evidence, arrest, search and seizure, hearings and probable cause; a discussion of techniques involved in drug and narcotic investigations. Previous course number: CRIJ 2323; a student may receive credit in only one course.

## CRIJ 2323 Legal Aspects of Law Enforcement

(Texas Common Course Number is (R/J 2323.)
Police authority; responsibilities; constitutional restraints; laws of arrest, search and seizure; police liability. Previous course number: CRIJ 2332; a student may receive credit in only one course.

CRIJ 2326 Police-Community Relations [3-0] (Texas Common Course Number is (RIJ 2326.) A study of the problems involving law enforcement agencies and the community; the philosophy of community action groups and boards; theories regarding police involvement in community projects and the principles and techniques used in establishing a proper law enforcement-community relationship; principles and techniques of crime prevention and various approaches to crime prevention programs. Previous course number: CRIJ 2304; a student may receive credit in only one course.

CRIJ 2328 Police Systems and Practices [3-0] (Texas Common Course Number is CRIJ 2328.)
The police profession; organization of law enforcement systems; the police role; police discretion; current and future issues. Previous course number: CRIJ 1313; a student may receive credit in only one course.

CRIJ 2335 Legal Aspects of Corrections [3-0] Legal problems and principles from conviction to release, to include consideration of convictions, imprisonment, sentencing, conditional release, post-conviction procedures, prisoner rights, probationer rights and validity of conviction. Previous course number: (RIJ 3331; a student may receive credit in only one course.

## CRIJ 3303 Criminology <br> [3-0]

Provides an overall perspective of the crime problem with special emphasis given to philosophical and theoretical ideas pertaining to crime causation and its control. Includes victimology and criminal typologies.

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\begin{array}{ll}
\text { CRIJ } 3304 & \begin{array}{l}
\text { Criminal Justice } \\
\\
\\
\text { Research Methods }
\end{array}
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A review of current literature and examination of selected problems affecting the criminal justice system; instruction of steps involved in the scientific approach to problem solving. Discussion of research techniques and paper writing; applications of research in criminal justice. Previous course number: CRIJ 3402; a student may receive credit in only one course.

CRIJ 3341 Probation and Parole [3-0] The philosophy, history and principles of probation, parole and other community-based treatment programs; philosophy of punishment and rehabilitation; trends, practices and current research in probation and parole, including methods of analysis, selection and prediction.

## CRIJ 3344 Gender, Crime and Criminal Justice

The course will focus on female criminality, gendered victimization; punishment, treatment, correction of female offenders; female inmate subculture and women workers in the criminal justice system. Social ideologies about race, class and gender will be examined as to their relevance in shaping and defining crime, criminology and the sociolegal treatment of offenders, victims and professionals.

CRIJ $3355 \quad$ Criminal Evidence and Proof [3-0] as scheduled
This course explores how the legal system has developed a complicated yet effective process for controlling the production of relevant evidence in making decisions in
forensic proceedings. Study of the balance of competing interests in presenting information in court, whether in pretrial motions, in camera proceedings or public trial.

CRIJ $4311 \quad$ Criminal Justice Administration [3-O] as scheduled
Study of organizational and administrative theory and its application to police departments, court systems and correctional settings. Looks at how philosophies used in business can be applied to not-for-profit and public agencies for better management of physical and human resources. Covers social trends and recent issues affecting criminal justice administration.

CRIJ 4312 Civil Liability in Criminal Justice [3-0] as scheduled
Study of statutes, case law and research in areas of civil rights and civil liability particular to employees and supervisors in the criminal justice system. Examination of legal issues, litigation trends and patterns in the federal courts, policy and procedure issues, failure to train liability, and individual officer and administrative responsibilities in this contentious subject area.

CRIJ $4313 \quad$ Current Issues in Law Enforcement
Analysis and discussion of contemporary issues in policing with particular attention to current developments, service delivery and the changing police role. Integration of established scientific knowledge with practical police experiences in various areas of policing.

CRIJ 4314 Private Security and Loss Prevention [3-0]

## as scheduled

This course analyzes critical issues in the administration and supervision of private security organizations, with an emphasis on preventing retail theft, or loss prevention. Examination of legal and ethical issues in public surveillance for private benefit, detecting employee malfeasance, costbenefit analysis, inventory control and audit systems and cutting-edge technologies for use in crime prevention.

CRIJ $4321 \quad$ White-Collar and Organized Crime as scheduled
This course surveys sociological, criminological and criminal justice theories and approaches to classifying white-collar, corporate and organized crime and deviance. Beginning with classic articles and continuing with case studies of corporate and organized criminality and irresponsibility, this course examines social, legal and ethical issues surrounding racketeering, "crime in the suites," and their punishment.


CRIJ 4343 Current Issues in Corrections
[3-0]
Analysis and evaluation of contemporary correctional systems; discussion of recent research concerning correctional institutions and various corrections field services. Emphasis is given to both administrative and treatment concerns in corrections.

CRIJ $4355 \quad$ Current Issues in the Courts [3-0] as scheduled
Analysis and discussion of contemporary issues in the courts, with particular emphasis on trends, service delivery to victims, defendants and the community, and the changing role of courts in society. In-depth study of drug courts, juvenile courts, community courts and prosecution, tribal justice and other specialized means of adjudication and disposition of criminal and delinquency cases.

## CRIJ 4356 Law and Society as scheduled

This course emphasizes the complexity and interrelationship of legal, social and ethical issues in their historical and comparative contexts. By examining the role of the legal system in society and specific legal issues from the perspectives of the social sciences and the humanities, students will be able to analyze and understand the legal implications and ramifications of policy and decision making.

CRIJ 4357 Crime Prevention Techniques [3-0] as scheduled
This course examines the theories and techniques of mobilizing community resources for crime prevention. Implementation and evaluation of crime reduction efforts through crime prevention through environmental design, routine activities and situational crime prevention case studies, and physical planning of the built environment will be studied. The conceptual framework will draw from principles of community psychology and environmental criminology.

## CRIJ 4361 Comparative Criminal Justice Systems

This is an upper-division course elective. The course's primary goal is to introduce students to the idea of a world criminal justice system. Several countries will be selected each semester. A survey of the criminal justice systems (government, police, judiciary, laws, corrections and juvenile justice) will be conducted of each of the countries.

CRIJ 4362 Special Topics in Criminal Justice [3-0] Designed to give advanced undergraduate students academic flexibility and the opportunity to study contemporary issues in crime and criminal justice.

CRIJ 4363 Independent Studies in Criminal Justice
Designed for advanced students who are capable of independent study and research to examine an issue or project of specific interest. Registration upon approval of the Chair of the Department of Criminal Justice and the professor directing the course.

CRIJ 4364 Field Internship
Three hours per week studying job interview techniques. Placement in a criminal justice agency or related experience for on-the-job training for a minimum of 120 hours. Evaluation of student and agency critiques, daily logs and a weekly meeting with the intern coordinator. Previous course number: CRIJ 4401, CRIJ 4464; a student may receive credit in only one course.

CRIJ 4399 Criminal Justice System: Capstone This course is intended to serve as a capstone course. It will give students the opportunity to complete a comprehensive overview of and demonstrate the ability to integrate all facets of the criminal justice system in the United States: philosophy, history and development of criminal justice institutions, functions, current controversial issues and future trends. Prerequisites: CRIJ 1301, CRIJ 1306, CRIJ 2314, CRIJ 2328, CRIJ 3303, and CRIJ 3304.

# Computer SCIENCE 

CSCl 1170 Engineering Computer Science I Laboratory

[0-3]

## fall, spring, summer

The course includes hands-on instruction and laboratory exercises in developing programs written in a highlevel object-oriented programming language applying the principles taught in the CSCl 1370 lecture course. Corequisite: CSCI 1370. Equivalent course: CMPE 1170. A student may receive credit in only one course.

CSCl 1201 Introduction to Computer and Information Technology [2-0]

## fall, spring, summer

A computer literacy course to develop awareness of the expanding role of computer and information technology and to provide knowledge and skills related to personal and social uses of computers. Topics include applications of computers, societal and ethical issues involving computers, history, the Internet, packaged software and hardware and software terminology. Assignments will be given to provide hands-on experience in personal software packages and information networks. Students with limited or no computer experience are advised to enroll in CSCl 1300.

## CSCl $1300 \quad$ Foundations of Modern Information Technology [3-0]

## fall, spring, summer

The course presents the foundations of computer and information technology related to its expanding role in communicating, solving problems and acquiring information in all aspects of society. Knowledge and skills related to personal and professional uses of personal computers and information networks will be developed along with the critical thinking skills necessary to evaluate and learn new technologies as they become available. Topics include applications of computers, limitations and potentials of information technology, societal ethical issues involving computers, history and hardware and software terminology. Assignments will be given to provide hands-on experience in personal software packages and information networks.

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\begin{array}{ll}
\text { CSCl } 1360 & \text { Introductory Computer } \\
& \text { Science Concepts }
\end{array}
$$

fall, spring, summer
This course is recommended for students who need an
introduction to the concepts of computer science and programming experience before taking CSCl 1380 . Topics include concepts of computer hardware, software and networks; Internet services; and computer programming. Focuses on basic problem-solvingtechniques and algorithms development. Assignments will be given to provide handson experience in a high-levellanguage programming.
Prerequisite: Student with computer experience. This course fulfills the core curriculum requirements.

CSCl 1370 Engineering Computer Science I
fall, spring, summer
An introduction to computer science and computer engineering. The fundamentals of a high-level programming language will be introduced. Methods of problem solving, techniques of algorithmic development and concepts of procedural and objectoriented programming will be emphasized. Societal and social issues related to computer engineering will be introduced. Prerequisites: CSCl 1300 or equivalent experience and grade of "C" or better in MATH 1340 or placement in a higher-level Math course. Corequisite: CMPE 1170. Cannot receive credit for both CSCl 1380 and CMPE 1370. Will replace a grade received in CSCI 1380. Equivalent course: CMPE 1370. A student may receive credit in only one course.

CSCl $1380 \quad$ Computer Science I
fall, spring, summer
An introduction to computer science and computer programming is given, in which the fundamentals of a high-level programming language will be introduced. Methods of problem-solving, techniques of algorithmic development and concepts of structured objectoriented programming will be emphasized. Prerequisite: Concurrent Enrollment in MATH 1340.

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\begin{array}{ll}
\text { CSCl } 1381 & \text { Foundations of } \\
& \text { Computer Science } \tag{3-০}
\end{array}
$$

fall, spring, summer
This course presents an examination of the breadth of computer science that continues the introduction to the field of computer science first begun in CSCl 1380. Topics Include an introduction to the mathematical foundations of computing, basic computer architecture, assembly language, the operating system and networks, problem-solving algorithms and complexity, programming languages, software engineering, data organization, social and ethical issues of a computerized society and an overview of various computer science fields and topics. Programming projects will be given to reinforce and enhance the programming experience that began in CSCl 1380. Prerequisite: CSCI 1380.

CSCl 1387 Computer Science I (Honors) [3-0] as scheduled
This course introduces a high-level programming language. Methods of problem-solving, techniques of algorithmic development and concepts of structured object-oriented programming will be emphasized. Students are required to complete an integrated project entailing the development and implementation of a program for solving a given problem. Prerequisites: Concurrent Enrollment in MATH 1340 or.

## CSCl $1388 \quad$ Foundations of Computer Science (Honors)

as scheduled
This course gives an introduction to the mathematical foundations of computing, computer architecture, assembly language, the operating system and networks, problem-solving algorithms and complexity, programming languages, software engineering, data organization, social and ethical issues of a computerized society and an overview of various computer science fields and topics. Programming projects will be given to reinforce and enhance the programming experience that began in CSCl 1387. Prerequisite: CSCI 1380 or CSCl 1387.

CSCl 2302 Web Graphics and Animation [3-0] as scheduled
This course introduces modern 2-D graphics and animation techniques and methods on the Web. Basic image processing techniques, image formats and client side scripting for Web use will be discussed. Current software tools for developing graphical dynamic Web sites will be presented. Students are required to develop and implement active Web pages.

CSCl 2320 Computer Programming in a Second Language
as scheduled
Computer programming in a high-level programming language such as Ada, Modula-2, Java, LISP and PROLOG. May also cover two different languages, such as both LISP and PROLOG. Designed for students who already know how to program in another high-level language. May be repeated when languages change. Prerequisite: CSCI 1380.

CSCl 2333 Computer Organization and Assembly Language
fall, spring, summer
An introduction to computer organization, use of assembly language programming, basic instruction sets, arithmetic and logical operations, addressing modes and macro definition. Several computer programming projects are included. Prerequisite: CSCl 1381 or 1387 or CMPE 1370. Equivalent course: CMPE 2333. A student may receive credit in only one course.

CSCl $2344 \quad$ Programming in the UNIX ${ }^{\circledR}$ / Linux Environment
as scheduled
The course presents the UNIX file system, the commonly used utilities, editors, shell programming and scripting. It includes instruction in software development in the UNIX/Linux environment. In addition, a brief overview of the internal components of the operating system will be covered. Prerequisites: CSCI 1370, CSCI 1380 or CSCI 1387 or consent of instructor.

CSCl 2380 Computer Science II
fall, spring, summer
A second programming course includes problem solving by structured design; provides an introduction to elementary data structures, including linked lists, stacks, queues, trees and graphs, and advanced programming techniques, including recursion, sorting and searching. Prerequisite: CSCI 1381 or CSCI 1388 or CMPE 1370 or consent of instructor. Equivalent course: CMPE 2380. A student may receive credit in only one course.

## CSCl 2388 Computer Science II (Honors) [3-0]

 as scheduledThis course problem-solving by object-oriented design and development; covers elementary data structures, including linked lists, stacks, queues and binary trees, with an introduction to graphs, advanced programming techniques, including recursion and sorting and searching algorithms. Students are required to complete problemsolving projects. Prerequisites: CSCl 1381, CSCl 1388 or consent of instructor.

CSCl 3300 Internship in Computer Science [3-0] This course is designed to give students an opportunity to gain practical experience in the computer science career field by working with a participating employing firm or organization. The student will be supervised by a faculty member acting as a liaison between the University and the employing organization to ensure compliance with specific learning and experience requirements. The employment can be either paid or unpaid, and normally would include practical experience spread over one academic term or summer. A maximum of three hours of credit from CSCl 3300 or CSCl 3390 can be used toward the computer science major. May be repeated once. Prerequisite: Upper-division standing, minimum 12 hours of computer science completed and approved by both the department and employer providing the practicum/internship experience.

## CSCl 3326 Object-Oriented Programming in Java

The Java programming language and environment will be introduced with an emphasis on object-oriented
programming. Application areas will include Internetbased programming, applets, and HTML, and topics will include control structures, classes, methods, inheritance, Java libraries and packages. Objected-oriented aspects will include graphics, GUI, exception handling, multithreads, multimedia and networking. Prerequisites: CSCl 1380 or consent of instructor.

CSCl 3327 Object-Oriented Programming in Visual Basic
The Visual Basic programming language and environment will be introduced with an emphasis on window-based programming and the use of objects in Visual Basic. Topics will include control structures, graphical user interface concepts, classes, methods, inheritance and the Visual Basic interface and libraries. Prerequisites: CSCI 1380 or consent of instructor.

CSCl 3333 Algorithms and Data Structures [3-0] fall, spring, summer
This course is a continuation of data structures topics covered in CSCl 2380. Content includes theoretical topics in algorithmic efficiencyand complexity, along with abstract data types, including graphs, networks, trees and priority queues. Search topics, including hashing, trees, external search trees (B-trees) and sorting algorithms including external sorting are introduced and compared. Computational complexity topics include the Class $P$ and NP, NP-completenessand Reducibility, NP-completeness Proofs and NP-complete Problems. Prerequisites: CSCl 2380 and concurrent enrollment in MATH 3373. Equivalent course: CMPE 3333. A student may receive credit in only one course.

CSCl 3334 [3-0] fall, spring
This course covers the design and implementation of system software. It investigates the relationship between software design and machine architecture. Topics may include assemblers, macroprocessors, compilers, loaders, debugging environments, program development and archival tools, command language interpreters (shells), file systems, I/O support, processes, threads and interprocess communication. Prerequisites: CMPE 2333, or ELEE 3435 or CMPE 3435. Equivalent course: CMPE 3334. A student may receive credit in only one course.

CSCl $3336 \quad$| Organization of Programming |
| :--- |
| Languages |

as scheduled
This course describes the fundamental concepts of programming languages by discussing the design of the various language constructs, examining the design choices for these constructs, critically comparing design alternatives and discussing implementation techniques.

The underlying theory and formal modes of describing the syntax and semantics including finite automata and regular expressions, context-free grammars, contextsensitive languages and the Chomsky Hierarchy are included. Prerequisites: CSCl 2380.

CSCI 3340 Software Engineering [3-0] fall, spring, summer
A formal approach to the state-of-the-art techniques in software design and development. Emphasis will be on project planning, requirements, specification and system design and includes object design, testing and implementation. Provides the student with the opportunity to work on large projects in a group situation. Prerequisite: CSCl 2380 and three advanced hours in CSCl courses. Equivalent course: CMPE 3340. A student may receive credit in only one course.

CSCI 3341 Software Engineering II [3-0]
fall, spring, summer
The course will cover the analysis of requirements and software architecture and with a major emphasis on object design, implementation, testing and validation, maintenance and software re-engineering. It will provide the student with the opportunity to work on large projects in a group situation. Prerequisite: CSCl 3340 or CMPE 3340. Equivalent course: CMPE 3341. A student may receive credit in only one course.

CSCI 3342 Internet Programming [3-0] as scheduled
Focuses on programming techniques and methods and technologies on the Internet. Topics include HTTP (Hypertext Transfer Protocol) protocol, networking techniques, data transmissions and the use of Java Applets, multithreading, RMI (Remote Method Invocation), CGI (Common Gateway Interface) and Java Servlets in programming and Web site development. Prerequisites: CSCl 3326 or consent of instructor.

CSCl $3344 \quad$ UNIX ${ }^{\circledR} /$ Linux
Operating System
as scheduled
This course provides a detailed study of operating system principles as seen in the UNIX ${ }^{\circledR} /$ Linux system kemel including initialization, scheduling, context switching, process management, memory management, device management and the file system. A student may receive credit in only one of the courses CSCl 3344 and CSCI 4334. Prerequisites: CSCl 3333 and CSCl 3334 , or consent of instructor.
$\mathrm{CSCl} 3350 \quad$ Numerical Methods
as scheduled
This course studies the numerical solutions to various
problems occurring in engineering, the sciences and mathematics. These problems include finding solutions to nonlinear equations, solutions to linear and nonlinear systems of equations, interpolation of data, approximation of functions, numerical integration and solutions to differential equations. It also studies the influence of data representation and computer architecture on the choice and development of algorithms. Equivalent course:MATH 3368, a student may receive credit in only one course. Prerequisite: MATH 1401 and CSCl 1380.

CSCl 4301 Digital Image Processing [3-0]
fall, spring, summer
The course presents fundamental concepts and applications of digital image processing. Topics include basic color, image perception and transformation, image enhancement and compression and image analysis and computer vision. Prerequisite: CSCI 3333 or CMPE 3333. Equivalent course: CMPE 4301. Students may receive credit for only one course.

CSCl 4302 Multimedia Systems
as scheduled
This course presents the broad field of multimedia systems. Topics include the digital interactive multimedia, creation of multimedia, and various issues involving technology, design and effectiveness of multimedia applications.
Students will have the opportunity to learn programming techniques for integrating video, sound, animation and graphics for multimedia systems. Prerequisite: CSCl 3333 or consent of instructor.

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\text { CSCl } 4310 \quad \begin{align*}
& \text { Design and Analysis } \\
& \text { of Algorithms } \tag{3-0}
\end{align*}
$$

as scheduled
The course presents elements of the design and analysis of computer algorithms. Topics include in-depth study of algorithms' design strategies such as dynamic programming, divide-and-conquer and greedy methods; algorithms for graph problems, geometric problems and other selected problems; and computational complexity. Prerequisite: CSCl 3333 or consent of instructor.

CSCl $4325 \begin{aligned} & \text { Automata, Formal Languages } \\ & \text { and Compatibility }\end{aligned}$
[3-0]
as scheduled
The course presents formal computation models. Topics include finite state machine, pushdown state machine, Turing machine, halting problem, definition and properties of formal grammars and their languages as well as theory of computability and complexity including the complexity of optimization and approximation problems. Prerequisite: CSCl 3333 and CSCl 3336.

CSCl 4327 Compiler Construction
fall, spring, summer
Syntax analysis and semantic processing for a blockstructured language. Compilation vs. interpretation; lexical analysis based on finite automata; syntax-directed translation; symbol tables; run-time storage allocation; error detection and recovery; code generation and optimization. Students are required to write a compiler. Prerequisite: CSCI 3334 or CMPE 3334 or consent of the instructor. Equivalent course: CMPE 4327. A student may receive credit in only one course.

## CSCl 4333 Database Design and Implementation

fall, spring, summer
Study of logical (hierarchical, network, relational) and physical (sequential, indexed, relative) organization of databases. Database management systems and their features, querying databases, distributed databases and data compression. Prerequisite: CSCI 3333 or CMPE 3333. Equivalent course: CMPE 4333. A student may receive credit in only one course.

CSCl 4334 Operating Systems
fall, spring, summer
This course provides a study of the basic concepts of operating systems: process management, memory management, file systems, resource allocation and protection. A student may receive credit for only one of the courses CSCl 3344 and CSCI 4334. Prerequisites: CSCl 3333 and CSCl 3334 or consent of the instructor. Equivalent course: CMPE 4334.

CSCl 4335 Computer Architecture
fall, spring, summer
A study of the operational units and their interconnections of a modern computer as well as the theory behind the design of the instruction set, control unit, registers, memory hierarchy and addressing modes, bus structures, input/output and storage units. Similarities between CISC and RISC architectures and related issues such as instruction level parellelism and superscalar processors are discussed. Prerequisite: CSCI 2333 or CMPE 2333 or CMPE 3437 and CSCI 3333 or CMPE 3333. Students may receive credit for only one of CSCl 4335 , CMPE 4335 , CMPE 4380 or ELEE 4380. Equivalent course: CMPE 4335.

CSCl 4336 Parallel and Distributed Computing
fall, spring, summer
Presents principles and practices of parallel and distributed computing. Topics include parallel and distributed computation models and architectures; design, analysis and implementation of parallel algorithms; and methods
of parallel and distributed programming. Prerequisite: CSCI 4335 or CMPE 4335 or CMPE 4380. Equivalent course: CMPE 4336. A student may receive credit in only one course.

CSCl 4341 Topics in Computer Science [3-0] as scheduled
Topics or problems in Computer Science; subject matter changes from semester to semester. May be repeated for credit as topic varies. Prerequisite: Consent of instructor.

CSCl 4343 Software Verification, Validation and Quality Assurance

## fall, spring, summer

Course topics include methods for evaluating software for correctness and reliability including code inspections and their role in software verification; program proofs and testing methodologies; formal and informal proofs of correctness; unit and system testing techniques, testing tools and limitations of testing; statistical testing; and reliability models. Prerequisites: CSCI 3340 or CMPE 3340.

CSCl 4345 Computer Networks
fall, spring, summer
An introduction to data communication topics, including data transmission, encoding, data link control, switching, network topologies, protocols, internet working and data security. Examples of existing networks and network architectures are studied. Prerequisite: CSCI 3333 or CMPE 3333. Equivalent course: CMPE 4345. A student may receive credit in only one course.

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CSCl 4346 Advanced Operating Systems [3-0] as scheduled
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This course provides a survey of the design and implementation of distributed operating systems, both by introducing basic concepts and considering examples of current systems. Topics include: communication, synchronization, processor allocation and distributed file systems. Prerequisite: CSCI 3344 or CSCI 4334 or consent of instructor.

## CSCI $4350 \quad$ Artificial Intelligence

fall, spring, summer
Study of intelligent machines and machine learning. Includes problem solving and heuristic search, natural language understanding, game playing, database and expert systems. Artificial Intelligence projects will be implemented using an AI language such as Lisp, Prolog, C++ or Ada. Prerequisite: CSCI 3333 or CMPE 3333. Equivalent course: CMPE 4350. A student may receive credit in only one course.


CSCl 4360 Interactive Computer Graphics and Systems as scheduled
Presents fundamental concepts of computer graphics. Topics include display hardware, transformations, geometric modeling, shading two- and three-dimensional display algorithms and graphics software systems.
Prerequisite: CSCl 3333 or consent of instructor.
CSCl 4363 Advanced Computer Networks and Network Security
fall, spring, summer
This course examines the internetworking architecture and routing, design and implementation issues related to secure and reliable networks, cryptography, firewalls, digital signatures, worms, viruses, logic bombs and spyware. Prerequisite: CSCI 4345 or CMPE 4345. Equivalent Course: CMPE 4363. A student may receive credit in only one course.

CSCl 4381 Interactive Systems and User Interface Design [3-0]
fall, spring, summer
Presents principles and practice of information communication between user and system. The course examines results of past research, as well as evolving trends in interface design and implementation.
Prerequisite: CSCI 3333, CMPE 3333 or consent of instructor. Equivalent course: CMPE 4381. A student may receive credit in only one course.

CSCl 4382 Computer Visualization as scheduled
Focuses on design and implementation of computer graphics systems to provide visual representation of large data sets. Presents current theory and practice of computer visualization systems and advanced display techniques. Prerequisite: CSCl 3333 or consent of the instructor.

CSCl $4390 \quad$ Senior Project
as scheduled
Students will construct a software product, following it through the stages from initial specification to the final completed project, including user manual. Prerequisites: CSCl 3340 and consent of instructor.

## $\lambda_{\text {Dance }}$

DANC 1201 Dance Improvisation [0-3] Exploration of dance elements and design through creative problem-solving and guided experiences. Must be registered concurrently in any dance technique course.

DANC 2110 Tap Dance I
[0-3]
Introduction to tap dance technique and styles.
Prerequisite: Permission of instructor.
DANC 2112 Dance Performance:
Beginning/Intermediate [0-3]
Introduction to dance performance participation and techniques. Must be registered concurrently in any dance technique course. Prerequisite: Permission of instructor. May be repeated for credit.

DANC 2120 Jazz Dance I
Introduction to jazz dance technique and styles.
Prerequisite: Permission of instructor.

DANC 2130 Dance Technique: Special Topics I [0-3] Intensive study in dance technique; study with guest artists. Prerequisite: Permission of instructor. May be repeated for credit as topics change.

DANC $2144 \quad$ Ballet Technique: Pointe I [0-3] Instruction in Pointe technique. Prerequisite: Grade of " $B$ " or better in DANC 2241 or 2242 or permission of instructor. May be repeated for credit.

DANC 2203 Music for Dancers
[3-0]
Introduction to musical elements as they relate to dance technique, performance and instruction. Musical forms, historical periods and composers.

DANC 2241 Ballet I: Primary Technique [0-4.5] Study of fundamentals of ballet technique for primary technique area. Prerequisite: Permission of instructor. May be repeated for credit.

DANC 2242 Ballet I: Secondary Technique [0-3] Study of fundamentals of ballet technique for secondary technique area. Prerequisite: Permission of instructor. May be repeated for credit.

DANC 2245 Modern Dance I:
Primary Technique
[0-4.5]
Study of fundamentals of modern dance technique for primary technique area. Prerequisite: Permission of instructor. May be repeated for credit.

DANC 2246 Modern Dance I:
Secondary Technique
Study of fundamentals of modern technique for secondary technique area. Prerequisite: Permission of instructor. May be repeated for credit.

DANC 2249 Mexican Dance I: Primary Technique
Study of fundamentals of Mexican dance technique for primary technique area. Prerequisite: Permission of instructor. May be repeated for credit.

DANC 2250 Mexican Dance I:
Secondary Technique
[0-3]
Study of fundamentals of Mexican dance technique for secondary technique area. Prerequisite: Permission of instructor. May be repeated for credit.

DANC 2253 Spanish Dance I: Primary Technique
Study of fundamentals of Spanish dance technique for primary technique area. Prerequisite: Permission of instructor. May be repeated for credit.

DANC 2254 Spanish Dance I:
Secondary Technique
[0-3]
Study of fundamentals of Spanish dance technique for secondary technique area. Prerequisite: Permission of instructor. May be repeated for credit.

DANC 2323 Dance Appreciation
[3-0] as scheduled
An introduction to theatrical dance, including ballet, modern dance, post-modern dance and Spanish dance. How to understand and enjoy dance, an appreciation and understanding of Western dance performance forms. (Fulfills University core curriculum requirements for Fine Arts; see pages 103-107 for details.)

DANC 3110 Tap Dance II
[0-3]
Continuation of DANC 2110. Prerequisite: Grade of "B" or better in DANC 2110 or permission of instructor. May be repeated for credit.

DANC 3112 Dance Performance: Intermediate/Advanced
Intermediate/advanced dance performance techniques. Must be registered concurrently in any dance technique course. Prerequisite: Permission of instructor. May be repeated for credit.

DANC 3120 Jazz Dance II
Continuation of DANC 2120. Prerequisite: Grade of " $\mathrm{B}^{-3}$ or better in DANC 2120 or permission of instructor. May be repeated for credit.

DANC 3130
Dance Technique:
Special Topics II
[0-3]
Intensive study in advanced dance technique; study with guest artists. Prerequisite: Permission of instructor. May be repeated for credit as topics change.

DANC 3143 Ballet Technique: Variations [0-3] Focus on ballet repertory, including classical variations and contemporary styles and dance works. Prerequisite: Grade of "B" or better in DANC 2241 or 2242 or permission of instructor. May be repeated for credit as repertory changes.

DANC 3144 Ballet Technique: Pointe II [0-3] Instruction in advanced Pointe technique. Prerequisite: Grade of "B" or better in DANC 2144 or permission of instructor. May be repeated for credit.

DANC 3202 Choreography I
Investigation of compositional structures, motif and motif development; space, dynamics and rhythm as choreographic tools in dance making, leading to production of original dance work for formal/informal presentation. Prerequisite: DANC 1201.

DANC 3241 Ballet II: Primary Technique [0-4.5] Continuing study of fundamentals of ballet technique for primary technique area. Prerequisite: Grade of "B" or better in DANC 2241 or permission of instructor. May be repeated for credit.

DANC 3242 Ballet II: Secondary Technique [0-3] Continuing study of fundamentals of ballet technique for secondary technique area. Prerequisite: Grade of " $B$ " or better in DANC 2242 or permission of instructor. May be repeated for credit.

## DANC 3245 Modern Dance II:

Primary Technique
[0-4.5]
Continuing study of fundamentals of modern dance technique for primary technique area. Prerequisite: Grade of "B" or better in DANC 2245 or permission of instructor. May be repeated for credit.

DANC 3246 Modern Dance II:
Secondary Technique
[0-3]
Continuing study of fundamentals of modern dance technique for secondary technique area. Prerequisite: Grade of "B" or better in DANC 2246 or permission of instructor. May be repeated for credit.

DANC $3249 \quad$ Mexican Dance II:
Primary Technique
[0-4.5]
Continuing study of fundamentals of Mexican dance technique for primary dance technique. Prerequisite:

Grade of "B" or better in DANC 2249 or permission of instructor. May be repeated for credit.

DANC 3250 Mexican Dance II: Secondary Technique
Continuing study of fundamentals of Mexican dance technique for secondary dance technique area.
Prerequisite: Grade of "B" or better in DANC 2250 or permission of instructor. May be repeated for credit.

DANC 3253 Spanish Dance II:
Primary Technique [0-4.5]
Continuing study of fundamentals of Spanish dance technique for primary technique area. Prerequisite: Grade of "B" or better in DANC 2253 or permission of instructor. May be repeated for credit.

DANC 3254 Spanish Dance II:
Secondary Technique [0-3]
Continuing study of fundamentals of Spanish dance technique for secondary technique area. Prerequisite: Grade of "B" or better in DANC 2254 or permission of instructor. May be repeated for credit.

DANC 3309 Dance History 1 [3-0]
Introduction to history of dance as an art form; examination of the role of dance in early world cultures and the evolution of dance forms through the 1800s, viewed in their cultural and societal contexts.

DANC 3310 Dance History II [3-0]
Continuing study of evolution of dance forms viewed in their cultural and societal contexts from the 1800 to the present. Prerequisite: DANC 3309.

DANC 3311 Dance Production [3-0]
Theory and practice of technical production for dance, including lighting design, costume design and construction, set design, sound and props.

DANC 3312 Dance Philosophy and Criticism [3-0] Orientation to historical and contemporary dance philosophies; critical analysis of choreography and dance performance. Prerequisite: DANC 3310.

DANC 3313 World Dance
Inquiry into dance forms and cultural contexts in diverse world cultures. Prerequisite: DANC 3310.

DANC 3320 Dance Science [3-0] Fundamentals of physiology, kinesiology, biomechanics, physical conditioning and injury prevention as they apply to dance techniques and training. Prerequisites: BIOL 2403 and BIOL 2404.

DANC 4102 Senior Project
The production of senior choreographic work or research project for formal presentation. Prerequisites: Permission of instructor and DANC 4202.

DANC 4202 Choreography II
[0-3] Study of space use, group design and emotional content in dance-making,leading to the production of original dance work for formal/informal presentation. Prerequisite: DANC 3202.

DANC 4241 Ballet III: Primary Technique [0-4.5] Continuing study of ballet technique with a strong emphasis on performing skills and styles for primary technique area. Prerequisite: Grade of " B " or better in DANC 3241 or permission of instructor. May be repeated for credit.

DANC 4242 Ballet III: Secondary Technique [0-3] Continuing study of ballet technique with a strong emphasis on performing skills and styles for secondary technique area. Prerequisite: Grade of " $B$ " or better in DANC 3242 or permission of instructor. May be repeated for credit.

DANC 4245 Modern Dance III: Primary Technique
[0-4.5]
Continuing study of modern dance technique with a strong emphasis on performing skills and styles for primary technique area. Prerequisite: Grade of "B" or better in DANC 3245 or permission of instructor. May be repeated for credit.

DANC 4246 Modern Dance III: Secondary Technique
Continuing study of modern dance technique with a strong emphasis on performing skills and styles for secondary technique area. Prerequisite: Grade of " B " or better in DANC 3246 or permission of instructor. May be repeated for credit.

DANC $4249 \quad \begin{aligned} & \text { Mexican Dance III: } \\ & \\ & \text { Primary Technique }\end{aligned}$
[0-4.5] Continuing study of Mexican dance technique with a strong emphasis on performing skills and styles for primary technique area. Prerequisite: Grade of " $B$ " or better in DANC 3249 or permission of instructor. May be repeated for credit.

DANC 4250 Mexican Dance III: Secondary Technique
Continuing study of Mexican dance technique with a strong emphasis on performing skills and styles for primary technique area. Prerequisite: Grade of "B" or

better in DANC 3250 or permission of instructor. May be repeated for credit.

DANC 4253 Spanish Dance III: Primary Technique
[0-4.5]
Continuing study of Spanish dance technique with a strong emphasis on performing skills and styles for primary technique area. Prerequisite: Grade of "B" or better in DANC 3253 or permission of instructor. May be repeated for credit.

DANC 4254 Spanish Dance III: Secondary Technique
Continuing study of Spanish dance technique with a strong emphasis on performing skills and styles for primary technique area. Prerequisite: Grade of " $B$ " or better in DANC 3253 or permission of instructor. May be repeated for credit.

DANC 4310 Dance Theory: Ballet, Modern, Jazz
Technical and aesthetic theories and practices related to the training of dancers in ballet, jazz dance and modern dance idioms. Prerequisite: Credit for any 3000 level technique class.

DANC 4311 Dance Theory: Folk
Exploration of theories and practice in folk dances as they relate to diverse world cultures. Prerequisite: Credit for any 3000 -level technique class.

DANC 4312 Dance Theory: Children's Dance [3-0] Technical and aesthetic theories and practices related to fashioning developmentally appropriate dance experiences for children. Prerequisite: Credit for any 3000-leveltechnique class.

DANC 4313 Dance in the Public Schools [3-0] Field-based experiences in program planning for dance in secondary schools, including unit instruction, lesson planning, class organization and materials sources. Laboratory experiences to be arranged. Prerequisites: DANC 4310 or DANC 4311 or DANC 4312; EDCI 4301 and EDHS 3305.

DIET 2351 Introduction to Clinical Nutrition [3-0] fall, spring, summer I
Basic principles of human nutrition with emphasis on the nutrients and factors that affect their utilization in the human body; nutritional requirements of the body at all age levels; modern concept of an adequate diet; cultural influences on food selection; principles of diet modification and its importance in the treatment of disease.

DIET 2352 Food Preparation

## spring

Application of scientific principles in food selection and preparation (conventional and microwave cooking). Consideration is given to the composition and properties of food, nutritional value, desirability standards, simple menu service and food economics.

## DIET 3353

Advanced Nutrition
[3-○]

## fall

Study of biological, physiological, sociological and environmental aspects of nutrition science. Controversial issues in nutrition are examined. Prerequisites: CHEM 3303 and CHEM 3103, HRP 2351, BIOL 2403, BIOL 2404 and admission to the Coordinated Program in Dietetics.

DIET $3354 \quad$ Food Systems Management
spring
Organization and management of a food service system and basic operational subsystems (procurement,inventory, production, distribution, sanitation and fiscal control). Prerequisites: DIET 3452, DIET 3353 and DIET 3356.

DIET 3356 Experimental Foods [2-3]

## fall

Investigation of chemical, physical and nutritional properties of foods and additives during food preparation. Study of food modifications necessary for diet therapy; consideration of cultural preferences. Prerequisites: DIET 2352, CHEM 2302 and admission to the Coordinated Program in Dietetics.

DIET 3357 Medical Nutrition Therapy I

## fall

Introduction to the concepts of providing nutritional care to individuals. Topics include nutritional assessment procedures (anthropometrics, biochemical, clinical and dietary) nutrition care plan, medical records including problem-oriented medical record, basic principles of interviewing and counseling, diabetic and
renal calculations, total parenteral nutrition (TPN) and tube feeding methods, and use of computers for dietary analysis of intakes. Prerequisites: DIET 3353 and admission to the Coordinated Program in Dietetics.

DIET 3358 Medical Nutrition Therapy II [3-0] spring
Pathophysiological effect of disease on humans and rationale for diet therapy. Development of ability to translate dietary prescription into meal plans that will satisfy nutritional, emotional and cultural needs of people. Prerequisite: DIET 3357.

DIET 3452 Quantity Foods Production [3-0-6] fall
Principles and methods of buying, preparing and serving foods for various types of quantity food facilities are considered. Standardization of recipes and cost controls. Use and care of institutional equipment. Safety and sanitation. Eight hours clinical experience per week. Prerequisites: DIET 2352, concurrent enrollment in DIET 3353 and DIET 3356, and admission to the Coordinated Program in Dietetics.

DIET 3655 Food Systems Management Practicum
spring
Selected problems and clinical experiences directly correlated to DIET 3354. Sixteen hours clinical experience per week. Prerequisites: DIET 3452, DIET 3353 and DIET 3356, each with a minimum grade of "C," and concurrent enrollment in DIET 3354.

DIET 4257 Seminar in Dietetics spring
The study of principles of research and research design. Introduction, interpretation and evaluation of dieteticsrelated professional literature. Study of planning techniques and instructional strategies for professional presentations. Students are provided preliminary directions in the development of a research proposal. Prerequisite: Senior status in dietetics program.

DIET 4259 Community and Life Cycle Nutrition

## spring

Study of community assessment planning, education and implementation of community programs. Also includes the study of physiological changes and nutritional requirements in infancy, childhood, adolescence and adulthood (including the elderly). Prerequisites: DIET 4358 and DIET 4852, and concurrent enrollment in DIET 4455.

DIET 4358 Communication Skills in Dietetics [3-0] fall
Study of the major components of communication, interviewing, counseling, behavior modification, group process, delivery of oral presentations and workshops, learning and motivation. Prerequisites: DIET 3354, DIET 3655, DIET 3357 and DIET 3358.

DIET 4455 Community Nutrition Practicum
[0-0-12]
spring
Survey of major problems arising from food habits of population groups, including the study of the MexicanAmerican culture. Techniques for teaching effective nutrition to groups. Clinical experience includes observation and participation with selected community agencies and schools. Sixteen hours clinical experience per week for 11 weeks. Prerequisites: DIET 4852 and concurrent enrollment in DIET 4259.

DIET 4456 General Dietetics Practicum [0-0-9] spring
Integration of nutritional care and dietetic service into various systems of health care, food systems management or clinical nutrition. Under close supervision, students will assume the role of the generalist dietitian. Thirty two hours clinical experience per week for four weeks. Prerequisites: DIET 4358 and DIET 4852.

DIET 4852 Clinical Nutrition Practicum [0-24] fall
An introduction to the role of the clinical dietitian in the health care environment. Selected problems and clinical experiences directly correlated to DIET 3357 and DIET 3358. Twenty four hours clinical experience per week. Prerequisites: DIET 3357 and DIET 3358.

ECON 1301 Introduction to Economics [3-0] fall, spring, summer
Uses economic analysis to examine a variety of past and current economic, social and political issues/ problems. While the focus will be on the United States, international issues will also be considered. In particular, the student will have the opportunity to develop an understanding of how economic, social and political systems, through their institutions and structures, affect a variety of issues related to the economy and society.

ECON 2301 Principles of Macroeconomics [3-0] (Texas Common Course Number is ECON 2301.) fall, spring, summer
Provides an introduction to the economy as a whole. Topics include national income and output, unemployment, inflation, market forces and economic growth, international linkages (such as trade deficits), and economic, social and political structures and institutions (such as fiscal and monetary policies and the Federal Reserve System).

ECON 2302 Principles of Microeconomics [3-0] (Texas Common Course Number is ECON 2302.) fall, spring, summer
Introduction to the economic problem and the fundamentals of microeconomics. Analysis of the market system (including market failure), consumer demand, the firm's supply decision, product and resource markets, resource allocation and efficiency and international linkages (such as comparative advantage).

ECON 3300 Internship in Economics [3-0] as scheduled
This course is designed to give students an opportunity to gain real world experience in their chosen economics career field by working with a participating employer or organization. The students will be supervised by a faculty member acting as a liaison between the employing organization and the academic department to assure compliance with specific learning and experience requirements for the assignment. The employment can be either paid or unpaid, and must be at least 10 hours of work each week over the period of one academic term. Prerequisites: ECON 2301, ECON 2302, upper-division standing and approval by both department chair and employer providing internship experience.

ECON 3336 The Political Economy of Mexico [3-0] as scheduled
This course surveys the growth of the Mexican economy, its institutions and problems. Emphasis is placed on the relative roles of government and private enterprise in the development process. Prerequisites: ECON 2301 and ECON 2302, or equivalents.

## ECON 3341 Econometrics

This course studies standard regression procedures of parameter estimation and hypothesis testing in economics. This course covers basic probability concepts, the linear regression model, the properties of the least squares estimators, hypothesis testing, functional form, heteroskedasticity, autocorrelation and the basics of panel data estimation and simultaneous equation. Prerequisites: ECON 2301, ECON 2302, and MATH 1322 or QUMT 2340.

ECON 3342 Business and Economics Forecasting This course studies forecasting techniques as they apply to finance and economics. The course covers graphical analysis, modeling and forecasting trends, seasonality adjustment, stationarity, MA, AR, ARMA, ARIMA, unit roots, forecasting with regression models and forecast evaluation. Prerequisites: ECON 2301, ECON 2302, and MATH 1322 or QUMT 2340.

ECON 3343 Economics of the Government Sector

## as scheduled

Economic roles of the government, public sector economic decision making, and the effects of government expenditures and taxation on resource allocation, income distribution and economic growth. Also includes topics such as pollution control, education, deregulation and income security programs. Prerequisites: ECON 2301 and ECON 2302 or equivalents.

ECON 3351 Macroeconomic Theory [3-0]
fall, spring
Provides an analysis of the construction, character and operational uses of the macroeconomic models of classical, Keynesian, Monetarist and Neoclassical schools of thought. Applications of the foregoing models to such issues as inflation, unemployment, economic growth, interest rates and investment in the U.S. economy are emphasized. Prerequisites: ECON 2301 and ECON 2302.

## ECON 3352 Microeconomic Theory <br> [3-0]

fall, spring
Provides an in-depth study of the theory of consumer demand and the theory of the firm. Supply and demand analysis and different ttet structures are also discussed.
Prerequisites: ECON 2301 and ECON 2302.
ECON 3353 International Trade
[3-0]
fall, spring
Provides an analysis of the mechanism of international trade and its effects on the domestic economy. Emphasis is placed on the issues of comparative advantage, trade barriers, international factor mobility (including foreign direct investment) and trade agreements. Prerequisites: ECON 2301 and ECON 2302.

ECON 3354 Health Economics
[3-0] as scheduled
This course examines the economics of health and health care, the production of health services, the markets for hospital and physician services and the health insurance market. Other major topics include managed care, the pharmaceutical industry, the role of government in the health care sector and health care reform. Prerequisite: ECON 1301 or ECON 2302 or equivalents.

ECON 3355 Economic Development [3-O] as scheduled
This course is designed to provide students with contemporary concepts, analytical approaches, policies and practices that foster the technology-based economic development of regional and local economies. The course provides evidence on how factors such as knowledge, place, time, capital, institutional relationships, learning and policy promote technology-based economic development. Worldwide and regional comparative perspectives and alternative strategies are also examined in the course. Prerequisites: Three hours of economics and junior standing.

ECON 3357 Economics of Poverty [3-0] fall
Provides an analysis of the causes and socioeconomic consequences of poverty. Discussions will involve such topics as income transfer programs, welfare reform, Social Security, national health programs and income tax structures. Prerequisites: ECON 2301 and ECON 2302.

ECON 3358 Labor Economics [3-0]
fall
Provides an in-depth analysis of labor market structures and processes, patterns and determinants of employment and wages, labor force participation, unemployment, discrimination and human capital. Prerequisites: ECON 2301 and ECON 2302.

ECON 3360 Managerial Economics [3-0] as scheduled
This course applies economic reasoning to entrepreneurial decision making. The course covers topics such as personnel economics, production theory, pricing policies and investment planning. Prerequisites: ECON 2301 and ECON 2302 or equivalents.

ECON 3381 Money and Banking [3-0]
fall, spring, summer
The components, nature, functions, creation and destruction of money and credit are surveyed in this course. Other topics include financial institutions and their functions and an introduction to monetary theory and policy. Prerequisites: ECON 2301 and ECON 2302 or equivalents.

ECON 4340 Introduction to
Mathematical Economics [3-0]
spring
Introduction to quantitative methods used to analyze a variety of macroeconomic and microeconomic issues, including the role of fiscal and monetary policies in the macroeconomy, markets, production costs, profit maximization and utility maximization. Methods
discussed include the use of structural models, matrix algebra, comparative statics and unconstrained and constrained optimization. Prerequisites: ECON 2301, ECON 2302 and MATH 1342 (or equivalent).

> ECON $4359 \quad$ History of Economic Thought spring
> Provides a survey of the field of economics. Pre-scientific, classical and contemporary works will be studied to offer knowledge of the development of economic theory and view of current direction and scope. Prerequisites: ECON 2301 and ECON 2302.

## ECON 4361 Studies in Economics

## fall, spring

Provides an in-depth analysis of a special economics topic selected by the instructor. The topic will be established a priori, such that interested students should contact the instructor or department chair before registration. This course will have variable content and may be repeated for credit with consent of instructor. Prerequisites: ECON 2301 and ECON 2302.

ED 3350 Information Technology [3-0] fall, spring, summer
Operational skills in computer applications to educational word processing, database, worksheet, desktop publishing, testing, graphics and communication. Emphasis will be given to a critical review of methodology for instruction and management of instruction. Prerequisite: CSCI 1300 or consent of instructor.

ED 4313 Directed Teaching - Generic Special Education

## fall, spring

Course consists of observation, limited participation in teaching, then full teaching responsibility in a public school (TEA-accredited) special education classroom to which the student is assigned. This work is done under the guidance of the teacher of the class to which the student is assigned and the supervision of a college professor who makes periodic observations and evaluations of the student's progress. Seminars and individual conferences are required. Students are assigned to the public school classroom for a minimum number of hours as mandated by TEA. The number of hours per day and the number of days per
week are regulated by TEA, UTPA Student Teaching Manual and local school districts. Prerequisites: Approval of UTPA Teacher Education Committee. For additional prerequisites, refer to Directed Student Teaching Requirements for Generic Special Education.

## Thlternative Certification PROGRAM

EDAC 4320 Internship [3-0-30] as scheduled
Will consist of on-site supervision. Seminars will meet weekly during the semester and for a minimum of 12 hours. This course is required to meet elementary and secondary requirements for teacher certification. May not be substituted for student teaching. Prerequisites: Baccalaureate degree and acceptance into the UT Pan American Alternative Certification Program.

EDAC 4321 Internship [3-0-30] as scheduled
Will consist of on-site supervision. Seminars will meet weekly during the semester and for a minimum of 12 hours. This course is required to meet elementary and secondary requirements for teacher certification. May not be substituted for student teaching. Prerequisites: Baccalaureate degree and acceptance into the UT Pan American Alternative Certification Program.

EDAC 4340 Introduction to the Teaching Profession [3-0-4]
fall, spring, summer
This course, designed for both elementary and secondary Alternative Certification candidates, will orient students to the teaching profession, the lesson cycle, the teaching process and real-life requirements of teaching in a modern public school. Following instruction in observation skills, students will spend 45 clock hours, including three full consecutive days, in a public school setting where they will have the opportunity to prepare lessons and teach them in small and large group settings. ACP students will be evaluated in both the University and public school setting.

EDAC $4342 \quad \begin{aligned} & \text { Introduction to Early } \\ & \text { Childhood Education }\end{aligned}$
[3-0]

## as scheduled

Teachers of young children (birth to age eight) must understand how children develop socially, emotionally, physically and cognitively so that they can plan developmentally appropriate experiences for each child. The major purpose of this course is to present current theories, knowledge and research about children that underlie decision making in early childhood programs. A second purpose is to illustrate how theories and research findings evolve into curriculum organization, teaching strategies and activities that are developmentally appropriate for young children.

## EDAC 4343 The Process of Reading as scheduled

The reading process and its correlates as they pertain to emergent literacy through the acquisition of comprehension processes; focus on the directed reading process for grades Pre-K through four; connections among the processes of language, writing and reading; basic diagnosis techniques and assessment procedures as they relate to the reading/writing process.

## EDAC 4345

## as scheduled

This course will present principles of curriculum organization and planning based on learner needs. Students will design instruction to enable elementary students to achieve educational goals and objectives. Implementation of the lesson cycle with utilization of instructional media will be stressed. The scope, sequence and materials for teaching the elementary school curriculum will be studied. The course will include basic principles and procedures of instruction and classroom management, with emphasis on discipline and effective teaching strategies. Skills needed to meet the requirements of the Texas Teacher Appraisal System will also be addressed. Microteaching with appropriate instructional media and technology for the elementary learner will be included.

EDAC 4348 Instructional Planning Methodology and Classroom Management in the Secondary Schools [3-0]

## as scheduled

This course focuses on the practical application of Texas curriculum requirements incorporating the lesson cycle for planning, implementing and evaluating the teachinglearning process in secondary schools within legal and ethical guidelines. It includes basic principles and
procedures of instruction and classroom management, with emphasis on discipline and effective teaching strategies. Skills needed to meet the requirements of the Texas Teacher Appraisal System will also be addressed. Microteaching with appropriate instructional media and technology for the secondary learner will be included.

EDAC 4620 Internship
4621
[6-0-30]
as scheduled
Internship will consist of on-site supervision. Seminars will meet weekly during the fall semester and for a minimum of 12 hours during the spring semester. Courses are designed to meet elementary or secondary requirements for teacher certification. May not be substituted for student teaching. Prerequisites: Baccalaureate degree and acceptance into the UT Pan American Alternative Certification Program.

EDAK 3370 Internship I: Kinesiology in Elementary Schools [3-0]

## fall, spring

Instruction and practice with methods and materials necessary to design and implement developmentally appropriate instruction for elementary school physical education. It is aligned with the EC-4 Texas Essential Knowledge and Skills (TEKS). This is a field-based course which requires a minimum of 25 hours in a field setting. Prerequisites: KIN 3340, kinesiology major and admission to teacher education.

EDAK 3380 Internship I: Kinesiology in Middle Schools [3-0]

## fall, spring

Instruction and practice with methods and materials necessary to design and implement developmentally appropriate instruction for middle school physical education. It is aligned with the 4-8 Texas Essential Knowledge and Skills (TEKS). This is a field-based course which requires a minimum of 25 hours in a field setting. Prerequisites: KIN 3340, kinesiology major and admission to teacher education.


EDAK 4390
Internship I: Kinesiology in High Schools
[3-O]
as scheduled
Instruction and practice with methods and materials necessary to design and implement developmentally appropriate instruction for high school physical education students. It is aligned with the 8-12 Texas Essential Knowledge and Skills (TEKS). This is a fieldbased course which requires a minimum of 25 hours in a school setting. Prerequisites: KIN 3370 and 3380.

## A All-Level EDUCATION

EDAL 3301 Foundations of All-Level Education<br>\section*{as scheduled}

This course is designed for the student who is preparing to teach in a specific content-area at all levels in public education. Research issues and trends regarding all-level education will be examined including the historical and philosophical systems affecting the current state of schools. The course will analyze the professional roles and responsibilities as well as the legal and ethical requirements of the teaching profession. This course requires a minimum of 25 hours in the public school setting. Prerequisite: Admission to the College of Education.

EDAL 3302
Human Development, Learning
Theory and Assessment
as scheduled
This course examines the human developmental processes as they apply to planning instruction and assessment for learners at all levels. It also emphasizes the role of learning theory in the instructional process, including varied learning styles and developmental characteristics and needs. This course also focuses on the role of formal and informal assessment in guiding instructional planning and creating assessments congruent with instructional goals and outcomes at the EC-4 and 8-12 levels. This course requires a minimum of 25 hours in the public school setting. Prerequisite: Admission to the College of Education.

EDAL 3303
Instructional Methods for English Language Learners and Learners with Exceptionalities at All Levels [3-0]
as scheduled
Designed for the prospective all-level teacher, this course explores contemporary first and second language acquisition theories and theories of instruction as they relate to the special needs of English language learners (ELLs) and learners with exceptionalities in content-area classrooms for all level (EC-12) instruction. Students will have the opportunity to learn to assess the special needs of students whose first language is not English and students who have exceptionalities (i.e., mild learning disabilities). They will also learn to integrate researchbased best practices for promoting literacy and language development in their teaching. This course requires a minimum of 25 hours in the public school setting. Prerequisite: Admission to the College of Education.

EDAL 4301
Internship I: Elementary (EC-4)
Classroom Management, Planning
and Curriculum
[3-0]

## as scheduled

This course is designed for the prospective all-level teacher emphasizing principles of curricular organization, planning and classroom management based on elementary school learner needs. Development of lessons and utilization of instructional media will be stressed. Students will also learn the scope, sequence and materials used in the elementary (EC-4) school curriculum. The course will also focus on the basic principles and procedures of instruction and classroom management. The development of appropriate goals, objectives and lesson plan for grades EC-4 is introduced. This course requires a minimum of 25 hours in the public school setting. Prerequisites: EDAL 3301, EDAL 3302 and EDAL 3303.

EDAL 4302 Internship I: Principles of Learning and Classroom Management Grades 4-8 [3-0] as scheduled
This course is designed for the prospective all-level teacher and addresses the intellectual, physical, social, emotional and moral implications for teaching, learning and school curricular organization at the middle school level. It also focuses on the interdisciplinary nature of knowledge, including how the middle school curriculum should be relevant, challenging, integrative and exploratory. The development of appropriate goals, objectives and lesson plans for middle school is introduced. This course requires a minimum of 25 hours in the public school setting. Prerequisites: EDAL 3301, EDAL 3302 and EDAL 3303.

EDAL 4303
as scheduled
Internship I: Planning and Curriculum Development for Grades 8-12

This course is designed for students preparing to teach at all levels. It focuses on methods that emphasize curriculum, classroom organization and management. The development of appropriate goals, objectives and lesson planning for grades 8-12 will be introduced. The prospective teacher will have the opportunity to identify needs and plan instruction using technology and other resources. A particular emphasis will be for students to demonstrate lessons in respective content areas utilizing appropriate instructional techniques. This course requires a minimum of 25 hours in the public school setting. Prerequisites: EDAL 3301, EDAL 3302 and EDAL 3303.

EDAL 4395 Supervised Internship II: All-Level in Art
[3-0]
as scheduled
This course is designed for students in art seeking alllevel teacher certification. Intern will be placed in a stateaccredited public school all day under the guidance of an experienced classroom teacher (mentor) and a university supervisor for a minimum of twelve (12) weeks. This course must be taken concurrently with EDAL 4398.

EDAL 4396 Supervised Internship II: All-Level in Music [3-0]
as scheduled
This course is designed for students in music seeking alllevel teacher certification. Intern will be placed in a stateaccredited public school all day under the guidance of an experienced classroom teacher (mentor) and a university supervisor for a minimum of twelve (12) weeks. This course must be taken concurrently with EDAL 4398.

Supervised Internship II:
All-Level in Special Education [3-0]
as scheduled
This course is designed for students in special education seeking all-level teacher certification. Intern will be placed in a state-accredited public school all day under the guidance of an experienced classroom teacher (mentor) and a university supervisor for a minimum of twelve (12) weeks. This course must be taken concurrently with EDAL 4398.

EDAL 4398 Integrated Internship II: Seminar All-Level
as scheduled
A seminar format facilitates the intern's integration of the supervised internship experience and the program's professional curriculum for kinesiology, art, music and special education all-level teacher certification. Emphasis is placed on linking classroom learning with practice in the field and integrating theory with professional practice. Internship situations and experiences will be used for discussion and analysis. This course must be taken concurrently with EDAL 4399.

EDAL 4399 Supervised Internship II:
All-Level in Kinesiology
as scheduled
This course is designed for students in kinesiology seeking all-level teacher certification. Intern will be placed in a state-accredited public school all day under the guidance of an experienced classroom teacher (mentor) and a university supervisor for a minimum of twelve (12) weeks. This course must be taken concurrently with EDAL 4398.

EDBE 3315 The Bilingual Curriculum in the Content Areas [3-0-2] fall, spring (and summer for endorsement only) This is a course in which the learner-centered curriculum for the content area will be studied, focusing on the Texas Essential Knowledge and Skills (TEKS) of science, mathematics, social studies and health in a dual language classroom. (Field-Based Approved Course.)

EDBE 3316 The Development of Biliteracy [3-0-2] fall, spring (and summer for endorsement only) This course will examine the transfer of Spanish literacy to English literacy. The course will also emphasize the current perspective of the social nature of the biliteracy process in order to provide relevant and meaningful learning experiences for all learners. (Field-Based Approved Course.)

## EDBE 3322 Foundations of Bilingual Education [3-0-11/2]

## fall, spring, summer

The study of cultural, psychological, socioeconomic, linguistic, cognitive and curricular factors affecting the academic achievement of bilingual students. This course also will investigate the philosophical, legal and sociological aspects of bilingual education in the American public school system. National, state and local guidelines designed to meet the needs of multilingual and multicultural student populations will be reviewed.

EDBE 3324 English as a Second Language [3-0-2] fall, spring, summer
The rationale, theories, goals and practical applications of a comprehensive learner-centered ESL curriculum will be studied. The integration of a learner-centered ESL curriculum in biliteracy development will also be examined as an integral component of a bilingual education program.
$\begin{array}{ll}\text { EDBE } 4304 & \begin{array}{l}\text { The Development } \\ \text { of Bilingualism }\end{array} \\ \text { [3-0-2] }\end{array}$
fall, spring (and summer for endorsement only)
This course is designed to investigate the nature of dual language development in a bilingual setting, beginning with early childhood through the sixth grade. Special emphasis is placed on first and second language development and transference of skills and concepts resulting in balanced bilingualism. (Field-Based Approved Course.)


## CURRICULUM AND INSTRUCTION

EDCI 1301 Introduction to the<br>Teaching Profession<br>\section*{as scheduled}

This course, designed for elementary, middle school and secondary candidates, will orient students to the teaching profession, the teaching process and real-life requirements of teaching in a modern public school. Students will spend 45 clock hours, including three full consecutive days, in a public school setting where they will have the opportunity to prepare lessons and teach them in small and large group settings. Students will be evaluated in both the university and public school setting. This course will also address college success skills needed by entering freshman.

EDCI 3301 Principles of Learning

## as scheduled

This course provides an introduction to the behavioral, cognitive, social and constructivist concepts of learning at the elementary school level. The course will examine the principles and theories of classroom management, organization, motivation, behavior modification, emotional, intellectual, physical and social implications related to the education of young children. This course requires a minimum of 25 hours in the public school setting.

## EDCI 3305 Social, Cultural, Historical and Political Foundations of Education [3-0]

fall, spring
This course is designed for the student who is preparing to teach in grades EC-4. The course focuses on the social, cultural, historical and political issues impacting the current state of education in the United States. Research, issues and trends in these areas with regard to early childhood through fourth grade (EC-4) education will be discussed. This is a field-based approved course.

EDCI 4302 Educational Psychology [3-0-11/2] fall, spring, summer
In this course, the prospective teacher will examine the development of children, with emphasis on the development of students in middle and secondary school. The importance of understanding and demonstrating how to work with diverse groups of learners will be stressed (e.g., SES, exceptionalities, race, ethnicity, gender equity, language), and students will be involved

## BILINGUAL Ed, CURRICULUM/INSTR, EARLY CHILDHOOD COURSE DESCRIPTIONS

in field-based experiences in the schools and/or the community. The importance of the interrelationship between students, educators, parents and the community will be stressed.

EDCI 4305 Instructional Technology and Curriculum Development [3-0-1]

## fall, spring

This course will present principles of curriculum organization, planning and technology applications that provide relevant and meaningful learning experiences for all students. The infusion of instructional technology across content areas will be emphasized.

EDCI 4306 Instructional Methods and Classroom Management [3-0-2]

## fall, spring

This course focuses on instructional methods that emphasize practical applications of a learnercentered curriculum and classroom organization and management. Teaching strategies for delivering learnercentered instruction will be stressed. (Field-Based Approved Course.)

EDCI 4310 Directed Teaching - ESL: Internship II
[3-0-15]

## fall, spring

(Student must also be enrolled in EDCI 4311-elementary or EDCl 4398-secondary.)
This course must be taken by all undergraduate student teachers working toward an English as a Second Language endorsement for teaching in ESL programs. Course requires observation and teaching experiences in a public school ESL classroom for one-half day, Monday through Friday, for half a semester. This work is done under the direction of a fully certified teacher of the class to which the student is assigned. Periodic observations and evaluations will be done by the course instructor. Weekly seminars and individual conferences are a required part of the course. Prerequisite: Approval by the UT Pan American Teacher Education Committee. Elementary prerequisites: EDCI 3305 and EDCI 4306. High school prerequisites: EDCI 4301, EDCI 4302, EDCI 4307, EDCI 4308 and READ 4351.

EDCI 4316 Principles of Teaching Workshop for Elementary/Secondary Teachers Advanced
as scheduled
A workshop course designed for the person entering the teaching profession to study classroom management and to give the student the opportunity to develop instructional skills needed in the area of the instructional assignment. Prerequisite: Special permission must be given to each participant before enrollment in the course.


EDCI 4390 Development and Learning [3-0] as scheduled
This course focuses on the cognitive and affective development of children in early childhood through fourth grade (EC-4) education. The emphasis of this course is on using research and trends on the cognitive and emotional development of children to establish a positive and challenging learning environment. The course will also provide a better understanding of the different factors that impact the teaching and learning process. This course requires a minimum of 25 hours in the public school setting.

EDCI 4398 Integrated Internship II SeminarElementary (EC-4)

## fall, spring

A seminar format facilitates the intern's integration of the supervised internship experience and the program's professional curriculum for elementary (EC-4) teacher certification. Emphasis is placed on linking classroom learning with practice in the field and integrating theory with professional practice. Internship situations and experiences will be used for discussion and analysis. This course must be taken concurrently with EDCI 4399.

EDCI 4399 Supervised Internship II EC-4 [3-0] fall, spring
This course is designed for students seeking elementary (EC-4) teacher certification. Intern will be placed in a state-accredited public school all day under the guidance of an experienced classroom teacher (mentor) and a university supervisor for a minimum of twelve (12) weeks. This course must be taken concurrently with EDCI 4398.

# $\Delta_{\text {Enir }}$ CHILDHOOD 

EDEC 4314 Research in Early Childhood [3-0-11/2] fall, spring
Students will research and survey current trends in early childhood programs including day care. Theories of classroom management and supervision of children will be emphasized. Prerequisites: EDEC 4390 and EDEC 4391.
$\begin{array}{ll}\text { EDEC } 4391 & \text { Foundations of } \\ & \text { Early Childhood }\end{array}$

$$
[3-0-11 / 2]
$$

## fall, spring, summer

This course will address child development during early childhood as it impacts formal learning settings. A learner-centered curriculum which includes learning centers, thematic instruction, and authentic assessment in a field-based setting will be emphasized. (Field-Based Approved Course.) Prerequisite: EDEC 4390.
$\begin{array}{ll}\text { EDEC } 4392 & \begin{array}{l}\text { Acquisition and Conceptualization } \\ \text { Processes in Early Childhood }\end{array} \\ \text { [3-0-2] }\end{array}$ fall, spring (and summer for endorsement only)
Analysis of processes of acquisition and conceptualization of Piagetian concepts, socialization, wellness and fitness. (Field-Based Approved Course.) Prerequisite: EDEC 4390. EDEC 4393 Cultural Dimensions Related to Early Childhood [3-0-2] fall, spring (and summer for endorsement only) Multicultural, pluralistic societies will be reviewed with emphasis on major components of culture. The culture of Hispanics and other minorities will be an integral part of this course. Dynamics of socioeconomic status, stereotyping, family structure, language acquisition and health/nutrition will be researched.

EDEC 4394 Cognitive and Psychomotor Development in Early Childhood
[3-0-2]
fall, spring (and summer for endorsement only) Theories and stages of cognitive and psychomotor development will be analyzed. Developmental program models will be studied. Readiness for first language learning and second language acquisition will be addressed. (Field-Based Approved Course.)

EDHS 3305

$$
\begin{aligned}
& \text { Instructional Methods for } \\
& \text { English Language Learners } \\
& \text { and Learners with Exceptionalities } \\
& \text { in High School } \\
& \text { [3-0] }
\end{aligned}
$$

## as scheduled

Designed for prospective high school teachers, this fieldbased course explores contemporary first and second language acquisition theories and theories of instruction as they relate to the special needs of English language learners (ELLs) and learners with exceptionalities in contentarea classrooms in high schools. Students will have the opportunity to learn to assess the special needs of students whose first language is not English and students who have exceptionalities (i.e., mild learning disabilities). They will also have the opportunity to learn to integrate research-based best practices for promoting literacy and language development in their teaching.

## EDHS 4301 Foundations of Education [3-0]

 as scheduledThis course is designed for the student who is preparing to teach in high school (8-12 level). Students will investigate the teaching profession as it relates to social, political and economic forces in a global society. The historical and philosophical systems that have influenced contemporary schools will be studied. Research, issues and trends in these areas will be examined through both classroom instruction and field-based experiences in high schools. Ethics and personal integrity will be examined within the context of ethical and legal standards for teachers. Instructional use of technology is emphasized. This course requires a minimum of 25 hours in the public school setting.

## EDHS 4302 Instructional Planning and Assessment

as scheduled
This course is designed for students who are preparing to teach in high school (8-12 level). It addresses human developmental processes, learning theories and factors that impact student learning to support the framework for planning and assessing instruction that motivates students and is responsive to their developmental characteristics and needs. The course focuses on procedures for designing appropriate, coherent and effective instruction and assessment based on appropriate learning goals and objectives, including the use and

integration of technology. This course requires a minimum of 25 hours in the public school setting.

EDHS 4303 Instructional Strategies and Classroom Management [3-0] as scheduled
This course is designed for the student who is preparing to teach in high schools (8-12 level). The prospective teacher examines and models teaching styles that place the learner at the center of instruction. Integration of other disciplines, the learner's interests, and technological resources will be stressed in considering central themes of subject matter from many different viewpoints. Theories of and strategies for classroom management will also be addressed. This course requires a minimum of 25 hours in the public school setting.

## EDHS 4398 Integrated Internship II: 8-12 [3-0] as scheduled

A seminar format facilitates the intern's integration of the supervised internship experience and the program's professional curriculum for high school teacher certification. Emphasis is placed on linking classroom learning with practice in the field and integrating theory with professional practice. Internship situations and experiences will be used for discussion and analysis. This course must be taken concurrently with EDHS 4399.

## EDHS 4399 Supervised Internship II: High School 8-12

as scheduled
This course is designed for students in specific content areas seeking high school (8-12) teacher certification. Interns will be placed in a state-accredited public school all day under the guidance of an experienced classroom teacher (mentor) and a university supervisor for a minimum of twelve (12) weeks. This course must be taken concurrently with EDHS 4398.

## $\boldsymbol{d}_{\text {MIDDLE }}$ SCHOOL 4-8

EDMS 3305

> Instructional Methods for English Language Learners and Learners with Exceptionalities In Middle Schools
as scheduled
Designed for the prospective middle school teachers, this field-based course explores contemporary first and second language acquisition theories as they relate to instruction in content area classrooms in middle schools. Students will have the opportunity to learn to assess students' special needs whose first language is not English and those with exceptionalities. They will also study the integration of research-based practices for promoting literacy and language development in their teaching. This course also provides methods on motivating and involving English Language Learners (ELLs) and students with exceptionalities, providing future teachers with practical strategies to evaluate and teach strugging readers by linking assessment and instruction.

EDMS 3353 Young Adolescent Development and Learning
as scheduled
This field-based course is centered on concepts, principles and theories of young adolescent development and learning differences of middle school students. It specifically focuses on the intellectual, physical, social, emotional and moral implications of these differences for teaching, learning and school organization. Students will study a variety of instructional strategies that take into consideration and capitalize upon the developmental characteristics of the middle school age group. Young adolescent development is the framework to understand the middle school concept and organization and how to work successfully within these organizational components in the 21st century. This course also considers issues of young adolescent health, sexuality, needs and their development within classrooms, families, peer groups, communities and society.

EDMS 3354 Middle School Curriculum
Development and Assessment [3-0]
as scheduled
This field-based course examines major concepts, principles, theories and research related to middle school
curriculum development, including how the middle level curriculum should be relevant, challenging, integrative and exploratory. It focuses on the interdisciplinary nature of knowledge making connections among subject areas when planning curriculum. It also addresses how to incorporate all young adolescents' ideas, interests and experiences into the curriculum, and how to implement a variety of developmentally responsive assessment measures (e.g., portfolios, authentic assessments, student self-evaluation). This course also describes the role of assessment in guiding instructional planning and the importance of creating assessments that are congruent with instructional goals and objectives. Specifically, it will address formal and informal assessment strategies used (advantages and limitations) to evaluate learning and teaching that ensure the continuous intellectual, social and physical development of all young adolescents. Finally, the course also focuses on the connection between the Texas statewide assessment programs, the TEKS, instruction and illustrates examples on how to use common statistical measures to analyze assessment data and maintain useful records to communicate such information knowledgeably.

EDMS 3355 Instructional Technology Methods And Classroom Management for Middle School Classrooms [3-0]

## as scheduled

This field-based course examines when and how to integrate technology into curriculum development, instruction and assessment and how to effectively organize and manage a middle school classroom. It presents the background on technology's role in middle school education and describes learning theories and teaching/learning models related to technology integration. This course discusses how technology and media are used to support instructional goals and objectives to engage students in meaningful learning, including the growing importance of connecting people and resources for a technologypermeated future (World Wide Web, distance-learning technology, etc.). Infusion of instructional technology across content areas will be emphasized, presenting examples of technology resources and integration strategies for several different content areas. Also, course focuses on practical applications of a learner-centered curriculum, classroom organization and management.

EDMS 4398 Integrated Internship II:
Seminar-Middle School

## as scheduled

A seminar format facilitates the intern's integration of the supervised internship experience and the program's professional curriculum for middle school teacher certification. Emphasis is placed on linking classroom
learning with practice in the field and integrating theory with professional practice. Internship situations and experiences will be used for discussion and analysis. This course must be taken concurrently with EDMS 4399.

EDMS 4399 Supervised Internship II: Middle School
as scheduled
This course is designed for students seeking middle school teacher certification. Intern will be placed in a state-accredited public school all day under the guidance of an experienced classroom teacher (mentor) and a university supervisor for a minimum of twelve (12) weeks. This course must be taken concurrently with EDMS 4398. (Field-Based Approved Course.)

ELEE 2120 Electrical Circuits I Laboratory [0-3] fall, spring, summer
This course covers fundamental circuit measurement techniques and reinforces concepts from ELEE 2320, Electrical Circuits I. Topics include basic instrumentation; measurement of voltage, current, resistance, power, frequency and phase; analysis of experimental data; and reporting of technical results. Prerequisite: Credit or registration for ELEE 2320. Equivalent Course: CMPE 2120. A student may not receive credit for both CMPE 2120 and ELEE 2120.

ELEE 2130 Digital Systems Engineering I Laboratory
fall, spring, summer
Basics of digital logic and hardware combinational circuits, flip-flops, resistors, sequential circuits and state machines. Corequisite: Credit or registration for ELEE 2330. Equivalent Course: CMPE 2130. A student may not receive credit for both CMPE 2130 and ELEE 2130.

ELEE 2319 Numerical Computation and Data Visualization Topics in this course include performing engineering numeric calculations using computation tools, introduction to mathematics software languages, writing programs to solve scalar and multivariable problems using matrix algebra, numerical solution of linear equations, relational and logical operators, and plotting
and visualization of data. Prerequisites: CSCI 1380 and MATH 2346, both with a grade of "C" or better.

## ELEE 2320 Electrical Circuits I <br> fall, spring, summer <br> This course covers fundamentals of electrical circuits, including basic definitions, Kirchoff's laws, nodal and loop analysis, superposition, Thevenin and Norton equivalents, time-varying circuits, simple transient response, sinusoidal steady-state analysis using phasors and power in sinusoidal steady-state circuits. Prerequisite: MATH 1470. Equivalent Course: CMPE 2320. A student may not receive credit for both CMPE 2320 and ELEE 2320. This course replaces ELEE 2420. Student may not receive credit for both courses.

ELEE $2321 \quad$ Electrical Circuits II [3-0] fall, spring
Transient response of networks by Fourier and Laplace transform methods, frequency-domain techniques and time-domain techniques. Prerequisites: ELEE 2420 and credit for or enrollment in MATH 3349.

ELEE 2330 Digital Systems Engineering I [3-0] fall, spring, summer
Boolean algebra; analysis and synthesis of combinational and sequential switching network; applications to computer design. Corequisite: Credit or registration in MATH 1460 is recommended but not required. Equivalent Course: CMPE 2330. A student may not receive credit for both CMPE 2330 and ELEE 2330.

ELEE 2420 Electrical Circuits I
fall, spring
Basic network principles, steady-stateresponse to signals, simple transient response, and nodal and loop analysis. Prerequisite: Credit for or concurrent enrollment in MATH 2401.

ELEE $3100 \quad$ Projects in Electrical Engineering
Special projects, research activities or supervised engineering studies. May be repeated for credit. Prerequisite: Consent of instructor.

ELEE $3225 \quad$ Electrical Engineering Laboratory I

## fall

Basic experimental methods; theory and practice of measurements; limitations of theoretical models; reporting of technical results. Prerequisites: ELEE 2330 and ELEE 2130 with a grade of "C" or better and credit for or concurrent enrollment in ELEE 2321 and ELEE 3301.

ELEE 3301 Electronics I [3-0]
fall
A course in the physical principles of electronic devices with emphasis on semiconductor electronics. Includes the analysis and design of electronic circuits such as rectifiers, amplifiers and switching circuits using diodes, bipolar transistors, field effect transistors and operational amplifiers. Prerequisite: ELEE 2420 with a grade of "C" or better, credit for or enrollment in ELEE 2321.

ELEE 3302 Electronics II [3-0] spring
Provides further study in electronic circuits. Includes analysis and design of differential and multistage amplifiers, feedback and frequency response techniques in amplifier design. Prerequisites: ELEE 2321 and ELEE 3301 with a grade of "C" or better.

ELEE 3305 Electrical Systems [2-3]
fall, spring
Introduction to electric circuits and machines. Circuit elements; voltage, current and power; DC circuits; AC circuits in the steady state; elementary circuits; polyphase circuits. Types and characteristics of DC motors, AC motors and transformers. This course may not be counted toward the Bachelor of Science in electrical engineering degree. Prerequisites for engineering majors: MATH 1402 and PHYs 2302. Prerequisites for other majors: MATH 1402 and PHYS 1402.

ELEE 3306 Electronic Systems [2-3] spring
Electronic devices and circuits with applications in modern industrial control systems; electronic circuits for signal processing and wave shaping and analog computing; basic digital computer circuits; transducers and sensors; electronic instruments; measurements; basic feedback control systems. Prerequisite: ELEE 3305.

ELEE 3315 Electromagnetic Engineering [3-0] fall
Introduction to electrostatics and magnetostatics; properties of conductive, dielectric, and magnetic materials; time varying-fields; Maxwell's equations; transmission lines and transmission line circuits; fundamentals of electromagnetic radiation. Prerequisites: ELEE 2420 and MATH 2401 with a grade of "C" or better.

ELEE $3330 \quad$ Electrical Engineering Laboratory II
spring
Experimental solution of engineering problems, including design, optimization, evaluation and simulation; advanced measurement techniques in
electrical, electronic and digital systems. Prerequisites: ELEE 3301 and ELEE 3225 with a grade of " $C$ " or better; credit for or enrollment in ELEE 3302.-

## ELEE $3340 \quad$ Probability and Statistics for Electrical Engineers

## fall, spring, summer

Probability, random variables, distribution and density functions, statistical estimators, correlation, regression techniques, system response to random inputs.
Prerequisite: ELEE 2321 or CMPE 2322. Equivalent Course: CMPE 3342. A student may not receive credit for both ELEE 3340 and CMPE 3342.

ELEE 3370 Power Electronics
as scheduled
Power electronic devices (diodes, thyristors, etc.); power electronic circuits (rectifiers, DC choppers, AC voltage controllers, etc.); applications (AC and DC motor drives, etc.); modeling and simulation using Spice software. Prerequisite: ELEE 3301 with a grade of " $C$ " or better.

ELEE 3371
Electrical Power Systems
Design and Application
[3-0]

## spring

This course covers practical design of electrical power and lighting distribution for commercial, industrial and residential buildings, based on National Electrical Code (NEC) standards. The NEC, regulatory considerations, industry standards and the Texas Engineering Practice Act are discussed. Current commercial, industrial and residential projects are analyzed, and students will have the opportunity to complete designs for sample residential and office buildings. Prerequisites: ELEE 2420 or ELEE 3305.

ELEE 3435 [3-3] fall, spring, summer
Basic microprocessor programming and principles of assembly language programming; microprocessor organization and interfacing; applications, including data acquisition, control and communication. Prerequisites:
CSCI 1380 and ELEE 2330. Equivalent Course: CMPE 3437. A student may not receive credit for both ELEE 3435 and CMPE 3437.

ELEE 4303 Digital Systems Engineering II [3-0] fall, spring, summer
Hardware implementation of arithmetic and other algorithmic processes; organization, design and simulation of digital systems; asynchronous sequential switching networks. Prerequisite: ELEE 2330. Equivalent Course: CMPE 4303. A student may not receive credit for both CMPE 4303 and ELEE 4303.

ELEE 4308 Electromechanical Systems [3-0] spring
Magnetic circuits and transformers; principles of electromechanical energy conversion, rotating AC and DC electric machinery. Prerequisite: ELEE 2321 or ELEE 3305 with a grade of "C" or better.

ELEE 4321 Automatic Control Systems [3-0]
fal/
Dynamic system modeling; system stability; time-domain analysis; root-locus technique; frequency-domain analysis; control system design. Prerequisites: ELEE 2321 and MATH 3349 with a grade of " $C$ " or better.

## ELEE 4328 Solid State Electronic Devices <br> fal/

Semiconductor materials and carrier transport; p-n junctions and Schottky barriers; bipolar and field effect transistors; integrated circuits. Prerequisites: CHEM 1301, CHEM 1101, ELEE 3315 and ELEE 3301 with a grade of "C" or better.

ELEE 4351 Communication Theory [3-0]
fal/
Signals, systems and analog modulation techniques; effects of noise in modulation systems, signal-to-noise ratio; digital data transmission; probability of error. Prerequisite: ELEE 3340 with a grade of "C" or better.

ELEE $4360 \quad$ Microwave Systems Engineering $\quad[2-3]$ as scheduled Ideal and lossy transmission lines: s-parameters; couplers, isolators, circulators and filters; basic active circuits; systems and component specifications; antenna and radiation specifications. Prerequisites: ELEE 3315 and ELEE 3301 with a grade of " $C$ " or better.

ELEE 4365 Digital Signal Processing [3-0]
fall, spring, summer
Sampling theory, discrete processing of analog signals, discrete Fourier transforms, signal analysis, z-transforms, digital filter design, real-time digital signal processing and applications. Prerequisite: ELEE 2321 or CMPE 2322 and credit for or concurrent enrollment in MATH 3349. Equivalent Course: CMPE 4365. A student may not receive credit for both ELEE 4365 and CMPE 4365.

ELEE 4366 Introduction to Image Processing [3-0] fall, spring, summer
This course provides an introduction to image processing topics and design of image processing software. It covers methods for computer analysis of images, and processing of images including image formation, spatial resolution, preprocessing techniques, image filtering, image enhancement and image segmentation methods.

Prerequisite: ELEE 2319 or equivalent. Equivalent Course: CMPE 4366. A student may not receive credit for both CMPE 4366 and ELEE 4366.


#### Abstract

ELEE 4367 Fiber Optic Communications [2-3] fall, spring, summer Introduction to optics, photonics, and optoelectronics; fiber optic devices; and communication systems. Topics include ray optics, electromagnetic optics, resonator optics, dielectric waveguides and filters, semiconductor and laser light sources and detectors, modulators, amplifiers, connectors and optical fiber communication systems. Prerequisite: ELEE 2321 or CMPE 2322. Equivalent Course: ELEE 4367. A student may not receive credit for both ELEE 4367 and CMPE 4367.


## ELEE 4375 Introduction to VLSI <br> [3-O]

fall, spring, summer
This course provides an introduction to the area of CMOS VLSI design and design of VLSI circuits, including CMOS logic circuits, integrated circuit layout and design tools and overview of integrated circuit fabrication. Prerequisite: ELEE 2330 and ELEE 3301. Equivalent Course: CMPE 4375. A student may not receive credit for both CMPE 4375 and ELEE 4375.

## ELEE 4378 Signal Integrity and <br> Electromagnetic Compatibility [3-0]

fall, spring, summer
Distortion of digital signals analyzed via lumped element and transmission line models, power distribution in electronic systems, printed circuit layout guidelines, basic electromagnetic principles as applied to shielding and grounding, EMI regulations. Prerequisite: ELEE 2321 or CMPE 2322. Equivalent Course: CMPE 4378. A student may not receive credit for both ELEE 4378 and CMPE 4378.

ELEE 4380 Computer Architecture [3-0] fall, spring, summer
This course presents an overview of digital computer architecture, including architectural issues for processors, instruction sets, microprogramming, memory hierarchy and interleaving, cache and virtual memory mapping, RISC principles, and principles of pipelining and pipeline hazards, as well as input/output devices. Prerequisite: One of the following: ELEE 3435 or CMPE 3437. Equivalent Course: CMPE 4380. A student may receive credit for only one of the following: CMPE 4380, ELEE 4380, CSCl 4335, CMPE 4335.

ELEE 4390 Communication Networks [3-0] fall, spring, summer
This course covers engineering principles of data communications, including the following topics:
communication media and signal encoding schemes, point-to-point communication standards, layering concepts, datalink protocols, network protocols, transport layer protocols, error control, flow control, congestion control, routing algorithms, virtual circuits, call setup procedure, TCP/IP protocol, internetworking, switching and switching fabric, frame relays, ATM and emerging technologies. Prerequisite: ELEE 3435 or junior standing. Equivalent Course: CMPE 4390. A student may not receive credit for both CMPE 4390 and ELEE 4390.

ELEE 4461 Senior Design Project I as scheduled
This is the first semester of a capstone design experience, drawing from previous engineering, science and general education coursework. Activities will include project selection, definition and specification; background research; periodic written and oral reports, and preparation of a detailed proposal including a preliminary design.
Prerequisites: ELEE 3330, 3435, and credit for or enrollment in at least nine hours of 4000-level electrical engineering coursework.

ELEE $4462 \quad$ Senior Design Project II [1-9] as scheduled
This is the second semester of a capstone design experience, drawing from previous engineering, science and general education coursework. Activities include preliminary test and evaluation, design optimization and revision, and final test and evaluation. Periodic written and oral reports, and final demonstration of a working project are required. Prerequisite: ELEE 4461.

## 3 ENGLISH

ENG 1301 Composition [3-0] (Texas Common Course Number is ENGL 1301.) as scheduled
This course affords the opportunity for students to develop their ability to communicate effectively and responsibly through written discourse. Emphasis upon mechanical proficiency and organization skills in writing expository essays, analysis of style, tone and point of view of expository prose. (Credit for this course may be obtained by qualified students through advanced placement or advanced standing examinations.) Prerequisite: Satisfactory scores on English portion of ACT test and TASP examination, or ENG 1320.

ENG 1302 Rhetoric
(Texas Common Course Number is ENGL 1302.) as scheduled
This course offers the opportunity to learn to recognize and to employ the principles of rhetoric in written discourse. Analysis of rhetoric and logic, writing of essays and study of research and documentation techniques. Requires the completion of a research project. (Credit for this course may be obtained by qualified students through advanced placement or advanced standing examinations.) Prerequisite: A grade of "C" or better in ENG 1301, ENGL 1387 or ENG 1406.

## ENG 1310 Reading-Vocabulary as scheduled

This course offers students the opportunity to develop their ability to read college-level materials. Emphasis on vocabulary and word recognition skills, comprehension skills, study skills and efficiency in content area reading. Required of students with reading skills below college level. Course does not satisfy University core curriculum requirements.

## ENG $1320 \quad$ Basic Writing

 as scheduledIntensive study and practice in basic grammar and fundamentals of composition. Emphasis on punctuation, sentence combining, sentence construction, correct language use and other basic writing skills. Does not count toward hours for graduation or in the computation of hours attempted or earned. A course grade will be recorded as Pass (P) or No Pass (NP). (There will be special sections for foreign-born students. A minimum score of 500 on TOEFL or minimum score of 60 on MTEL is required for entrance.)

ENG 1387 Rhetoric and Composition (Honors Plan)
as scheduled
Study and practice of writing effectively, with emphasis on expository writing and the research paper. Prerequisite: Admission to the Honors Studies Program or by invitation.

ENG 1388 Rhetoric and Literature
(Honors Plan) [3-0] as scheduled
Study and practice of writing effectively/interpreting literature. Emphasis on critical analysis of essays, fiction and poetry. Prerequisite: ENGL 1387 or by invitation.

ENG 2300 Introduction to Literature [3-0] as scheduled
An introduction to literary genres, with special emphasis
on the short story, novel or novella, drama and poetry. Requires careful reading and the writing of critical essays about individual works. Prerequisite: Minimum grade of " $C$ " in six hours of required freshman English.

ENG 2303 Introduction to American Literature
(Texas Common Course Number is ENGL 2326.) as scheduled
Emphasis on critical methods of reading, writing and thinking; at least three genres and three authors considered. Prerequisite: Minimum grade of " $C$ " in six hours of required freshman English.

ENG 2305 Introduction to British Literature [3-0] (Texas Common Course Number is ENGL 2322.) as scheduled
Emphasis on critical methods of reading, writing and thinking; at least three genres and three authors considered. Prerequisite: Minimum grade of " $C$ " in six hours of required freshman English.

ENG 2307 Introduction to World Literature [3-0] (Texas Common Course Number is ENGL 2331.) as scheduled
Emphasis on critical methods of reading, writing and thinking; at least three genres and three authors considered. Prerequisite: Minimum grade of " $C$ " in six hours of required freshman English.

## ENG 2308 Readings in Special Topics

as scheduled
A study of the literature associated with a special group, area, movement or technique. The topic to vary with each section. Special topics to be announced in the class schedule. Credit Restriction: May be taken only once to satisfy University core curriculum requirements but may be repeated for elective credit when the topic varies. Prerequisite: Minimum grade of "C" in six hours of required freshman English.

ENG 2313 Readings in Dramatic Literature [3-0] as scheduled
Critical review and analysis of selected plays from Greek antiquity to the present time. Designed to clarify the nature and major achievements of Western dramatic art. Equivalent Course: COMM 2313; may be counted as English or communication in satisfying degree requirements. Credit may be received for only one course. Prerequisite (for English credit): Minimum grade of " $C$ " in six hours of required freshman English.

ENG 2387 Readings in World Literature
(Honors Plan) [3-O]
as scheduled
A study of selected works from the literature of Greece, Rome and Medieval Europe. Prerequisite: Admission to Honors Studies or by invitation.

## ENG 2388 Readings in World Literature <br> (Honors Plan) <br> [3-○]

as scheduled
A study of selected works of Western literature from Renaissance through modern writers. Prerequisite: Admission to Honors Studies or by invitation.

ENG 3300 Introduction to Language Studies

## spring

Provides an overview of the cross-disciplinary nature of language issues from the theoretical contexts of linguistics to political interactions among languages in contact, to applications of language study for various disciplines including education, psychology, sociology, acquisition, learning, literacy, law, medicine, computer technology, etc.

ENG 3301 Medieval Literature
A study of various types of medieval literature, including the epic, the romance and the allegory, with special attention to Middle English writers. Prerequisite: Nine hours of English.

## ENG 3304 The Eighteenth Century [3-0]

 as scheduledA study of the major works of English writers of the Neo-classical period, including Dryden, Congreve, Pope, Swift, Sterne and Samuel Johnson. Prerequisite: Nine hours of English.

ENG 3305 The Romantic Period
as scheduled
A study of the development of romanticism in France, Germany and England, with the main emphasis on
English writers. Prerequisite: Nine hours of English.
ENG 3306 The English Novel to 1850
[3-0] as scheduled
A study of the origins and development of the English novel with emphasis on the major novelists. Prerequisite: Nine hours of English.

ENG 3307 The English Novel from 1850 to Present
as scheduled
A study of the continuing development and techniques
of the English novel with emphasis on the major novelists. Prerequisite: Nine hours of English.

| ENG 3309 | Development of <br> the American Novel |
| :--- | :--- |
| as scheduled | [3-0] |

A study of the American novel from its beginnings to the present, with emphasis on the major novelists.
Prerequisite: Nine hours of English.
ENG 3310 Twentieth Century English and American Poetry
as scheduled
A study of the trends and movements in contemporary poetry, with emphasis on the works of the major writers. Prerequisite: Nine hours of English.

ENG 3311 Contemporary Drama [3-0] as scheduled
A study of trends and movements in 2oth century American, British and European drama, with emphasis on works of major playwrights. Equivalent Course: COMM 3311; may be counted as English or communication in satisfying degree requirements. Credit may be received for only one course. Prerequisite: Nine hours of English.

ENG 3312 Survey of American Literature [3-0] as scheduled
A chronological study of the principal authors, works and trends in American literature from the colonial period through the Civil War. Prerequisite: Nine hours of English.

ENG 3313 Survey of American Literature [3-0] as scheduled
A chronological study of the principal authors, works and trends in American literature from the Civil War to the present. Prerequisite: Nine hours of English.

ENG 3314 Hemingway
as scheduled
A study of Hemingway's novels and short stories, especially those about Spain and Cuba.

ENG 3315 Introduction to Film Studies [3-0] fall, spring
An introduction to the study of film as a particular literary genre with special emphasis on fictional film, technical film analysis and cinematic interpretation. Prerequisite: Nine hours of English.

ENG 3316 Literature and Film [3-0] fall, spring
Studies the relation between literature and film to examine how a fictional work of art is presented in both
a written as well as a visual text. Prerequisite: Nine hours of English.

ENG 3317 The Short Story and the Novella [3-0] as scheduled
A study of the development and technique of the short story and novella with emphasis on literary analysis. Prerequisite: Nine hours of English.

ENG $3319 \quad \begin{aligned} & \text { Introduction to } \\ & \\ & \text { Descriptive Linguistics }\end{aligned}$
[3-0]
as scheduled
An introduction to the methods of linguistic science with emphasis on problem-solving techniques and their application to specific problems. Prerequisite: Nine hours of English.

ENG $3320 \quad$ Advanced Topics in English [3-0] as scheduled
A course adapted to the study of advanced special topics in English. Course may be offered for open enrollment when topic is selected by the instructor, or course may be conducted as independent/conference study when topic is selected by student and approved by the instructor. May be repeated for credit when topics vary. Prerequisite: Nine hours of English.

ENG $3321 \quad$ Language and Culture as scheduled
Systematic exploration of social aspects of language and language use, including language attitudes, sociolinguistic dynamics of language contact situations, language learning, and the social and linguistic nature of dialects, language variation and language change. Prerequisite: Nine hours of English.

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ENG3322 Poetry [3-0]
as scheduled
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An in-depth study of the art and nature of poetry, with emphasis on sounds, forms, language and modes of poetry. Prerequisite: Nine hours of English.

ENG 3323 World Drama [3-0] as scheduled
A study of trends and movements in dramatic literature from ancient Greece through the present.
Emphasis on the works of major playwrights. Equivalent Course: COMM 3323; may be counted as English or communication in satisfying degree requirements. Credit may be received for only one course. Prerequisite: Nine hours of English.

ENG 3324 The Victorian Period
[3-O] as scheduled
A study of the literature of Victorian England, from 1832 to
the end of the 19th Century. Prerequisite: Nine hours of English.

ENG 3325 Children/Adolescent Literature [3-0] as scheduled
A study of selected children's and adolescent literary works. Discussion and demonstration of pedagogical strategies. Emphasis on important representative examples and related criticism. Prerequisite: Nine hours of English.

ENG 3326 Writing and Culture
spring
Course provides students the opportunity to analyze and explore the complex ways in which culture shapes and is shaped by writing and other forms of textual representation.

ENG 3330 English Grammar [3-0] as scheduled
A study of grammatical concepts with concentration on basic sentence structure, principles of punctuation and functional grammar. Course designed for, but not limited to, prospective teachers of students with limited English speaking/writing ability and/or ESL students. Prerequisite: ENG 3319.

ENG 3331 Survey of English Literature
as scheduled
A chronological study of the principle authors, works and trends in English literature from the Anglo-Saxon period to the beginning of the Romantic movement. Prerequisite: Nine hours of English.

ENG 3332 Survey of English Literature [3-0] as scheduled
A chronological study of the principle authors, works and trends in English literature from pre-Romantic poetry to the 20th century. Prerequisite: Nine hours of English.

ENG 3333 Technical Report Writing [3-0] as scheduled
Training in writing and presentation of special types of reports often used in engineering, science and business. Prerequisite: Nine hours of English.

ENG 3334 Gallery
spring
A hands-on course on the process of selecting material, editing and publishing a student literary arts journal. Includes fundamentals of publicity; manuscript processing, selection, and editing; page design; cover art; printing requirements. Prerequisite: Nine hours of English.
ENG 3336

spring $\quad$ Creative Writing I | I O] |
| :--- |

An introductory study of literary form and techniques, with practice in writing poetry and prose.

ENG 3337 [reative Nonfiction [3-0]

## spring

Explores creative nonfiction as an historical genre and offers students the opportunity to create and workshop their own essays.

ENG 3338 Advanced Composition
as scheduled
Course offers students the opportunity to develop a sustained writing project to completion. Course covers methods of defining the parameters of a project, analyzing audience and publications, and designing and publishing the project.

ENG 3341 Women's Rhetoric and Language [3-0] spring
This course provides a focus on rhetoric and language in women's experiences. Related topics will include the contribution women have made to the Western rhetorical tradition as well as the consideration of the differences in actual language uses and conventions by and about women.

ENG 3342 Ethnic Women Writers
spring
This course provides a focus on women's writing from a multicultural perspective. Centered on the study of literary works and literary theory either by or about women, this course offers a global perspective and pursues insights about various approaches to the question of ethnic women and their representation.

ENG 3343 Women's Literature [3-0]
spring spring
This course provides a focus on literature by women and the contributions that such literature has made to a variety of cultural and social contexts. The focus will be on feminist perspectives and theories in critical analysis.

ENG 3350 Survey of World Literature [3-0] spring
A focused study of the principle authors, works and trends in world literature from the ancient world to the contemporary period. Specific focus on period, genre or theme will be determined by the individual instructor.

ENG 4301 Shakespeare [3-0] as scheduled
A study of representative comedies, histories, romances and tragedies. Prerequisite: Nine hours of English.

ENG 4302 Modern English Syntax [3-0] as scheduled
Studies in modern English syntax with attention given to investigative methods and findings of contemporary linguistic analysis. Prerequisite: ENG 3319.

ENG 4304 Introduction to
Cultural Studies
spring
Historical and textual study of the discipline of cultural studies, with emphasis on major figures and schools in cultural studies and their relation to textural analysis.

ENG 4305 Survey of Literary Theory [3-0] spring
Introduces students to the general principles of literary theory and provides opportunities for practical application of theoretical models to literary texts.

ENG 4306 Applied Literary Theory [3-0] spring
Practical application of theoretical models to literary texts. Particular focus on major figures, schools and movements in contemporary literary theory. Prerequisite: ENG 4305.

ENG 4307 Applied Discourse Studies [3-0] spring
Offers students experience in the practice and methods of rhetorical and discourse analysis applied to specific topics by the instructor.

ENG 4308 History of the English Language [3-0] as scheduled
A history of the English language from the Anglo-Saxon period to the present. Prerequisite: Nine hours of English.

ENG 4309 Chaucer [3-0] as scheduled
A study of selected works of the 14th century English poet. Prerequisite: Nine hours of English.

ENG 4310 American Literature of the South [3-0] as scheduled
A study of the works of representative writers of the south. Prerequisite: Nine hours of English.

ENG 4312 Milton [3-0] as scheduled
A study of the major poems and selected prose and minor poetry. Prerequisite: Nine hours of English.

ENG 4314 Contrastive Grammar [3-0] as scheduled
A comparison of English and Spanish grammatical
systems with emphasis on substantive and descriptive problems arising from the differences in the systems. Course open only to students with proficiency in both English and Spanish. Prerequisite: ENG 4302.

ENG 4316 Mexican-American Literature [3-0] as scheduled
A study of the literature by and about Mexican-Americans, with emphasis on the literary techniques and the cultural reflectionsin this literature. Prerequisite: Nine hours of English.

## ENG 4318 Teaching Secondary School Literature

## spring

A study of the characteristics of poetry, drama and fiction and of the major approaches to these genres with some attention to works encountered in secondary schools. Prerequisite: Nine hours of English.

ENG 4319 South Texas Literature
spring
A survey of the literary history of South Texas. This course will emphasize, but is not limited to, history, culture, borderlands aesthetics and canon formation.

ENG $4320 \quad$ Topics in Border Studies [3-0] spring
Intensive exploration of selected literary, theoretical and rhetorical topics in border studies. Particular focus on issues relevant to the intercultural interactions endemic to border sites and transnational borders.
$\begin{array}{ll}\text { ENG } 4321 & \text { Fundamentals of } \\ \text { Language Development [3-0] }\end{array}$
as scheduled
A study of how children develop language skills from age five through adolescence. Covers all systems of language from basic sounds through competence in oral and written communication.

ENG 4323 Studies in Literacy spring
Course examines the history and theories of literacy, including the critical ways literacy is connected to personal, political and social forces and ramifications.

ENG 4324 Survey of Rhetorical Theory [3-0] spring
Course surveys important rhetorical movements from classical to contemporary theories in order to demonstrate the significant influence theories of rhetoric have and continue to have in the social and political functions of discourse.

ENG 4325 Composition Techniques [3-0]
as scheduled
A study of advanced composition techniques, including theories and methods of teaching composition skills. Prerequisite: Nine hours of English.

ENG 4326 Language Acquisition
spring, even years
An analysis of the process of language learning, the normal development of speech and language, and the relationship of language to cognitive and social development.

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ENG 4328 Introduction to English as a Second Language
as scheduled
A study of the process of learning English as a second language. Special attention given to theories, variables and second language acquisition.

ENG 4330 Alternative Rhetorics
spring
Course considers important contributions to rhetorical and discourse theories that have been overlooked or have been traditionally marginalized in dominant studies of discourse theory. Topic varies, determined by instructor.

ENG 4331 Introduction to Border Language spring
A study of the second language learner's transition from regional Spanish to standard English. Emphasis on the particular characteristics of the English and Spanish

dialects of the region and the manner in which they interrelate. The course will treat theory already learned as well as that presented in the course in the light of practical methodological tools.

\section*{ENG 4336 Advanced Creative Writing [3-o]} spring
A workshop course devoted to the crafts of poetry and prose. Prerequisite: ENG 3336 or permission of instructor.

ENG 4337 Forms and Techniques in Creative Writing
[3-0]

\section*{spring}

Studies and practice in poetics, figurative language, metrics, narrative arc, symbol and other formal aspects of poetry and prose.
\[
\begin{array}{ll}
\text { ENG } 4340 & \begin{array}{l}
\text { Special Topics in } \\
\\
\\
\text { Creative Writing }
\end{array}
\end{array}
\]

\section*{spring}

Offers students the opportunity to explore and practice various genres and subgenres of creative writing as specified by the instructor.

\section*{GENERAL ENGINEERING}

\section*{ENGR 1101 Introduction to Engineering [1-0]}

\section*{fall, spring, summer}

Introduction to engineering as a career, the requirements for registration as a professional engineer and the fields of specialization within engineering. Approaches to engineering problem solving and the graphical presentation of data. Prerequisite: Computer literacy.

\section*{ENGR 2101 Engineering Technology Laboratory \\ [0-3]}

\section*{fall, spring, summer}

Introduction to machine shop tool operations, metrology, advanced laboratory skills and data analysis. Prerequisites: Sophomore standing and completion of ENGR 1221. \$4 laboratory fee.

ENGR 3101 Engineering Projects Laboratory [0-3] as scheduled
Special construction projects, research activities or supervised engineering studies. May be repeated once
for credit. Prerequisite: Junior standing or consent of instructor. \$4 laboratory fee.

ENGR 3300 Internship/Co-op in Engineering [4-0] as scheduled
This course is designed to give students in engineering an opportunity to gain practical work experience by working in an engineering trainee or related position with a participating employer. The student will be advised and mentored by a faculty member or staff person who will also serve as a liaison between the university and the employer. The employment period may be during the summer or an academic semester. Each student will be required to write a report on his/her work experience. The course may be repeated for each continuous work period and may count toward the International Endorsement if the work assignment is outside the United States. Prerequisite: Must be an engineering major in good academic standing.

ENGR 3333 Topics in Engineering [3-0] as scheduled
The topic will be changed by demand. May be repeated for credit. Intermediate topics in the engineering disciplines will be presented. Prerequisite: Junior standing in engineering or consent of instructor.

ENGR \(4161 \quad\) Senior Design Project I \(\quad\) [1-0]
fall, spring
This course is a preparation for a capstone design experience drawing from all previous coursework, and involves analysis of engineering methods problem definition, assumptions, methods of analysis and testing and reporting results. Classroom discussions will consider professional responsibility, ethics, technology and society, entrepreneurship, team building and lifelong learning. The project to be undertaken in Senior Design Project II (ENGR 4362) will be selected. Prerequisite: Senior standing in engineering.

ENGR 4261 Senior Design Lab [o-6] fall, spring
This laboratory involves implementation of design methodologies and engineering science into a real-world design. \(\$ 30\) lab fee. Prerequisite: Senior standing in engineering. Co-requisite: ENGR 4161.

ENGR 4362 Senior Design Project II
[0-9]
fall, spring
This is a continuation of ENGR 4161. Students will conduct a comprehensive engineering design of a project related to their major and report on the results. Synthesis using past coursework and outside reference material will be expected. Periodic progress reports and
final oral and written reports will be required. \$30 lab fee. Prerequisite: Senior standing in engineering.

\section*{FINANCE}

\section*{FINA 3382 Investment Principles \\ [3-0]} as scheduled
This course provides an overview of the valuation of investment securities of corporations and governmental agencies. The purchase and sale of securities through brokerage houses and investment banking firms are also studied.

\section*{FINA 3383 Managerial Finance as scheduled}

The finance function in the firm and the specific responsibilities of the firm's financial manager are studied in this course. Emphasis is placed on financial decisions using managerial information systems as an integrating force to deliver planned results. This study includes, but is not limited to, decisions affecting the internal management of the firm and the acquisition of new assets and funds.
Prerequisites: ACCT 2301, ACCT 2302 and ECON 2301.
FINA 3384 Fundamentals of Real Estate [3-0] as scheduled
This course studies the physical and economic characteristics of real estate, particularly as they relate to law, taxation, appraisal, marketing and finance.

\section*{FINA 3385 Principles of Insurance}
[3-0] as scheduled
The identification and control of risks facing the individual and the business firm, as well as the use of insurance and other mechanisms in dealing with them, are studied. Other topics include risk analysis, loss prevention, personal and property insurance, insurance programs and estate plans.

FINA 3386 Financial Institutions and Markets [3-0] as scheduled
The dynamics of financial markets and their interaction with the suppliers of funds, particularly financial intermediaries, are studied in this course. Prerequisite: FINA 3381.

FINA 3387 Real Estate Finance

This course provides an analysis of the nature and
problems of developing the financing of real estate. Also, it covers a study of financial markets and instruments that are used to solve the financial needs of various real estate activities. Prerequisite: FINA 3384 or consent of instructor.
\begin{tabular}{ll} 
FINA 3391 & \begin{tabular}{ll} 
Small Business Financial \\
Management
\end{tabular}
\end{tabular}
as scheduled
This course covers three important aspects of financial management for the small business: 1) sources of financing; 2) financial planning; and 3) valuation of the small business. Students will be required to complete a term project involving at least one of these aspects in a real business situation. Prerequisites: ACC 2421, MANA 3361 and three hours of economics.

FINA 3393 Entrepreneurial Finance [3-0] This course provides an in-depth analysis of venture financing and techniques to manage entrepreneurial risk. Prerequisites: ACC 2421, MANA 3361 and three hours of economics.

FINA 4300 Topics in Finance as scheduled
A special finance topic will be selected by the instructor. Total course content and requirements will be established on an individual basis by the instructor. Prerequisites: Consent of instructor and 12 hours of advanced courses in finance.

FINA 4381 International Finance as scheduled
The application of finance principles in the international environment are discussed in this course, including the nature of the balance of payment mechanism, the factors affecting the foreign exchange market, defensive techniques to protect the business against foreign exchange risk and the investing, financing and working capital management within a multinational firm.
Prerequisite: FINA 3383.

FINA 4382 Portfolio Management as scheduled
This course provides the theoretical framework, techniques and applications of investment management. It also develops models for performance evaluation emphasizing optimum combination of risk and return. Prerequisite: FINA 3382.

FINA 4383 Advanced Managerial Finance [3-0] fall, spring
This finance major capstone course focuses on the major decision areas of managerial finance. This course builds upon the theoretical concepts and empirical evidence
presented in introductory courses of corporate finance, investments and financial markets. It uses a case-based approach to apply these concepts to real or simulated business situations. Some of the topics covered in this course include the cost of capital, the capital structure of the firm, capital budgeting, financial analysis and planning and working capital management. Prerequisites: (FINA 3381 or FINA 3386), FINA 3382 and FINA 3383.

FINA 4389 Commercial Banking [3-0] as scheduled
The principles and policies affecting the services, organization and management of funds in the commercial bank are studied in this course. Policy formulation is emphasized. Coordination with general economic and money market conditions is covered. Prerequisites: ECON 3381 or FINA 3386.

\section*{FOREIGN LANGUAGES}

FORL 1391
Elementary Studies in Foreign Languages I
[3-○]

\section*{fall}

Beginning studies in critical languages of importance to the region. May be repeated for credit up to two times as the language of study varies.

FORL 1392 Elementary Studies in Foreign Languages II

\section*{fall}

Continuation of beginning studies in critical languages of importance to the region. May be repeated for credit up to two times as the language of study varies.

\section*{FRENCH}

\footnotetext{
FREN 1321 Beginning French I [3-0]
(Texas Common Course Number is FREN 1311.) fall, spring
A study of the essentials of French grammar, pronunciation, elementary conversation and prose
}
reading. Credit Restriction: A student may receive credit for only one of FREN 1321 or FREN 1387.

FREN 1322 Beginning French II
[3-O]
(Texas Common Course Number is FREN 1312.)
fall, spring
A continuation of FREN 1321. Credit Restriction: A
student may receive credit for only one of FREN 1322 or FREN 1388. Prerequisite: FREN 1321.

FREN 2321 Intermediate French I [3-0]
(Texas Common Course Number is FREN 2311.) as scheduled
Grammar review, conversation and writing practice based on selected literary and cultural readings. An emphasis on usage of different modes and tenses, as well as complex syntax. Prerequisite: FREN 1322.

FREN 2322 Intermediate French II [3-0]
(Texas Common Course Number is FREN 2312.) as scheduled
Grammar review, conversation and writing practice based on selected literary and cultural readings. An emphasis on usage of different modes and tenses, as well as complex syntax. Prerequisite: FREN 2321.

FREN 3321 French Composition I [3-0] as scheduled
Practice in writing expository, narrative and descriptive prose. Prerequisite: FREN 2322.

FREN 3322 French Composition II [3-0] as scheduled
Practice in writing critical appreciations of selected literary works. Prerequisite: FREN 3321.

FREN 3323 Business French [3-0] as scheduled
French for international business majors. A French practice in all areas: procedures, job and business cultures from French and Francophone countries.
Prerequisite: FREN 3321.
FREN 4120 Practicum on Location [3-0] as scheduled
Special programs designed by UTPA French faculty and taught in France or a French-speaking country. The course will familiarize students with specific aspects of the host country's culture. Students will be immersed in a French-speaking environment and will partake in numerous activities such as lectures, visits to museums and monuments, etc., to strengthen their language skills and develop their knowledge of Francophone culture. The course may be repeated if the location and topic changes.
Prerequisite: Four semesters of French or the equivalent.


\section*{FREN 4321 French Literature Through Genres}
[3-0]

\section*{fall, spring, summer}

This course introduces literature through literary genres (drama, poetry, novels or essays). Students will have the opportunity to study in depth the evolution of a genre as well as the literary devices used by writers in the production of that genre. This course can be repeated according to the genre for study. Course taught in French. Prerequisite: FREN 3321 or equivalent.

FREN 4322 Survey of French Literature [3-0] fall, spring, summer
This course covers a survey of French literature from the medieval period until the Enlightenment. It introduces students to the foundations of French and European thought and literatures. Course taught in French. Cannot be repeated. Prerequisite: FREN 3321 or equivalent.

FREN 4324 French Civilization I [3-0] as scheduled
A study of French culture and civilization from the Roman conquest of Gaul by Julius Caesar to the French Revolution of 1789. Prerequisite: FREN 3321.

FREN 4325 French Civilization II as scheduled
A study of French culture and civilization from the French Revolution of 1789 to the present. Prerequisite: FREN 3321.

FREN 4326 Survey of French Literature II [3-0] fall, spring, summer
This course offers an overview of French Literature. It introduces students to some masterpieces of the 19th, 20th and 21st centuries. Course taught in French. Cannot be repeated. Prerequisite: FREN 3321 or equivalent.

FREN 4331 Theater Practice in French [3-0]
fall, spring, summer
This course will cover a brief history of French and European theater from its classic origins in today's international trends. Students will read several excerpts of French theater and discuss different possibilities of interpretations and performance techniques (phonetics, tongue twisters, breathing techniques, etc.) This course familiarizes students with an important cultural component of French and European tradition and increases their listening and speaking skills to a nearer native speaking fluency. Students will also stage, perform and present their work. Prerequisite: FREN 2322 or equivalent.

FREN 4339 Special Topics as scheduled
Special topics from the field of French language and literature. Prerequisite: FREN 3321.

\section*{GEOGM}

GEOG 2313 Principles of Physical Geography [3-0] fall, spring, summer
An introduction to physical geography with emphasis on weather, ocean currents and climates. Soils and vegetation types and distributions are also studied. Can be counted in the supporting areas of elementary education curriculum.

GEOL 1401 Physical Geology
(Texas Common Course Number is GEOL 1403.)
fall, spring, summer
Involves a comprehensive description of materials composing the earth and deals with the classification and analysis of geologic agents responsible for the origin, structure and evolution of the earth's crust. \$4 laboratory fee.

GEOL 1402 Historical Geology
(Texas Common Course Number is GEOL 1404.)
fall, spring, summer
A course dealing with the geological history of the earth
and its inhabitants as revealed by the fossil record with emphasis on North America. \(\$ 4\) laboratory fee.

\section*{GEOL 3308 Introduction to Geographic Information Systems}
as scheduled
A study of the input, management, manipulation and output of georeferenced information using digital computers.
Methods of layering geologic, geographic, meteorologic, electromagnetic, biologic and political knowledge will be presented. Computer data structures including relational databases will be examined. The spatial analysis potential of a GIS will be compared with traditional manual (cartographic) methods.

GEOL 3310
Hydrologic Systems
[3-0]
as scheduled
This course is an introduction to surface and subsurface hydrologic systems which emphasizes physical hydrological processes. The course focuses on surface and near surface processes and introduces deeper, groundwater-hydrology. A broad range of specific topics is covered - e.g., the hydrologic cycle, watershed hydrology, runoff-rainfall relationship, erosion and sediment transport, occurrence and movement of groundwater and aquifer characteristics. The hydrological systems will be explained by using examples from the Rio Grande Valley. Prerequisite: GEOL 1401.

\section*{GEOL 3401 Geomorphology as scheduled}

A course designed for students interested in surface geological processes. An analysis of land forms of the Earth and processes by which they are formed. Emphasis will be placed on mapping and interpretation of local geomorphology. Also, comparative studies of lunar-Earth and Mars-Earth will be covered. Field trips. Prerequisite: GEOL 1401. \$4 Laboratory fee.

GEOL 3403 Oceanography

\section*{as scheduled}

An introduction to physical oceanography designed for geology minors, biology majors and earth science teachers. A study of the origin, motions and the physical and chemical properties of marine waters. Field trips.
Prerequisite: GEOL 1401 or advanced standing in any of the related sciences or consent of instructor. \(\$ 4\) laboratory fee.

GEOL 3404 Stratigraphy-Sedimentation
[3-3] as scheduled
A study of sedimentary processes and principles of stratigraphy, followed by a survey of stratified rocks of North America, their correlation, stratigraphic relations and guide fossils. Field trips. Prerequisites: GEOL 1401 and GEOL 1402. \$4 laboratory fee.

GEOL 4301 Exploration Geophysics [3-0] as scheduled
An introductory course on seismic refraction and reflection imaging of the subsurface of the earth, including methods of data acquisition, processing and interpretation in two and three dimensions. Designed for students with basic geology and/or engineering backgrounds. Prerequisites: PHYS 1401 or equivalent and GEOL 1401 or equivalent. \(\$ 4\) laboratory fee. Course is cross-listed as PHYS 4311 and GEOP 4301.

GEOL 4302 Environmental Geology as scheduled
This course explores the human-planet relationship - how Earth processes influence human lives, and how human actions, in turn, alter the interactions of Earth systems. Hazardous geologic processes, use and care of energy resources and the human impacts on the environment are the focus of this course.

\section*{GEOL 4309 Undergraduate Research} in Geoscience
[3-○]
Independent work in geosciences and/or environmental geosciences under the direction of a faculty member. Open only to students who have completed at least eight hours in geology or by approval of the instructor.
\(\begin{array}{ll}\text { GEOL 4408 } & \begin{array}{l}\text { Applications of Geographic } \\ \text { Information Systems }\end{array} \\ \text { as scheduled } & \end{array}\)
New ways of using georeferenced data. Methods of integrating information from multiple sources will be used to analyze the interdependencies of both human and physical systems in a rapidly changing rural to urban environment. Examples will be given of uses in evaluating resource capability units, analyzing hazardous radiation areas, mineral exploration, land management, flood prediction and control, earthquake prediction and hurricane preparation. Attention will be given to problems of data quality, errors, accuracy and logical consistency. Prerequisite: GEOL 3408.

\section*{GEOPHYSICS}

GEOP 4301 Exploration Geophysics I [3-0] spring, odd year
An introductory course on seismic refraction and reflection imaging of the subsurface of the Earth, including methods of data acquisition, processing and interpretation in two
and three dimensions. Designed for students with basic geology and/or engineering backgrounds. Prerequisites: PHYS 1401 or equivalent and GEOL 1401 or equivalent. \$4 laboratory fee. Course is cross listed as PHYS 4311.

GERM 1331 Beginning German I
fall, spring
A study of the essentials of German grammar, pronunciation, elementary conversation and prose reading.

GERM 1332 Beginning German II
fall, spring
A continuation of German 1331, focusing on German grammar, pronunciation, elementary conversation and prose reading. Prerequisite: GERM 1331.

GERM 2331 Intermediate German I [3-0]
fall, spring
A study of more complex patterns of German grammar and prose reading to facilitate written and oral communications. Prerequisite: GERM 1332.

GERM 2332 Intermediate German II
fall, spring
A study of more complex patterns of German grammar and prose reading to facilitate written and oral communication. Prerequisite: GERM 2331.

HIST 2313 American Heritage I [3-0]
(Texas Common Course Number is HIST 1301.)
fall, spring, summer
An integration of social, political and economic history of the United States with attention directed to geography and its influences. The approach is by problems that move chronologically from the earliest colonial period through the Civil War. Open to freshmen who enter with a credit in American history from high school. Credit Restriction: Credit may be received in only one of HIST 2313 and HIST 2387.

HIST 2314 American Heritage II [3-0]
(Texas Common Course Number is HIST 1302.)
fall, spring, summer
An integration of social, economic and political history of the United States with attention to geographical influences. The approach is by problems that move chronologically from Reconstruction to the present. Open to freshmen who enter with a credit in American history from high school. Credit Restriction: Credit may be received in only one of HIST 2314 and HIST 2388.
\[
\begin{array}{ll}
\text { HIST } 2331 & \begin{array}{l}
\text { Civilization Through } \\
\text { the Centuries }
\end{array}
\end{array}
\]
fall, spring, summer
A thorough survey of the political, social and cultural history of Europe through the treaty of Westphalia. Emphasis will be given to the contributions of Greece and Rome to the western world, the fall of Rome, the beginning of feudalism and the rise of national states, the Renaissance and the Protestant reformation. Major developments in world history will be related to these periods of European history.

HIST 2332 Civilization Through the Centuries
fall, spring, summer
A continuation of HIST 2331 to the present time.
Emphasis will be given to European expansion, the French Revolution and Napoleon, the Industrial Revolution, the spread of socialism and the world conflicts of the 20th century. Major developments in world history will be related to these periods of European history.

\section*{HIST 2387 American Heritage I}
(Honors Plan)
fall
An integration of social, political and economic history of the United States with attention directed to geography and its influences. The approach is by problems which move chronologically from the earliest colonial period through the Civil War. Credit Restriction: Credit may be received in only one of HIST 2313 and HIST 2387. Prerequisite: Admission to Honors Studies or by invitation.

HIST 2388 American Heritage II
(Honors
Plan)
spring
An integration of social, economic and political history of the United States with attention to the geographical influences. The approach is by problems that move chronologically from Reconstruction to the present. Credit Restriction: Credit may be received in only one of HIST 2314 and HIST 2388. Prerequisite: Admission to Honors Studies or by invitation.
HIST 3301 The History of Ideas [3-0]

\section*{as scheduled}

A study of major beliefs and patterns of thought in Western culture, emphasizing the development of the arts and sciences, social thought and religion. Prerequisite: Six hours of history.

HIST 3302 World History Studies [3-0] fall, spring, summer
A comprehensive survey of social, economic, political, cultural and geographical factors influencing the course of world history. Emphasis will be on thematic and content material. Prerequisite: Six hours of history with HIST 2331 recommended.

HIST 3303 Geography and the Environment in History [3-0]
as scheduled
This class examines the effects of the environment and geography on history. The course will focus on how humanity has reacted to the environment and influenced ecosystems, and how different cultures have interacted with similar environments. The course will also examine trade routes, the effects of disease, the connections between resources and the rise of civilizations and empires. Prerequisite: Six hours of history.

\section*{HIST 3313 American Colonial} Era to 1783 [3-0]
as scheduled
A study of American colonial history from the founding of the first colony through the American Revolution with emphasis given to the development of American civilization; causes, course and results of the American Revolution. Prerequisite: Six hours of history.

HIST 3324 Formative Period of the American Nation,
1783-1840
[3-0]
as scheduled
A study of the early years of the American nation from the critical period to the adoption of the Constitution and launching of the new government through the transformation of American society by the Jacksonian Era of the Common Man. Prerequisite: Six hours of history.

HIST 3330 A General Survey of the History of Texas
[3-0]

\section*{as scheduled}

A survey of the history of Texas from indigenous period to present. Previous course number: HIST 2333; a student may receive credit for only one course. Prerequisite: Six hours of history.

HIST 3332 Historiography and Methodology
[3-○] as scheduled
This course will acquaint students with the various schools of history, famous scholars and common debates in the field of history. The class will also provide instruction in the various tools and research methods that are utilized by historians. Prerequisite: Nine hours of history, including either 2331 or 2332.

HIST 3333 Colonial Mexico, Central and South America
as scheduled
A study of the establishment of Spanish dominion; geography and natural resources; institutional and social development; cultural aspects and contribution. Prerequisite: Six hours of history.

HIST 3335 History of Spain as scheduled
The historical development of the Spanish nation from earliest times to the present. Emphasis will be given to the evolution of the political, economic and social institutions that are important to the conquest and colonization of the Americas. Prerequisite: Six hours of history.

HIST 3341 History of England I to 1686 [3-0] as scheduled
English history from earliest times through the period of the Stuart kings. Emphasis will be given to the factors that have influenced the development of British and American institutions. Prerequisite: Six hours of history.

HIST 3342 History of England II after 1686 [3-0] as scheduled
The period of the Glorious Revolution to the British Empire and commonwealth of nations. Prerequisite: Six hours of history.

HIST 3350
The American
Military Experience
[3-○]

\section*{as scheduled}

The American military experience will be examined from the colonial period to the present. The course will examine not only the operational history of the American military but also the causes and consequences of war and the role of the military in American society. Prerequisite: Six hours of history.

HIST 3373 [3-0] as scheduled
An interpretation of the historical heritage of the
Mexican-American in the United States. Prerequisite: Six hours of history.
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HIST 3375 Women in History Topics [3-0]
as scheduled

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This course will introduce students to the growing and diverse field of women's and gender history. It will examine the experiences, roles and contributions of women in politics, economics, labor and culture. The time period, the focus and the geographical area will change according to the instructor. Suggested topics include Mexican-American-Chicanahistory and Latina history.
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HIST 43O3 The Emergence of
Modern America, 1877-1917

## as scheduled

A study of the growth of American business and industry, the emergence of the United States as a world power, the populist protest and progressive reform movements. Prerequisite: Six hours of history.

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HIST 4313 Twentieth Century America
    1917 to the Present [3-0]
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as scheduled

A study of the history of the United States from World War I to the present with emphasis on domestic and foreign affairs and in their relationship to and effect on each other. Prerequisite: Six hours of history.

HIST 4322 The Spanish Southwest to 1821 [3-0] as scheduled
A study of the northward colonization of Mexico with emphasis on institutions and the settlement of the interior provinces of Texas, New Mexico, Arizona and California. Prerequisite: Six hours of history.

HIST 4325 The American Southwest
After 1821 [3-O]

## as scheduled

The American penetration of Texas and the war with Mexico; subjugation of the Indians; extension of mining, railroad, cattle industry and farming across the Southwest; and the transition from raw frontier to modern states of the Southwest. Prerequisite: Six hours of history.

HIST $4343 \quad$ Era of Sectional Conflict 1840-1877
[3-0]

## as scheduled

United States history from 1840 to 1877 with emphasis upon the development of sectionalism, Southern nationalism, the breakdown of American political parties, Civil War and Reconstruction. Prerequisite: Six hours of history.

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HIST 4345 Mexico's First Century as
    an Independent Republic [3-0]
as scheduled
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A study of the political, social and economic development
of Mexico from the independence movement to the Revolution of 1910. A study of the problems of Mexico and the various distinct eras of its first century as a republic. Prerequisite: Six hours of history.

HIST 4352 Brazil After Independence
as scheduled
A study of Brazil as an empire and a republic with emphasis on the social, geographic and political factors that make it a unique nation in the Western hemisphere. Prerequisite: Six hours of history.

HIST 4353 History of Mexican Culture [3-0] as scheduled
A study of the Mexican people, including development of their social institutions, thinking, concepts, attitudes, values, reactions and sensitivities. Prerequisite: Six hours of history.

HIST 4354 Contemporary Mexico [3-0] as scheduled
A study of the nature and impact of the social, political and economic transformations since the revolutionary epoch of 1910-1917; greatest emphasis on the contemporary factors that have made Mexico's experience unique. Prerequisite: Six hours of history.

HIST 4355 Spanish South America Since Independence
as scheduled
The historical development of the major Hispanic South American republics; general trends in their social, economic and political growth. Prerequisite: Six hours of history with HIST 3333 recommended.

HIST 4363 U.S.-Latin American Relations
as scheduled
The development of a distinctive system of international relations - economic, cultural and political - between the nations of Latin America and the United States. Prerequisite: Six hours of history.

HIST 4370 The Renaissance and the Reformation, 1300-1650
as scheduled
A study of the political, social and cultural developments of Western Europe from the decline of the medieval system, through the age of the new monarchies, with emphasis on France, Germany and Italy. Prerequisites: Six hours of history with HIST 2331 recommended.

HIST 4371 Russia Since 1905
as scheduled
Russia from the precursors of the Revolution through
the Revolutions of 1905 and 1917 and the development of the Soviet regime to current trends. Prerequisites: Six hours of history with HIST 2332 recommended.

## HIST 4374 The Caribbean and Central America <br> as scheduled

A study of the 19th century efforts of these nations to emerge as separate entities and an evaluation of their 20th century experiences. Prerequisite: Six hours of history with HIST 3333 recommended.

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\begin{array}{lll}
\text { HIST } 4375 & \begin{array}{l}
\text { Absolutism and Enlightenment } \\
\text { in Europe, 1650-1789 }
\end{array} & \text { [3-0] } \\
\text { as scheduled } & &
\end{array}
$$

Traces the development of the absolutist state, benevolent despotism and the intellectual and scientific trends of the Enlightenment. Prerequisite: Six hours of history with HIST 2332 recommended.

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HIST 4376 Revolutionary Europe
    1789-1850 [3-0]
as scheduled
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A study of Europe of this period with emphasis on the growth of democratic institutions from the beginning of the French Revolution through the Revolution of 1848. Prerequisite: Six hours of history with HIST 2332 recommended.

HIST 4383 Europe's Age of Imperialism, 1850-1919
as scheduled
A study of European history through the period of growing nationalism and imperialism leading to World War I. Prerequisite: Six hours of history with HIST 2332 recommended.

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\begin{array}{ccc}
\text { HIST } 4393 & \text { Contemporary Europe, } \\
1919 & \text { to Present } & {[3-0]}
\end{array}
$$ as scheduled

A study of the causes of World War II, its resulting problems and current trends. Prerequisite: Six hours of history with HIST 2332 recommended.

HIST $4396 \quad \begin{aligned} & \text { Special Topics in } \\ & \end{aligned}$
[3-0]

## as scheduled

A study of selected topics in European history. Topics are varied according to availability of faculty and student interest. Course can be repeated once for credit as topics change. Prerequisites: Nine hours of history, including either 2331 or 2332.

HIST $4397 \quad$ Special Topics in U.S. History $\quad$ [3-0] as scheduled
A study of selected topics in the history of the United

States. Topics are varied according to availability of faculty and student interest. Course can be repeated once for credit as topics change. Prerequisites: Nine hours of history, including either 2331 or 2332.

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HIST 4398 Special Topics in
    Latin American History
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    [3-0]
    as scheduled

A study of selected topics in Latin American history. Topics are varied according to availability of faculty and student interest. Course can be repeated once for credit as topics change. Prerequisite: Nine hours of history, including either 2331 or 2332.

HLTH 1352 Community and Environmental Health [3-0] as scheduled
Basic community health waste disposal, safe water, food and drug control and the improvement of community health.

HLTH 1354 Safety and First Aid [3-0] as scheduled
Basic knowledge for safe and effective living. The essential aspects of home, work, motor vehicle and public safety. Includes both theoretical and practical aspects of emergency care. Standard First Aid and Personal Safety and Cardiopulmonary Resuscitation (CPR) certification upon completion of specific requirements. Equivalent Course: KIN 1354; a student may receive credit for only one course.

HLTH 2352 Personal Health and Wellness [3-0] as scheduled
A survey of factors involved in human physical and psychological wellness. Disorders arising from mutagenic, teratogenic infections, environment and lifestyle behaviors will be studied. May not be used to satisfy Health Secondary Option II Teacher Certification.

HLTH 2373 Growth, Development and Fitness
as scheduled
A study of the growth process and systemic development of the human organism. The concept of physical fitness is analyzed and related to organismic function and well being.

HLTH 3371
Health Problems in Alcohol, [3-0] Tobacco and Narcotics

## fall

This course examines the psychological, physiological and social effects of substance use, abuse and dependency. Special emphasis is placed on prevention with in-depth study of the contribution of intervention models and informed decision-making skills.

HLTH $3372 \quad$ Nutrition and Health [3-0]
spring
Analysis of food constituents relating to human nutritive needs and sources throughout the life span will be studied. Its emphasis will be on prevention of nutritionrelated health problems through study of healthpromoting dietary and lifestyle practices, contributing risk factors and mechanism of development.

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HLTH 3373 Human Sexuality
as scheduled
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Adjustment of the individual to life in the social group with emphasis upon problems occurring in mental and emotional health, aging, family living and human sexuality.

HLTH $3374 \quad$ Chronic and Degenerative Disease [3-0] as scheduled
A study of chronic and degenerative disease with respect to the nature, source, incidence, control and treatment of diseases such as cancer, cardiovascular anomalies, neurological disorders, mental retardation and genetic disorders. Emphasis is upon providing sufficient and usable information that will provide the basis for responsible action in matters of personal health.

HLTH 3375 Consumer Health [3-0] as scheduled
Selection, evaluation and understanding of health information, medical services, health products and advertising and sociocultural factors in consumer health protection.
$\begin{array}{ll}\text { HLTH } 4350 & \begin{array}{l}\text { Organization of } \\ \text { the Health Program }\end{array} \\ \text { as scheduled } & \end{array}$ [3-0]

The organization and management of the health program in school, community and clinical settings with special emphasis on program phases, responsibilities, evaluation and functional relationships with local, state and federal agencies. Prerequisite: 15 hours of health.

program evaluation, basic issues and management/ funding methods achieved. University classroom and field-based experiences.

HLTH 4357 Health Seminar
summer, odd years
For teachers, nurses, principals, superintendents and community leaders to gain perspective and insight into essential cooperative efforts of home, school and community to meet the growing health needs of our society.

HLTH 4358 Current Health Readings and Reported Research

## as scheduled

Research and analysis of the latest concepts and findings relating to the school health program. This will be conducted through review of the literature, written reports and independent study in a health-substantive area.

HONR 2387 Humanities I
An interdisciplinary course that emphasizes cultural roots from ancient Greece through the Middle Ages. The course stresses the integration of the humanities (philosophy, painting, sculpture, architecture, literature, music) into the Western civilization framework.

HONR 2388 Humanities II
An interdisciplinary course that emphasizes cultural roots from the Renaissance to the present. The course stresses the integration of the humanities (philosophy, painting, sculpture, architecture, literature, music) into the Western civilization framework.

HONR 3187 Problems in Independent Study [3-0] This course is an introduction to basic problems encountered in independent study. It aids the student in choosing a topic for independent study, in setting up objectives for the study and preparing a research proposal or project.

HONR 3387 Independent Study Supervised independent research in student's topic, with periodic meetings for coordination, instruction in methodology and discussion.

HONR 4387 Independent Study
Supervised completion of research and writing of
thesis or creative project, with periodic meetings for coordination, instruction in methodology and discussion.

- Departmental Courses, Honors (See Course Listings for course descriptions.)

| Biology: | BIOL 1487 | General Biology |
| :---: | :---: | :---: |
|  | BIOL 1488 | General Biology |
| Communication: | COMM 1387 | Speech Communication |
|  | COMM 2387 | Theatre Appreciation |
| Economics: | ECO 1387 | Introduction to |
|  |  | Economics |
| English: | ENG 1387 | Rhetoric and |
|  |  | Composition |
|  | ENG 1388 | Rhetoric and Literature |
|  | ENG 2387 | Readings in World |
|  |  | Literature |
|  | ENG 2388 | Readings in World |
|  |  | Literature |
| French: | FREN 1387 | Beginning French |
|  | FREN 1388 | Beginning French |
| History: | HIST 2387 | American Heritage I |
|  | HIST 2388 | American Heritage II |
| Mathematics: | MATH 2387 | Problems and Statistics |
|  | MATH 1487 | Calculus |
| Philosophy: | PHIL 1387 | Introduction to |
|  |  | Philosophy |
|  | PHIL 1388 | Introduction to Logic |
| Political Science: | POLS 2387 | U.S. and Texas |
|  |  | Government and |
|  |  | Politics |
|  | POLS 2388 | U.S. and Texas |
|  |  | Government and |
|  |  | Politics |
| Sociology: | SOCI 1387 | Principles of Sociology |
| Spanish: | SPAN 1387 | Beginning Spanish |
|  | SPAN 1388 | Beginning Spanish |


$\boldsymbol{n}_{\text {Health- }}$ RELATED PROGRAMS

- Interdisciplinary Courses

HRP 1301 Introduction to Health Careers [3-0] fall, spring
This course will survey careers in the health and healthrelated professions. Specific topics related to health careers will include health care organizations, history and trends, ethics, legal aspects, terminology, relevant professional affiliationsand vocational trends. Employment options and educational requirements will be covered in some depth.

HRP 2303 Medical Terminology
[3-O]
fall, spring
This course is designed to introduce the student to analysis techniques and to correct spelling and pronunciation of medical terms. The student will have the opportunity to learn a medical vocabulary, develop skills in recognizing medical terms by analyzing their elements and relating them to the corresponding anatomical site.

HRP 3310 Special Topics in Patient Care Issues
as scheduled
The topics will vary according to current issues in the provisions of health care and prevention. Course offering will be contingent on student demand. May be repeated once for credit as topics vary. Prerequisite: Approval of department.

## $\Omega$

## INTERNATIONAL BUSINESS

INTB 3300

Internship in International Business

[3-0]

## fall, spring

This course is designed to give students an opportunity to gain real-world experience in their chosen career field by working with a participating employing firm or organization. The students will be supervised by a faculty member acting as a liaison between the employing organization and the academic department to assure compliance with specific learning and experience requirements for the assignment. The employment can be either paid or unpaid, and must be at least 10 hours of work each week over the period of one academic term. Prerequisites: Upper-division standing and approval by both department chair and employer providing internship experience.

INTB 3330 International Business [3-0] fall, spring
Business concepts, analytical processes and philosophical bases for international business operations. Emphasis is on environmental dynamics, multinational business organizations, cultural and economic constraints, unique international business practices and international operations, strategy and policy.

INTB 4360 International Logistics
[3-0] fall, spring
Introduction to imports and exports procedures and processes, with emphasis in logistics - documentation, export licenses, packaging, terms of sales, payments, transportation and border crossing. Prerequisite: INTB 3330.

INTB 4364 International Management [3-0] fall, spring
Organizational planning, organizing, including staffing, communication and controlling in an international environment. How these functions of management are affected by, and may need to be adapted for, the social/ cultural, economic, legal and political environments. The process of individual negotiation and the impact of culture and business practices on that process. Reference to selected cultures and practices to include Asia, Western Europe and Latin America. Prerequisite: INTB 3330.

INTB 4365 International Competitiveness [3-0] fall, spring
International dimensions of competition for global markets, with emphasis on manufacturing, production and operations management as tools of international competitive strategy. Prerequisite: INTB 3330.

INTB 4367 International Transportation and Logistics
fall, spring
This course provides background, understanding and current technical information about the techniques of international transportation and distribution. It deals with intermediate agencies such as freight forwarding agencies and transportation brokers, warehousing, material handling and utilization devices. Prerequisite: INTB 3330.

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INTB 4368 Cross-Cultural Behavioral Management [3-0]
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## fall, spring

This course provides the knowledge required for proficiency in cross-culturalinteractions. The emphasis is in conducting an in-depth examination of the organizational behavioral aspects of management in the international context. Prerequisites: MANA 3361, INTB 3330.

INTB 4379 Topics in International Business [3-0] fall, spring
Special topics in international business as selected by the instructor. Course can be repeated as topics change. Prerequisite: INTB 3330 or consent of chair of the department.

ACTIVITY/WELLNESS COURSES:
Students may select an activity/wellness course that emphasizes movement arts, lifetime skills or sports skills to satisfy the two hours of kinesiology wellness listed in the University core curriculum requirements. Each course includes a minimum of a two-week wellness component with continuing emphasis throughout the semester. There is a $\$ 6$ activity fee for each class unless otherwise indicated.

Movement Arts: Fundamental motor skills and knowledge appropriate for various movement forms to enhance cultural awareness and total well-being.

KIN 1210 Basic Karate [0-3]
KIN 1215
KIN 2223
KIN 2225
KIN 2226
KIN 2230
KIN 2235
KIN 2236
KIN 2264

KIN 1211 Intermediate Karate [0-3]
Tai Chi
Spanish Dance
Folk and Square Dance [0-3]
Modern Dance
Jazz Dance
Mexican Folkloric Dance [0-3]
Ballet
Fencing

Lifetime Skills: Principles, assessment and development of total well-being through health-related physical fitness or development of lifetime skills.

KIN 1200
KIN 1201
KIN 1202
KIN 1220
KIN 1221
KIN 2206
KIN 2216
KIN 2232
KIN 2233
KIN 2280
KIN 2281
KIN 2282

Swimming
[0-3]
Fitness and Motor Development [0-3] Fitness and Wellness [0-3] (majors only)
Backpacking
Camping and Hiking
Weight Training I
Weight Training II
Aerobic Dance
Aerobic Dance II
Lifeguard Training Water Safety Instruction [0-3] Scuba Diving

KIN $2259 \quad$ Bowling
[0-3]
Fee must be paid directly to the bowing alley for the use of non-University facilities. At the time of publication of this catalog, the fee was $\$ 75$ (subject to change).

## H THEORY COURSES:

KIN $1101 \quad$ Concepts in Physical Activity and Wellness
fall, spring, summer
A study of the process of taking personal responsibility for engaging in attitudes and behaviors that develop optimal physical health. Emphasis is upon assessing one's physical health coupled with effective nutritional practices, healthy sleep habits, avoidance of risky behaviors, stress management and postural efficiency.

KIN 1202 Fitness and Wellness [3-0] as scheduled
Wellness components of nutrition, smoking cessation, stress management and substance abuse will be addressed with particular emphasis on health-related fitness and assessment. Prerequisite: Kinesiology majors only.

KIN 1351 Introduction to Kinesiology [3-0] as scheduled
Orientation to the field of kinesiology, its scope, organization of professional activities, vocational opportunities and professional qualifications.

## KIN 1354 Safety and First Aid [3-0]

as scheduled
Basic knowledge for safe and effective living. The essential aspects of home, work, motor vehicle and public safety. Includes both theoretical and practical aspects of emergency care. Standard First Aid, Personal Safety and Cardiopulmonary Resuscitation (CPR). Certification upon completion of specific requirements. Equivalent Course: HLTH 1354; a student may receive credit for only one course.

KIN 2301 Health-Related
Physical Fitness Appraisal [3-0]
as scheduled
Introduction to health-related physical fitness and health risk appraisal procedures that are intended to provide the intellectual and motivational base for positive health. (Taken by students who cannot take four hours of required kinesiology activities. Fulfills the University core curriculum requirements. See pages 104-106 for details.)

[^5]
in selected team sports (i.e. flag football, volleyball, soccer, softball, etc.). Lab fee required. Prerequisites: Kinesiology major and KIN 1351.

KIN 2310 Outdoor Education as scheduled
Motor skill acquisition, knowledge and safety issues in selected outdoor education activities (i.e. adventure education, rock climbing, hiking, swimming, etc.). Lab fee required. Prerequisites: Kinesiology major and KIN 1351.

KIN 2315 Technical Skills for Individual Sports

## as scheduled

Motor skill acquisition, knowledge and safety issues in selected individual or lifetime sports (i.e. tennis, badminton, golf, archery, etc.) Lab fee required. Prerequisites: Kinesiology major and KIN 1351.

KIN 2320 Movement Arts as scheduled
Motor skill acquisition, knowledge and safety issues in selected movement art activities (i.e. martial arts, dance activities, movement exploration, rhythmical activities, yoga, etc.) Lab fee required. Prerequisites: Kinesiology major and KIN 1351.

KIN 3300 Theory of Football
[3-0] as scheduled
The analysis and interpretation of coaching techniques, rules, strategies and fundamentals of football.

KIN $3302 \quad$ Teaching Individual Sports [1-2] as scheduled
A study of current theories of teaching selected individual sports. Participation required.

KIN 3303 Theory of Basketball [3-0] as scheduled
The analysis and interpretation of coaching techniques, rules, strategies and fundamentals of basketball.

KIN 3304 Theory of Baseball [3-0] as scheduled
The analysis and interpretation of coaching techniques, rules, strategies and fundamentals of baseball.

KIN 3305 Theory of Track and Field [3-0] as scheduled
The analysis and interpretation of coaching techniques, rules, strategies and fundamentals of track and field.

KIN 3310 Modified Team and Individual Sports
as scheduled
Analysis and presentation of selected sports in a modified form appropriate for middle school students. Participation required.

KIN 3320 Theory of Volleyball as scheduled
The analysis and interpretation of coaching techniques, rules, strategies and fundamentals of volleyball.
$\begin{array}{ll}\text { KIN } 3333 \\ \text { as scheduled } & \text { Theory of Soccer } \\ \text { [3-0] }\end{array}$
as scheduled
The analysis and interpretation of coaching techniques, rules, strategies and fundamentals of soccer.

KIN 3340 Kinesiology Activities for Elementary and Middle Schools
as scheduled
Motor skill acquisition, knowledge and safety issues in selected elementary and middle school activities (i.e. movement education, activities using small equipment, dance, tumbling, games and modified team and individual sports). Lab fee required. Prerequisites: Kinesiology major and admission to teacher education.

KIN 3345 Biomechanics
as scheduled
A study of the structural and mechanical factors that interact with human movement. Prerequisites: BIOL 2403 and BIOL 2404.

KIN 3352
as scheduled
Prevention and correction of accidents in physical education and athletic activities. The use of proper personal and field equipment, support methods, conditioning exercises, therapeutic aids, medical examinations and massage.

KIN 3353 Physiology of Exercise as scheduled
Basic systemic adaptations to exercise with specific emphasis on teaching kinesiology and on training and conditioning athletes. Prerequisites: BIOL 2403 and BIOL 2404.

KIN 3365 Tests and Measurements in Kinesiology

## as scheduled

The use, interpretation, evaluation and administration of valid tests in kinesiology. Also involves the application of elementary statistical procedures.

KIN 3395 Motor Learning

## as scheduled

A study of applications of principles of psychology to learning situations involved in motor skill acquisitions. Emphasis will be given both to general learning situations involved in the mastery of motor skills and to special situations involved with individual and group problems of motivation and response.

KIN 4313 Kinesiology Workshop
[3-0] as scheduled
This course is designed to give a student experience in research or in-depth study/readings in a substantive area not normally covered within standard courses. Course topics will vary according to student interest. May be repeated for credit with different topics.

KIN $4351 \quad$ Adapted Kinesiology
[3-0] as scheduled
The selection and planning of kinesiology for students whose activity must be adapted due to demands by gravity, trauma, injury, congenital defect, illness or disease. Pedagogy labs and field experiences are required. Prerequisites: KIN or GESE major and admission to teacher education.

KIN 4664 Kinesiology Practicum as scheduled
University work and field placement in a public and/or private setting involving the theory and practice of operating a wellness establishment. Twenty hours of field work per week are required. This is the capstone
course for the non-certified program. Prerequistes: Admission to the kinesiology non-certified program and the final semester of coursework.

## 3 Latin American Studies

LAMS 2301 Introduction to Inter-American Studies<br>[3-0]

fall, spring, summer
This course provides an introduction to major themes in Latin American and border studies through the study of history, literature, music and other kinds of expressive culture. These themes may include colonialism, ethnic diversity and conflict, national development, political economy, strugles for democracy, migration, artistic and popular cultures, and gender and sexuality.

LAMS 4301 Seminar on Latin
American Studies
[3-O]
fall, spring, summer
An interdisciplinary course that reviews and integrates major themes and ideas that have guided Latin American studies since the mid-2oth century and pursues analyses of problems that affect the region, such as inequality, violence, migration, environmental change, health care and international relations. Prerequisite: LAMS 2301.

LEAD 1310 Introduction to Leadership Theory

## as scheduled

This is an overview of the history and theory of leadership. This interdisciplinary course is designed to introduce the student to the tasks, strategies and skills of effective leadership. Topics will include historical and contemporary theories, modern organizational theory, goal-setting, decision-making and other leadership topics. The format of the course will involve lecture, group activities and hands-on exercises.

## LEAD 2310 Ethics in Leadership [3-0]

 as scheduledThis course will critically examine the issues of authenticity, self-interest, self-discipline and the moral obligations leaders face in pursuing justice, duty and the greatest good. Additionally, this course will investigate and analyze the ethical obligations of constituents and how the ethical commitments of both leaders and constituents are interconnected. The format of the course will include case studies, written papers and class debates.

LEAD 3310 Community Leadership
[3-0] as scheduled
This course will help students apply leadership theory to community service. A number of guest lecturers, solicited and scheduled by students, will introduce students to public service opportunities in their own backyard. The guest lecturers will be presented by local community and university leaders. Students will be required to interview these leaders and write and present a biographical introduction for them. Students will also be required to participate in a community service organization and write a paper on the experience. Students in this class will also partner with the local leadership programs. Prerequisites: LEAD 1310 and LEAD 2310.
$\begin{array}{ll}\text { LEAD 4310 } & \begin{array}{l}\text { Survey of Texas and U.S. Leadership } \\ \\ \text { Models and Practices }\end{array} \\ \text { as scheduled } & \end{array}$
The course examines leadership on a macro-level. Starting at the state level and moving on to a national scope, this class will explore case studies in both government and organizational leadership. Students will have the opportunity to explore leadership styles, both successful and not, of a number of famous (or infamous) state and national leaders. In addition, students will examine a number of complex social issues that affect us on a state and/or national level. They will have the opportunity to apply leadership theory, community building strategies and interdisciplinary approaches to propose a variety of solutions. Prerequisite: LEAD 3310.
$\begin{array}{ll}\text { LEAD } 4320 & \text { Survey of World Leadership Models } \\ & \text { And Practice } \\ \text { [3-0] }\end{array}$

## as scheduled

This course examines leadership on a global level. Students will explore world leadership through case studies, examine the differences between leadership styles and models in Latin America, Europe, the Middle East, Asia, etc. In addition, students will have the opportunity to examine a number of complex social issues that affect society on a global level. They will apply leadership theory, community building strategies and interdisciplinary approaches to propose a variety of solutions. Prerequisite: LEAD 3310.

MANA 3300 Internship in Management as scheduled
This course is designed to give students an opportunity to gain real-world experience in their chosen career field by working with a participating employing firm or organization. The students will be supervised by a faculty member acting as a liaison between the employing organization and the academic department to assure compliance with specific learning and experience requirements for the assignment. The employment can be either paid or unpaid, and must be at least 10 hours of work each week over the period of one academic term. Prerequisites: Upper-divisionstanding and approval by both department chair and employer providing internship experience.

| MANA 3333 | Digital Media for Management <br> and Marketing |
| :--- | :--- |
| [3-0] |  |

as scheduled
Digital media available to organizational managers and marketers is a fast moving field of development. Although one area of importance is the technical capability of such media, overlooked competencies are the strategy of media use, the efficient deployment of digital media and the effective assessment of the medium as a communication tool. This course is a leading edge effort to provide students with exposure to those critical components for organizational success. Prerequisites: MANA 3361 and MARK 3371.

MANA 3335 Communication Policy and Strategy
fall, spring
Course focuses on communication policy and practice as contributions to the effectiveness and efficiency of organizational operations in domestic and global theaters. The focus includes decision-making, ethical dilemmas and tactics related to establishment of organizational policies and practices guiding communication, internal and external, global and domestic, to the organization. The course uses case study format. Prerequisites: ENG 1301 and ENG 1302.

MANA 3361 Principles of Management and Organizational Behavior [3-0]
fall, spring, summer
A study of the management functions of planning, organizing, leading and controlling. Emphasis is placed on organizational theory and behavior to include culture and ethics. Prerequisite: CIS 1301 or equivalent.

MANA 3362 Human Resource Management [3-0] fall, spring, summer
This class focuses on the current developments within the field of personnel administration. Students will have the opportunity to study the concepts, principles, policies and organizational procedures utilized by business institutions in the management of personnel that includes selection, placement, compensation, morale, labor turnover, collective bargaining, employee service and supervisory activities. Prerequisite: MANA 3361.

> MANA $3364 \quad$ Organizational Theory fall, spring

This course studies the theory and process of designing, utilizing and evaluating organizational structures. It includes the design of appropriate jobs which will fit into the organizational structure as well as adapting the organizational design to the operational and environmental demands of the organization.
Prerequisite: MANA 3361.
MANA 3365 Compensation [3-0] fall, spring
This course presents the principles and practices of the determination of relative values of jobs and their applications to basic wage and salary structure. The class includes the formulation of a job evaluation plan and its accompanying wage structure. Prerequisites: ECON 2302, MANA 3361 or consent of chair of the department.

## MANA 3366 Recruitment and Selection [3-0]

 fall, springThis course is designed to provide an understanding of the process of recruitment and selection in organizations. It will cover the basic aspects of these areas (e.g. job analysis, legal issues, selection devices) as well as current issues such as global staffing, downsizing and contingent workers. While the focus of the course is from an organization's point of reference, a significant portion of the requirements will aid students in developing the tools, resources and awareness to get placed and promoted in organizations. Prerequisite: MANA 3361 or consent of the chair of the department.

## MANA 3367 Organizational Training and Development

[3-0]
This course is designed to provide students with the fundamental aspects of training as well as hands-on practical experience in developing training programs for organizations. The primary focus of this course deals with aiding students in developing the skills necessary to deliver training and development sessions that can be applied in organizations in order to meet the needs of the fast-paced, information-generating corporate
environments that are necessary in firms today. A major emphasis will be on skill development in regard to the design and delivery of training that is both efficient and cost effective to the organization. Prerequisite: Junior or senior standing.

MANA 4300 Topics in Management [3-0] fall, spring
Special topics in management as selected by the instructor. Course can be repeated as topics change. Prerequisite: MANA 3361 or consent of the chair of the department.

MANA 4352 Family and the Small Business [3-0] fall, spring
This course studies the family business employing systems theory, culture and the stages of evolution. Issues such as individual development, management of family structure, conflicts and relationships are explored. Other topics include organizational issues (such as succession and estate planning) and formalizing the firm. Students will be required to undertake a field project where they will report, via a group seminar to the class, on an existing family small business.

MANA 4361 Organizational Behavior [3-0]
fall, spring
This course focuses on the study of management theory with emphasis on the investigation of individual and group behaviors within organizations. Prerequisite: MANA 3361.

MANA 4363 Production Management [3-0]
fall, spring, summer
The concept of the production function and its applicability to all types of business firms, problems that provide background for the integration of scientific decision processes relative to an analysis of production activities and computer applications in the production/ operations environment. Prerequisites: QUMT 3342 or QUMT 3343 and MANA 3361.

MANA 4364 Business and Society [3-0] fall, spring
The behavior and social responsibilities of business firms and other business institutions in modern society to include current cultural and ethical issues. Prerequisite: MANA 3361 or consent of the chair of the department.

MANA 4365 Quality Management [3-0] as scheduled
This course focuses on the design of products and services that meet customer needs; control of processes to ensure meeting design requirements; and the continuous improvement of quality. Analytical methods for obtaining and maintaining quality will be addressed in the course.

In order to understand real-life applications of quality management, students will be involved in working with companies on actual quality problems. In addition, case discussions will be used to enhance the students' understanding of the key points in lectures.

MANA 4366 Small Business Management [3-0] fall, spring
A study of the special characteristics of small business. Emphasis will be placed on the selecting and starting of a small business and the essential function of management in the first years of operation. Prerequisites: Senior standing in business or entrepreneurship minors. ACC 2301, MANA 3361, and ECON 2301.

## MANA 4367 Purchasing and Supply Management

A study of the integration and coordination of activities, such as purchasing, outsourcing, materials management, logistics, supplier selection, global sourcing and international distribution, to create an effective flow of materials and information from suppliers to customers.

## MANA 4369 Strategic Management

## fall, spring, summer

This capstone course for all Business Administration majors requires the broad integration of knowledge contained in functional, core and specialty areas, and focuses on the formulation, implementation and evaluation of strategy in both business and nonprofit organizations in a global environment. Cases, projects and practical applications in the course require in-depth analysis of competitive, economic, regulatory, cultural, technological, demographic and environmental variables as they influence strategy formulation. Prerequisites: MANA 3361, MARK 3371, FINA 3383, completion of the business core analytical course requirement, and completion of the business core international course requirement. This course must be taken in the semester in which the student is graduating.

MANA 4370 Project Management
fall, spring
This course focuses on the organizational function of managing projects process. It uses cases and applications in service sectors to enhance student understanding about the issues and challenges of managing workflow. Prerequisite: MATH 1340 or MATH 1341, and QUMT 3343.

MANA 4399 Business Consulting [3-0] on demand
This course is an on-site evaluation of an operating business by a student or students serving in the role as a consultant or consulting team. Course emphasis will
be directed toward an analysis of the basic business functions of accounting, finance, production, marketing and management as they pertain to the successful operation of a business. Prerequisite: Senior standing and consent of department.


## MANUFACTURING ENGINEERING

MANE 2332 Engineering Statistics
spring
Fundamentals of probability, commonly encountered density functions, distribution functions, statistical tests and experimental designs as used in manufacturing and product design. Includes use of microcomputer-based statistical analysis software. Prerequisite: MATH 1460. Previous Course Number: MANE 3332.

MANE 3101 Projects in Manufacturing Engineering
as scheduled
Special construction projects, research activities or supervised manufacturing engineering studies. May be repeated once for credit. Prerequisite: Junior standing or consent of instructor.

MANE 3164 Manufacturing Processes Lab [0-3] fall, spring
Provides hands-on experience in various manufacturing processes. Prerequisite: Credit for or enrollment in MANE 3364. $\$ 30$ laboratory fee.

## MANE 3300 Computer-Aided Design [2-3]

fall
Curve and surface definition, geometric transformation and solid modeling, projections and visualization and numerical analysis, introduction to finite element analysis. Prerequisite: MECE 1221.

| MANE 3301 | Projects in Manufacturing <br> Engineering [o-9] |
| :---: | :---: |
| as scheduled |  |
| Special construction projects, research activities or |  |
| supervised manufacturing engineering studies. May be |  |
| repeated once for credit. Prerequisite: Junior standing or |  | Engineering

as scheduled
Special construction projects, research activities or supervised manufacturing engineering studies. May be repeated once for credit. Prerequisite: Junior standing or consent of instructor.

MANE 3302 Computer-Aided Manufacturing [2-3] spring
Programmable logic controllers, sensors, robotics, computer control of manufacturing processes and integration. Prerequisite: Credit for or enrollment in MANE 3364.

## MANE 3337 <br> Engineering Economics

fall
Application of economics and decision theory to engineering alternatives in planning, developing, constructing and managing engineering projects. Discounted cash flow mechanics, economic analysis, management of money and economic decisions including inflation and utility theory. Prerequisite: MANE 2332.

MANE 3340 Fundamentals of Industrial Engineering

## spring

Introduction to economic analysis, industrial and project management, ergonomics, human factors, work recording techniques, time and motion study and line balancing. Prerequisite: MANE 2332. Previous Course Number: MANE 2340.

MANE 3351 Manufacturing Engineering Analysis [3-0]

## fall

Topics include linear algebra, numerical methods and programming with engineering analysis software.
Prerequisites: MATH 1470, CSCI 1380.

## MANE 3364 Manufacturing Processes [3-0] fall and spring

An introduction to manufacturing processes including metal cutting, non-traditional machining, force analysis, casting, deformation and joining processes, plastics, composites, manufacturing of ceramics and electronics devices. Prerequisite: MECE 2440.

MANE $4311 \quad$ Quality Control [3-0]
fall
Study of statistical methods applied to the assurance of product quality. Foundational principles developed by Juran, Deming and others will be applied. Sampling techniques and control charts will be applied. Concepts of statistical process control will be emphasized throughout. Design of experiments and Taguchi-type methodologies will be introduced. Prerequisite: MANE 2332.

MANE 4321 Automation Systems [3-0] fall
Modeling of mechanical, thermal, fluid, electrical and electromechanical systems; time response analysis, block
diagram and signal flow representation; stability analysis and design of compensators. Prerequisite: Credit for or enrollment in MATH 3349.

MANE $4331 \quad$| Manufacturing Planning |
| :--- |
| and Control |$\quad$ [3-0]

spring
A capstone course covering the principles of manufacturing
process and plant design and control emphasizing the
interrelationship between product design, process design
and the firm's operating plan. Computer models will be
used extensively. Prerequisite: Consent of instructor.

MANE 4333 Topics in Manufacturing Engineering
[3-O]
as scheduled
Topics selected from current issues of concern in manufacturing industries. May be repeated for credit when topics change. Prerequisite: Consent of instructor.

MANE 4340 Operations Research [3-0] spring
An introduction to basic concepts in mathematical modeling, stochastic processes, linear programming and optimization. Applications include inventory system and control, plant location and network analysis. Prerequisite: MANE 3351.

MANE 4346 Introduction to Plastics Engineering as scheduled
Emphasis on important relationships between material's properties (physical and chemical), the molding process, the design process and the performance of finished products. Prerequisite: MECE 2440.

MANE 4352 Manufacturing Simulation [3-0] spring
Develops skills in applying discrete computer simulation and modeling techniques for facility layout design and production planning. Topics include data collection, input analysis, distribution fitting, model development, verification and output analysis. Prerequisite: MANE 2332.

MANE 4365 Tool Design
[3-O]
as scheduled
Covers topics on tool design methods, locating and clamping methods, design of jigs and fixtures, gauges and gauge design, die design and mold design. Prerequisites: MANE 3364 and MANE 3300.


MARETNG

MARK 3371 Principles of Marketing
[3-0]
fall, spring, summer
The marketing structure as it operates in our economic system, with emphasis on improving the flow of goods and services from producer to consumer. Practical application of principles and techniques. Designed as a beginning course in marketing. Prerequisites: ECON 2302, CIS 1301 or equivalent.

MARK 3372 Consumer Behavior [3-0] fall, spring
An overall view of the basic perspectives of consumer behavior. An interdisciplinary approach is utilized by studying the fields of economics, psychology, sociology and anthropology as they relate to marketing. Emphasis is placed on the fundamental process of motivation, perception and learning, as well as analysis of individual predispositions and group influences in marketing. Prerequisite: MARK 3371.

MARK 3373
fall, spring
A comprehensive study of marketing in other than the retail area. Topics include wholesale institutions, their competitive positions and strategies; channels of distribution; physical distribution; marketing to industrial consumers and industrial buying behaviors. Readings, cases and special projects. Prerequisite: MARK 3371 or consent of the instructor.

MARK 3375 Retailing
fall, summer
Principles and methods of modern retailing, emphasis on problems of store location and layout, buying, pricing, credit, stock control, personnel and sales promotion. Designed for students who wish to gain a general knowledge of the retail field as well as those specializing in marketing. Prerequisite: MARK 3371.

MARK 3376 Professional Selling
fall, spring
Professional salesmanship, the product, the buyer, planning the presentation, meeting the prospect, the interview, overcoming resistance, closing the sale and building goodwill, presentations with an emphasis on consultative selling. Prerequisite: MARK 3371 or consent from instructor.

## MARK 3378 Marketing in an

E-Commerce Environment [3-0]
fall, spring
This course focuses on the marketing of business over the Internet, highlighting the important dual role of the Internet in selling online and providing support for brick and mortar stores. The course will both evaluate existing Web sites and cover theories of improving the customer utility of Web sites. Students will have the opportunity to study about driving traffic to the Web site, keeping customers on the site and encouraging purchases from the Web site.

MARK 3379 Services Marketing
fall, spring
This course focuses on the marketing of services businesses highlighting the differences between them and marketing product businesses. The course looks at different categories of services businesses, i.e. retail, hospitality, and professional services to identify differences in the way consumers evaluate these enterprises and means of improving customer satisfaction.

MARK 4330 International Marketing [3-0]
fall, spring, summer
The development of the international marketing mix
for the multinational organization, and an in-depth look at global versus domestic marketing management. Prerequisite: MARK 3371.

## MARK 4372 Promotions Management [3-0]

 Management of the promotional mix. Analysis and application of advertising and sales promotion methods through mass communication and management of the sales force for both consumer and industrial goods. Prerequisite: MARK 3371.MARK 4373 Sales Management

## fall, spring

Decision making of the sales manager and how it affects the sales force. Emphasis is placed on sales planning, staffing, training and directing of the sales force including sales force analysis and evaluation. Prerequisite: MARK 3371.

MARK 4379 Topics in Marketing
fall, spring
Special topics in marketing will be covered as selected by the instructor. Course can be repeated for credits as topics change. Prerequisite: MARK 3371 or consent of the chair of the department.

MARK 4382 Marketing Research Analysis [3-0] fall, spring
This course covers quantitative research procedures and techniques used in business today. These include problem definition, sources of research data, survey methods, questionnaire design and sampling techniques. Prerequisites: QUMT 3343 and MARK 3371.
$\begin{array}{ll}\text { MARK } 4383 & \begin{array}{l}\text { Marketing Research } \\ \text { Applications }\end{array}\end{array}$ [3-0]

## fall, spring

Required for all marketing majors. It is designed as a research application course whereby students are assigned a real-world marketing problem to solve. Students would be required to identify the research question, develop a plan for study, implement the research study, analyze the results and present the results in a professional, realistic situation. Prerequisite: QUMT 3343 and MARK 4382.

MARK 4389 Marketing Management [3-0] fall, spring
Capstone course for marketing majors. Emphasis on integrating knowledge of various marketing tools and models that may be useful in assisting the marketing manager in the decision-making process. All areas of marketing are discussed within the decision-making framework, with practical applications of techniques emphasized. Prerequisite: MARK 3372.

MATH 1300 Elementary Algebra [3-0] as scheduled

A course in elementary algebra designed for the student with a background in numerical skills. Students have the opportunity to prepare for intermediate algebra and other mathematics coursework recommended in education, fine arts, the humanities or social sciences. Topics include basic operations on real numbers, elementary geometry, introduction to algebra, linear equations and graphs, linear equations with applications, exponent properties, systems of linear equations in two unknowns, polynomials and factoring methods. This course does not count toward a student's hours for graduation or in the determination of hours attempted or earned. This course may not be used to satisfy any University core curriculum requirements.

MATH 1334 Intermediate Algebra
as scheduled
A course in algebra designed to prepare the student for College Algebra or the equivalent. Topics include factors of polynomials; rational expressions; radical expressions; an introduction to complex numbers, quadratric equations, rational equations, radical equations and elementary inequalities. Prerequisite: MATH 1300 with a grade of "C" or better or satisfactory score on the ACT or placement exam. This course does not count toward a student's hours for graduation or in the determination of hours attempted or earned.
MATH $1340 \quad$ College Algebra
as scheduled [3-0]

Topics include nonlinear and absolute value inequalities, functions, complex numbers, polynomial and rational functions, exponential and logarithmic functions, and systems of linear and nonlinear equations. Prerequisite: MATH 1334 with a grade of "C" or better or satisfactory score on ACT or placement exam.

MATH 1341 Business Algebra [3-0] as scheduled
Topics include inequalities, quadratic functions, logarithmic and exponential functions, sequences and series, mathematics of finance, systems of linear equations, matrices and an introduction to linear programming. Use of technology to perform numerical computations is emphasized. Prerequisite: MATH 1334 with a grade of "C" or better or satisfactory score on ACT or placement exam.

MATH 1342 Business Calculus [3-0]
Topics include differential calculus with business optimization applications, multivariable calculus including optimization techniques and applications and an introduction to integral calculus. Prerequisite: MATH 1340 or MATH 1341 with a grade of "C" or better.

## MATH 1348 Contemporary Mathematics [3-0]

 fall, spring, summerTopics include real-world problem-solving and critical thinking; mathematical logic; graphs and graphical representations; statistics and probability; voting and apportionment methods, and financial mathematics. This course is designed to meet the THECB Exemplary Educational Objectives and will satisfy the core requirement in mathematics. Prerequisite: MATH 1334 with a grade of "C" or better, and/or satisfactory placement scores.

## MATH 1389 Contemporary Mathematics

Honors
[3-0]

## fall, spring

Topics include real-world problem-solving and critical thinking; mathematical logic; graphs and graphical representations; statistics and probability; voting and apportionment methods, and financial mathematics. This course is designed to meet the THECB Exemplary Educational Objectives and will satisfy the core requirement in mathematics. Prerequisite: MATH 1334 with a grade "C" or better, and/or satisfactory placement scores.

## MATH 1450 Pre-calculus with Trigonometry

## fall, spring, summer

Topics include trigonometric functions, applications, graphs, equations and identities; inverse trigonometric functions; vectors; sequences and series; the binomial theorem; conic sections; and parametric and polar equations. A student may use MATH 1450 to replace a grade received in MATH 1357; however, one may not receive credit for both MATH 1357 and MATH 1450. Prerequisite: MATH 1340 with a grade of "C" or better or appropriate high school background and/or placement scores.

MATH 1460 Calculus I
fall, spring, summer
Topics include limits, the derivative and its applications, antiderivatives, definite integrals and the derivatives and integrals of transcendental functions. A student may use MATH 1460 to replace a grade received in MATH 1401; however, one may not receive credit for both MATH 1401 and MATH 1460. Prerequisite: MATH 1450 with a grade of "C" or better or appropriate high school background and/or placement scores.

MATH 1470 Calculus II
fall, spring, summer
Topics include methods and applications of integration, parametrized curves, integration in polar coordinates and infinite sequences and series. A student may use MATH 1470 to replace a grade received in MATH 1402; however, one may not receive credit for both MATH 1402 and MATH 1470. Prerequisites: MATH 1460 with a grade of "C" or better.

MATH 1487 Calculus I (Honors)
as scheduled
Topics of derivatives, definite integrals, limits are studied taking examples from algebraic and transcendental functions. Emphasis is placed on calculus as a discipline and calculus as a tool in modeling. Prerequisites: MATH 1450 with a grade of "C" or better or appropriate high school background and placement scores, together with admissions to the honors program or consent of instructor.

MATH 1488 Calculus II (Honors) [4-0] as scheduled
Topics include methods and applications of integration, alternative coordinate systems, parameterizations, infinite sequences and series. Topics are viewed as useful tools and are studied in the context of calculus as a discipline. Prerequisites: MATH 1487 (or MATH 1460) with a grade of "C" or better or appropriate high school background and/or placement scores, together with admission to the honors program or consent of instructor.

## MATH 2330 Elementary Statistics and Probability

as scheduled
This course is intended to provide the student with an elementary overview of the mathematical nature and uses of descriptive statistics and inferential statistics. Topics include the definitions and fundamental theorems concerning measures of central tendency and dispersion, empirical and theoretical concepts of probability, the central limit theorem, tests of hypotheses, interval estimation, chi-square tests and regression and correlation. Equivalent Course: STAT 2330. Credit may be received in only one of MATH 2330 or STAT 2330. Prerequisite: MATH 1334 with a grade of "C" or better or satisfactory score on ACT or placement exam.

MATH 2345 Elementary Linear Algebra as scheduled
Topics include systems of linear equations, matrices and their algebraic properties, determinants, vectors, Euclidean N -space, linear transformations and their matrix representations, vector spaces, eigenvalues and eigenvectors and applications to the sciences and
business. Previous Course Number: MATH 2304. A student may use MATH 2345 to replace a grade received in MATH 2304; however, one may not receive credit for both MATH 2304 and MATH 2345. Prerequisite: MATH 1460 with a grade of "C" or better.

## MATH 2346 Mathematics for <br> Electrical Engineers

as scheduled
This course covers the essentials of matrix theory, discrete mathematics, and numerical methods needed for majors in electrical engineering. Topics include Gauss-Jordan elimination, matrix algebra, determinants, graphs, trees, combinatorics, root finding algorithms, numerical differentiation, numerical integration, and numerical matrix methods. Prerequisites: CSCI 1380 with a grade of "C" or better. Co-requisite: MATH 1470.

## MATH 2401 Calculus III as scheduled

[4-o]
Topics include vectors, calculus of several variables, partial derivatives, multiple integrals and vector calculus including the Divergence Theorem and Stoke's Theorem. Prerequisite: MATH 1470 with a grade of "C" or better.

## MATH 3303 History of Mathematics [3-0] as scheduled

This course is a study of the historical development of ideas that shape modern mathematical thinking. Although mathematicians are studied, emphasis is placed on mathematical development. Prerequisite: MATH 1470 with a grade of "C" or better.

MATH 3304 Geometry [3-0] as scheduled
This course studies Euclidean and non-Euclidean geometries focusing on axiomatic systems with the purpose of developing students' understanding of the ability to create mathematical proofs. Prerequisite: MATH 2345 with a grade of "C" or better.

| MATH 3311 | The Organizational Structures <br> and Processes of Mathematics | $[3-0]$ |
| :--- | :--- | :--- |
| as scheduled |  |  |

This course examines the content and organization of logical, axiomatic and algorithmic structures and the corresponding networks of concepts, principles and skills in the field of mathematics. It includes the analysis, justification and application of such mathematical processes as those for proofs, algorithms, problem solving and applications of mathematics. This course aims at developing an advanced level of understanding of mathematics (content and method) up through integral calculus. Prerequisite: MATH 1470 with a grade of " $C$ " or better.

MATH 3337 Applied Statistics I [3-0] as scheduled
This course concerns itself with probabilistic models, regression analysis, nonparametric statistics and the basics of experimental design. Computer laboratory experience will be an important part of the class. Equivalent and Previous Course Information: This course replaces MATH 3308 and is the same as STAT 3337. A student may use MATH 3337 to replace a grade received in MATH 3308; however, one may receive credit for only one of MATH 3308, MATH 3337 and STAT 3337. Prerequisites: Junior standing and either MATH 1340 or MATH 1341. It is highly recommended that the student have some knowledge of statistics such as is offered in MATH 2330.

MATH 3338 Applied Statistics II
[3-0]
as scheduled
This course is a continuation of MATH 3337 and includes special designs, analysis of variance and covariance, multiple comparisons and coding. Prerequisite: MATH 3337 or STAT 3337.

MATH 3349 Differential Equations [3-0] as scheduled
This course studies first-order and linear second-order differential equations, Laplace transforms, power series solutions and first-order linear systems. Prerequisite: MATH 1470 with a grade of " $C$ " or better.

MATH 3355 Linear Programming as scheduled
Basic theory of linear programming, an introduction to the simplex method path-following interior-point methods, and applications of linear programming. Programming will be done in MATLAB. Prerequisite: MATH 2345 with grade of " $C$ " or better.

MATH $3368 \quad$ Numerical Methods [3-0] as scheduled
This course includes interpolation, numerical integration, numerical solutions to differential equations and a study of numerical solutions to systems of equations. Equivalent Course: CSCl 3350; a student may receive credit for only one course. Prerequisites: MATH 1460; CSCl 1380 or CSCl 2325 or consent of instructor.

MATH 3373 Discrete Structures [3-0] as scheduled
This course addresses mathematical topics readily used in computer science, including formal logic, mathematical proof, counting techniques, functions and relations, an introduction to compatibility, the Church-Turing thesis and modeling computation. Prerequisites: MATH 1460 or MATH 1342 and CSCl 1380, all with a grade of "C" or better.

| MATH 4302 |
| :--- | :--- | :--- |
| as scheduled | Theory of Numbers [3-0]

This course includes the binomial theorem, the division algorithm, the Euclidean algorithm, diophantine equations, primes, congruences, Fermat's theories, Euler's theorem, perfect numbers, Pythagorean triples, sums of squares and the Fibonacci sequence. Prerequisite: MATH 2345 with a grade of " $C$ " or better.

MATH 4317 Complex Analysis [3-0] as scheduled
This course is an introduction to the theory of functions of a complex variable with basic techniques and some applications. Topics include complex numbers and the extended complex plane, elementary functions of a complex variable, differentiation, conformal mappings, contour integration, Cauchy's theorem, Cauchy's formula, Taylor and Laurent series and residue theory. Prerequisite: MATH 2401 with a grade of " $C$ " or better.

MATH 4318 Boundary Value Problems [3-0] as scheduled
This course is an introduction to elementary partial differential equations, with applications to physics and engineering. Heat conduction, diffusion processes, wave phenomena and potential theory are explored by means of Fourier analysis. Prerequisite: MATH 3349 with a grade of "C" or better.

## MATH 4319 Integral Transforms

as scheduled
This course is an introduction to transform analysis based on the theory of Fourier and Laplace integrals. Topics include contour integration, inverse formulas, convolution methods, with application to mathematical analysis, differential equations and linear systems.
Prerequisites: MATH 2401 and MATH 3349 both with a grade of "C" or better.

MATH $4339 \begin{aligned} & \text { Mathematical Probability } \\ & \text { and Statistics }\end{aligned}$ [3-0]

## as scheduled

Topics include probability, random variables, discrete and continuous probability distributions, expectations, moments and moment generating functions, functions of random variables and limiting distributions.
Prerequisite: MATH 1470 with a grade of " $C$ " or better.
MATH 4351 Modern Algebra [3-0]
as scheduled
This course provides an introduction to algebraic structures. Topics are to be taken from groups, rings and fields.
Prerequisite: MATH 2345 with a grade of "C" or better.

MATH 4357 Real Analysis
as scheduled
This course presents a rigorous introduction to the elements of real analysis. Topics include sequences, series, functions, limits, continuity and derivatives. Prerequisite: MATH 1470 with a grade of " $C$ " or better.

MATH 4360 Topology
as scheduled
This course presents a rigorous introduction to the elements of topology. Topics include a study of metric spaces, separation axioms, topological spaces and topological properties of point sets and mappings. Prerequisite: MATH 1470 with a grade of " $C$ " or better.

MATH 4364 Special Problems in Mathematics [3-0] as scheduled
This course covers special undergraduate topics in mathematics that are not taught elsewhere in the department. May be repeated for credit. Prerequisite: Consent of instructor.

MATH 4379 Special Problems in Applied Mathematics

## as sheduled

This course covers special undergraduate topics in applied mathematics that are not taught elsewhere in the department. May be repeated for credit when topic is different. Previous Course Number: MATH 4311. A student may use MATH 4379 to replace a grade received in MATH 4311; however, credit may be received for only one course. Prerequisite: Consent of instructor.

## MATHEMATICS - OTHER

EMAT 2306 Foundations of Mathematics I [3-0] as scheduled
Students will have the opportunity to study the mathematical background of meaningful learning of number concepts, precise definitions, fundamental operations and problem-solving mathematics. The structure of the real number system is developed through the use of elementary logic and set theory. Previous Course Number: MATH 2306; a student may use EMAT 2306 to replace a grade received in MATH 2306; however, one may not receive credit for both

EMAT 2306 and MATH 2306. Prerequisite: MATH 1340 with grade of " $C$ " or better.

## EMAT 2307 Foundations of Mathematics II [3-0] as scheduled

This course is a continuation of EMAT 2306. Topics include measurement, geometry, probability and statistics, elementary algebra and problem solving. Previous Course Number: MATH 2307; a student may use EMAT 2307 to replace a grade received in MATH 2307; however, one may not receive credit for both EMAT 2307 and MATH 2307. Prerequisites: MATH 1340 and MATH 2306, both with grade of "C" or better.

MMAT 3309 Foundations of Mathematics III Intermediate
as scheduled
This course advances knowledge and skills from EMAT 2306 and EMAT 2307 and involves analyses of intermediate mathematical structures, their construction and synchronous mappings into multiple embodiments (e.g., symbolic, situational, technological, geometric, and others). Clinical, laboratory, and field experiences provide opportunities to construct and assess selected structures according to established theories. Prerequisites: EMAT 2306 and EMAT 2307, both with a grade of "C" or better.

## MMAT 3312 Measurement and Geometry [3-0] as scheduled

This course is an in-depth study of measurement and geometry. Topics include length, area, volume, the metric system, transformations, symmetry, congruency, similarity, proof and coordinate systems, using technology and the van Hiele model of geometry instruction. Previous Course Number: MATH 3312; a student may use MMAT 3312 to replace a grade received in MATH 3312; however, one may not receive credit for both MMAT 3312 and MATH 3312. Prerequisite: EMAT 2307 with a grade of "C" or better.
tt 3313 Algebraic Structures [3-0] as scheduled
This course is an in-depth study of algebraic structures. Topics include meaningful learning of concepts and properties of relations, functions, binary operations, groups, rings and fields, using technology when appropriate. Previous Course Number: MATH 3313; a student may use MMAT 3313 to replace a grade received in MATH 3313; however, one may not receive credit for both MMAT 3313 and MATH 3313. Prerequisite: EMAT 2307 with a grade of "C" or better.

MMAT 3315 Probability and Statistics [3-0] as scheduled
This course is an in-depth study of probability and statistics. Topics include descriptive statistics, probability and inferential statistics, using calculator and computer technology. Previous Course Number: MATH 3315; a student may use MMAT 3315 to replace a grade received in MATH 3315; however, one may not receive credit for both MMAT 3315 and MATH 3316. Prerequisite: EMAT 2307 with a grade of "C" or better.

| MMAT 3316 | Mathematics in a |
| :--- | :--- |
| as scheduled | Computer Environment [3-0] |

as scheduled
This course studies mathematics that can be developed and explored in an environment that includes the computer as the primary investigative tool. Previous Course Number: MATH 3316; a student may use MMAT 3316 to replace a grade received in MATH 3316; however, one may not receive credit for both MMAT 3316 and MATH 3316.
Prerequisite: EMAT 2307 with a grade of "C" or better.
MMAT $3317 \quad$ Basics of Discrete Mathematics [3-0] as scheduled
This course is an introductory study of discrete mathematics. Topics include uses of mathematical notation, concepts, principles, and proofs applied to combinatorics, relations, graph theory, recursion and generating functions. Prerequisite: EMAT 2307 with a grade of "C" or better.

MMAT 3318 Basics of Number Theory [3-0] as scheduled
This course is an introductory course of number theory. Topics include uses of mathematical notion, concepts, principles, proofs applied to divisibility (e.g., primes, factorization, gcd, lcm), modular theory, Diophantine equations, multiplicative functions, Pythagorean triples, Fibonacci sequences and applications to cryptography. Prerequisite: EMAT 2307 with a grade of "C" or better.

MMAT 3319 Mathematical Structures and Processes
as scheduled
This course is an in-depthstudy in mathematical structures and processes. Topics include concepts, principles, skills, proofs, applications of logical, axiomatic, and algorithmic mathematical structures and processes. Previous Course Number: MATH 3319; a student may use MMAT 3319 to replace a grade received in MATH 3319; however, one may not receive credit for both MMAT 3319 and MATH 3319. Prerequisite: MMAT 3312 and MMAT 3313, both with a grade of "C" or better.

MMAT 3320 Basics of Mathematical Modeling [3-0] as scheduled
This course is an introductory study of mathematical modeling. Topics include the exploration of real world and mathematical situations using algebra, geometry, probability and statistics, trigonometry and elementary calculus using calculator and computer technology when appropriate. Prerequisite: EMAT 2307 with a grade of "C" or better.

MMAT 3321 Mathematical Problem Solving [3-0] as scheduled
This course is a study of mathematical problem solving using heuristics to investigate problems drawn from algebra, geometry, probability, statistics and calculus with the aid of calculator and computer technology, when appropriate. Topics include Poyla's problem solving model, teaching for, about and via problem solving and problem posing. Prerequisite: MMAT 3320 with a grade of "C" or better.

## MMAT 4322 Capstone Research Project [3-o]

 as scheduledStudents will have the opportunity to design, construct and evaluate research-based units and technologically enhanced materials for use in teaching mathematics in the middle school. The units will be composed of mathematical content selected from the history of mathematics, algebraic structures, measurement, geometries, probability, statistics, mathematical structures and processes, discrete mathematics, number theory, mathematical modeling and problem solving. Classroom discussions will address mathematical content, mathematical education research and research methodology. Oral presentations and written reports will be required. Prerequisites: MMAT 3315, MMAT 3320, and at least two of MMAT 3312, 3313, 3317, 3318. All with grades of "C" or better.


## MECHANICAL ENGINEERING

MECE 1101<br>Introduction to<br>Mechanical Engineering [0-3]

## fall, spring, summer

Introduction to mechanical engineering as a career, the requirements for registration as a professional engineer and the fields of specialization within mechanical engineering. Approaches to engineering problem solving and the graphical presentation of data. Engineering design stages and implementation within design teams. Prerequisite: Computer literacy.

## MECE 1221 Engineering Graphics

fall, spring, summer
This course provides an introduction to computeraided drafting techniques. Topics include methods of graphical communication, two- and three-dimensional drawing presentation, working drawing, data analysis, design synthesis and production methods. Prerequisite: Computer literacy. \$20 laboratory fee.

MECE 2303 Statics
(Texas Common Course Number is ENGR 2301.) fall, spring, summer
The study of forces, moments, friction, centers of mass, gravity and pressure using the equations of equilibrium in vector algebraic and calculus forms. Prerequisites: MATH 1460 and credit for or enrollment in MATH 1470 and PHYS 2401.

MECE 2304 Dynamics
fall, spring, summer
Kinematics, dynamics, work-energyand impulse-momentum methods applied to engineering problems involving particles and rigid bodies. Prerequisite: MECE 2303.

MECE 2335 Thermodynamics I
fall, spring, summer
Classical thermodynamics with primary emphasis on application of the first and second laws of thermal systems. Introduction to physical and chemical equilibria. Prerequisite: MATH 1470 with a grade of "C" or higher.

MECE 2405 Engineering Mechanics [3-3]
fall, spring
Force vectors; free body diagrams; engineering applications of equilibrium; centroids; moment of
inertia; kinematics and kinetics applied to engineering problems involving particles and rigid bodies.
Prerequisite: MATH 1470.

## MECE 2440 Engineering Materials <br> fall, spring, summer <br> An introduction to the atomic crystallographic and microstructural characteristics of solids and the relationship of these characteristics to the engineering properties and behavior of metallic, ceramic and polymeric materials. Topics in corrosion. Prerequisites: CHEM 1301 and CHEM 1101. \$15 laboratory fee.

MECE $3100 \quad$ Undergraduate Research [3-0] fall, spring, summer
This course is adapted to technological research with an emphasis in mechanical engineering. For advanced students capable of developing a problem independently through conference and activities directed by the instructor. The topic of research is chosen by the student with the approval of the instructor prior to registration. This course may be repeated for credit up to eight times. Prerequisite: Consent of faculty advisor.

MECE 3115 Fluid Mechanics Laboratory [0-3] spring, summer
Introduction to basic fluid mechanics instrumentation, computerized data acquisition and analysis. Experimental verification and reinforcement of analytical concepts introduced in MECE 3315. Prerequisite: Credit for or enrollment in MECE 3315. $\$ 25$ laboratory fee.

MECE $3160 \quad$ Heat Transfer Laboratory [0-3] fall, summer
Measurements in basic heat transfer design and heat exchangers; computerized data acquisition and analysis, experimental verification on the theoretical and semiempirical results developed in MECE 3360. Prerequisite: Credit for or enrollment in MECE 3360. \$15 laboratory fee.

MECE $3304 \quad$ System Dynamics [3-0] fall, spring
The course covers lumped-parameter modeling of mechanical, electrical, fluid and thermal systems. An energetic approach based on bond graph techniques, invented in 1959 by Henry M. Paynter, is introduced. Primary focus is on analysis of linear first- and secondorder systems with some exposure to analysis of higherorder systems. Transient and steady-state responses are examined. Time- and frequency-domain analysis methods are covered. Advanced topics include statespace modeling and feedback control of dynamic systems. Prerequisites: MATH 3349 and MECE 2304.

MECE 3315 Fluid Mechanics [3-0]
spring, summer
Laws and theory relative to incompressible fluids, continuity, momentum and energy relations; internal and external flow in laminar and turbulent regimes; design of piping systems and aircraft parameters. Prerequisites: MECE 2335, MATH 2401 and MATH 3349.

MECE 3320 Measurements and Instrumentation
fall, spring
Fundamentals of measurement systems, standards, treatment of data, statistics, uncertainty analysis, data acquisition, transducers, strain, force, acceleration, pressure, temperature, and fluid flow. Prerequisites: PHYS 2302, MATH 3349 and credit for or enrollment in ELEE 3305. $\$ 30$ laboratory fee.

MECE 3321 Mechanics of Solids [3-0] fall, spring, summer
This course covers internal forces and deformation in solids, concepts of stress and strain, formulas for stress and deflection for elastic bars, shafts, and beams, stress and strain transformation and theories of failure. Prerequisites: MECE 2303, MATH 1470 and PHYS 2401.

MECE 3336
Thermodynamics II
fall, spring
Gas and two-phase power and refrigeration cycles, gas mixtures, chemical reactions, chemical equilibrium. The basic laws and concepts of thermodynamics are viewed as their use is encountered in the course. Prerequisite: MECE 2335.

MECE 3350 Mechanical Engineering Analysis [3-0] fall, spring
Mathematical modeling and simulation of engineering systems. Introduction to the application of Fourier series and partial differential equations to a variety of engineering problems. Prerequisites: CSCl 2335 or CSCl 1380, MATH 2401 and MATH 3349.

MECE 3360 Heat Transfer
fall, summer
Steady and unsteady one- and two-dimensional heat conduction. Forced and free convection, radiation and heat exchangers. Prerequisites: MECE 2335, MECE 3315 and credit for or enrollment in MECE 3350.

MECE $3380 \quad$ Kinematics and Dynamics of Machines
spring, summer
Kinematic and dynamic modeling and analysis of mechanisms and machines; study of machine components
such as linkages, cams, gears, gear trains and differentials. Prerequisites: MECE 2304.

## MECE 3385 Mechanical Vibrations

fall
Undamped and damped, free and forced vibrations of single degree of freedom systems with design applications to base excitation, unbalance, rotating shafts, isolation and absorption; multi-degreeof freedom systems, continuous systems; transient response; numerical techniques used to analyze alternate designs and propose optimum solutions. Prerequisites: MATH 2401, MATH 3349 and MECE 2304.

## MECE 3449 Mechanical Engineering Analysis I

## fall, spring

The course offers engineering students an in-depth look into the following topics: linear algebra including matrices, vectors, determinants, linear systems and matrix eigenvalue problems; vector differential calculus and vector integral calculus including integral theorems; complex numbers and functions including complex integration; power series and Taylor series; numeric linear algebra; and probability and statistics. Prerequisites: CSCl 1380 or equivalent and MATH 1470 with a "C" or better.

MECE 3450 Mechanical Engineering Analysis II

## fall, spring

The course offers engineering students an in-depth look into the following topics: first-order ODEs, second-order linear ODEs, higher-order ODEs and systems of ODEs; series solutions of ODEs and special functions; Laplace transforms; Fourier series, integrals and transforms; partial differential equations (PDEs); and numerics for ODEs and PDEs. Prerequisite: MATH 2401 or equivalent with a "C" or better.

MECE 4101 Fundamentals of Engineering [0-3] fall, spring
This course is a review of major engineering topics to prepare students for the Fundamentals of Engineering (FE) exam. Assignments are given to each topic covered, and students are required to take a practice exam.
Prerequisite: Junior standing in engineering but within two semesters of graduation.

MECE 4304 Automatic Control Systems [3-0] spring
Classical control methods for linear-time-invariant systems are investigated including lead-lag, PID and state-feedback controllers. Time- and frequency-domain
methods including transfer functions, stability analysis, time and frequency response, root locus and Bode plots are used to design and analyze automatic controllers for mechanical systems. The course also includes an introduction to modern control theory. Prerequisites: MATH 3349 and MECE 2304.

MECE 4305 Vehicle Systems
Modeling and Control

## fall, spring

This course teaches the essentials of modeling and control principles needed to enable students to apply basic mathematics and physics concepts to derive models for numerical simulation of ground vehicle systems and to virtually prototype automatic controls for automotive applications. Prerequisites: MECE 2304 and MATH 3349.

## MECE 4315 Compressible Fluid Flow [3-0]

fall
Analysis of the flow of compressible fluids by means of the momentum equation, continuity equation and the laws of thermodynamics and some application of thermodynamic laws to incompressible fluids. Prerequisite: MECE 3315.

MECE 4316 Introduction to Acoustics [3-0] fall
Course is designed to develop an understanding of the fundamentals of acoustics, such as traveling waves in one-and two-dimensions, the derivation and nature of the fundamental fluid acoustic equations, the phenomena associated with reflection, transmission, radiation, reception, absorption and attenuation of sound, and the phenomena associated with cavities and waveguides, including sound propagation in pipes, resonators and filters. Prerequisites: MATH 2401, MATH 3349 and MECE 3315.

MECE 4320 Introduction to Mechatronics [2-3] spring
This course will introduce students to the analysis, design and implementation of mechatronics systems. Mechatronics is an interdisciplinary engineering area that comprises the integration of mechanical engineering, electronics, control systems and computer science, which together contribute to design smart products and processes. Different topics in mechatronics, such as DC motors, stepper motors, H-bridges, PIC microcontrollers and others will be covered in class and complementary experiments wil be performed in the laboratory. 20 lab fee. Prerequisites: ELEE 3306 and MECE 3320.

MECE 4321 Intermediate Mechanics of Solids [3-0] The topics covered in this course include: energy
methods in mechanics, non-systematic bending, shear center, elastic-plastic bending and torsion, torsion and bending of general cross-sections and column buckling. Prerequisites: MECE 3321 and MATH 3349.
$\begin{array}{ll}\text { MECE } 4322 & \begin{array}{l}\text { Introduction to the } \\ \text { Practice of Finite Elements }\end{array}\end{array}$
[3-0]
This course is an introduction to finite element theory, and truss, beam and plate element formulation for linear static analysis. Application of boundary conditions, element convergence, isoparametric formulation and Gauss quadrature are also examined. This course is design-oriented, with a substantial component involving the use of a commercial software package. Prerequisites: MECE 3321 and MECE 3350.

MECE 4325 Composite Material Design [3-0]

## fall

An introduction to the theory of mechanics of solids for elastic and viscoelastic composite materials. Emphasis on analysis and design of structural laminate composite including failure mechanism, e.g., fatigue, delamination and dynamics of composites including effective moduli and material damping. Students may not receive credit for both MECE 4325 and MECE 4345. Prerequisites: MECE 2440 and MECE 3321.

## MECE 4326 Introduction to Ceramics Engineering [3-0]

## spring

An introduction to the science and engineering of ceramic materials. Basic chemistry, structure and properties of engineering ceramics are covered. The unique, probability-based, design rules for engineering with these brittle materials are a special focus. Extensive time is devoted to special topics including electronic ceramics, distinctives of ceramic applications and bioceramics. Prerequisites: MECE 2440 and MECE 3321.

MECE 4327 Intermediate Materials Engineering [3-0]

## spring

The course explores advanced topics in materials science and engineering. Coverage includes ceramic materials, electronic and electrical properties of materials and the newest nanoscale materials. Prerequisites: MECE 2440 and MECE 3321.

MECE 4328 Polymer Engineering [3-0] spring
Introductory course designed to provide engineering students with a polymer materials science background that will enable them to design polymer components. Prerequisite: MECE 2440.
$\begin{array}{lll}\text { MECE } 4329 & \text { Introduction to } & \\ & \text { Nanotechnology } & \text { [3-0] }\end{array}$
fall
Course designed to introduce nanotechnolgy and nanoscience as well as to study the wide variety of technologies and potential applications that fall under the nanotech umbrella. This course provides an opportunity for the students to foster creative thinking given the vast potential in the area. Prerequisite: MECE 2440.

MECE 4350 Machine Elements [3-0]
fall, spring
Stress and deflection analysis, failure theories, design of machine elements for static and fatigue strength, design of welded and bonded connections and computer modeling applications. Prerequisites: MECE 2304, MECE 2440 and MECE 3321.

MECE 4360 Solar Energy
spring
Fundamentals of solar energy system modeling, analysis, design and testing. Solar radiation, design and analysis of low and high temperature applications, passive and active solar thermal engineering, solar properties of materials, design of solar collectors, experimental testing of collector performance, energy storage systems.
Prerequisites: MECE 3320 and MECE 3360.
MECE $4361 \quad$ Senior Design Project I [1-6] fall, spring
This course is a preparation for a capstone design experience drawing from all previous coursework and involves engineering analysis methods, problem definition, assumptions and testing and reporting results. Classroom discussions will consider professional responsibility, ethics, technology and society, team building and lifelong learning. The project to be undertaken in Senior Design Project II (MECE 4362) will be selected, and a final design concept generated. The laboratory associated with this course will involve implementation of design methodologies and engineering science into a real-world design. Periodic progress reports and final oral and written reports will be required. Students may not receive credit for both MECE 4361 and ENGR 4161 and ENGR 4261. $\$ 30$ lab fee. Prerequisite: Senior standing in engineering.

MECE 4362 Senior Design Project II
[0-9] fall, spring
This course is a continuation of MECE 4361. Students will have the opportunity to conduct a comprehensive engineering design of the concept generated in MECE 4361 and report on the results. Synthesis using past coursework and outside reference material will be expected. Periodic progress reports and final oral and
written reports will be required. Student may not receive credit for both MECE 4362 and ENGR 4362. \$30 lab fee. Prerequisite: MECE 4361.

## MECE 4365 Heating, Air Conditioning and Refrigeration Design [3-0] <br> fall

Heating, ventilation and air conditioning of buildings for human comfort or industrial processes; design selection, construction equipment and refrigeration systems.
Prerequisites: MECE 3315 and credit for or enrollment in MECE 3360.

## MECE 4380 Introduction to Computational Biomechanics

[3-O]

## spring

This course is designed to provide an introduction to the anatomy and functional anatomy of the human upper and lower extremities. The material is covered in a modular, challenge-based format in which the investigation of the musculoskeletal mechanics of the various joints comprising the upper and lower extremities follows a specific sequence of learning activities designed to answer a challenge(s) concerning the joint(s). Challenges include: What strength is required to hold the iron cross position in gymnastics? How do your leg muscles activate when you walk? How high can you jump? Can you tear your ACL in a voluntary knee extension exercise? Prerequisite: MECE 2304.

MUS $1100 \quad$ Rudiments of Music

## fall, spring, summer

This course will be a study of the basic visual and aural skills of music and their application to music comprehension. Written concepts to be covered in the class include naming and identifying notes, major and minor scales and key signatures, simple and compound meters, intervals and triads. The class will also include introduction to aural dictation and keyboard skills.

MUS 1101
$3102 G$ Guitar Ensemble
fall, spring
Instrumental music organization open by audition to students who play guitar. Each course may be repeated any number of times; however, only four hours of each course will count toward a degree.

MUS 1103
3104 University Choir
fall, spring
Vocal music organization open by audition to all University students who qualify. Each course may be repeated any number of times; however, only four hours of each course will count toward a degree.

MUS 1104
3105 University Band
fall, spring
Instrumental music organization open by audition to all University students who play appropriate instruments. Each course may be repeated any number of times; however, only four hours of each course will count toward a degree.

MUS 1105
3106 Symphony Orchestra
fall, spring
Instrumental music organization open by audition to students who play appropriate instruments. Each course may be repeated any number of times; however, only four hours of each course will count toward a degree.

MUS 1107
4108 Women's Chorus
fall, spring
Vocal music organization open by audition to all University students who qualify. Each course may be repeated any number of times.

MUS 1109
4110 Opera Workshop
fall, spring
An organization that stages scenes or complete works from opera and Broadway theater, open by audition to all University students. Each course may be repeated any number of times.

MUS 1112 Class Piano I
fall, spring
This class will provide a basis of keyboard musicianship with the objective of learning to read and play piano music and introduce the student to fundamentals of theory, musical structure and beginning piano literature. Block I of the Piano Proficiency Exam will be covered including scales, arpeggios, chord progressions and harmonization.

MUS 1113 Class Piano II
fall, spring
This class will provide a basis of keyboard musicianship with the objective of learning to read and play piano
music and introduce the student to fundamentals of theory, musical structure and beginning piano literature. Block II of the Piano Proficiency Exam wll be covered including scales, arpeggios, chord progressions, harmonization and memorization of selected pieces. Prerequisite: Class Piano I.

## MUS 1114 Class Piano III

fall, spring
This class will provide a basis of keyboard musicianship with the objective of learning to read and play piano music and introduce the student to fundamentals of theory, musical structure and beginning piano literature. Block III of the Piano Proficiency Exam will be covered including scales, arpeggios, transposition, reading an a cappella open score and sight reading. Prerequisite: Class Piano II.

## MUS $1115 \quad$ Voice Class <br> fall, spring

Vocal instruction for non-vocal music majors to include a foundation in healthy vocal technique, stage presence, an introduction to the elements of music and preparation of assigned songs.

MUS 1185
3186 Applied Music Lab
fall, spring
Music majors enrolled in Applied Music must register for Applied Music Lab. Each course may be repeated any number of times.

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MUS 1207
    3208 Jazz Ensemble
fall, spring
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An instrumental music organization open to all college students who have an ability to play an appropriate instrument. Membership is determined by audition. Organization rehearses and performs popular, rock and jazz music for its own musical development and to satisfy requests on and off the campus. Each course may be repeated any number of times.

## MUS 1208 <br> 3210 Mariachi Ensemble <br> fall, spring

Instrumental and vocal music organization open by audition to all college students who have the ability to sing or play an appropriate instrument. The organization rehearses and performs traditional mariachi music at numerous on- and off-campus occasions. Each course may be repeated any number of times.

MUS 1221 Class Piano
fall, spring
Piano instruction for students who have no previous training in piano. May be used to satisfy the minimum piano requirements for non-pianist music majors. Three class hours a week. Instructional fee: \$10.

MUS 1222 Class Piano
fall, spring
Piano instruction for students who have had MUS 1221 or equivalent. May be used to satisfy the minimum piano requirements for non-pianist music majors. Three class hours a week. Instructional fee: \$10.

MUS $1223 \quad$ Beginners Class Voice
fall, spring
Vocal instruction for students who have no previous training in voice. May be used to satisfy the voice requirements for non-vocal music majors. Three class hours a week with outside preparation of materials for examination. Instructional fee: \$10.

MUS $1224 \quad$ Beginners Class Voice
fall, spring
Vocal instruction for students who have no previous training in voice. May be used to satisfy the voice requirements for non-vocal music majors. Three class hours a week with outside preparation of materials for examination. Instructional fee: $\$ 10$.

MUS 1225 Beginning Guitar Class I
fall, spring
Basic instruction in guitar to include music reading, tuning of the instrument, elementary chord structures and fingering and strumming techniques. An acoustic instrument is required for this course. Instructional fee: \$10.

MUS $1226 \quad$ Beginning Guitar Class II fall, spring
Continuation of MUS 1225. An acoustic instrument is required for this course. Prerequisite: MUS 1225. Instructional fee: $\$ 10$.

MUS 1227 Level-Two Class Guitar
fall, spring
Continuation of MUS 1226. An acoustic instrument is required for this course. Prerequisite: MUS 1226. Instructional fee: $\$ 10$.

MUS 1228 Level-Two Class Guitar
fall, spring
Continuation of MUS 1227. An acoustic instrument is required for this course. Prerequisite: MUS 1227.
Instructional fee: $\$ 10$.

## Applied Music

## fall, spring

Private instruction in the concentration of the student's major area. Credit is earned on the basis of one half-hour lesson and one hour minimum daily practice for two hours credit, or two half-hour lessons per week and two hours minimum daily practice for four hours credit. Applied music fee: two-semesterhour course, $\$ 35$; four-semester hour course, $\$ 60$. Each course may be repeated four times for credit.

MUS 1231, 1431, 3232, 3432
MUS 1233, 1433, 3234, 3434
MUS 1235, 1435, 3236, 3436
MUS 1237, 1437, 3238, 3438
MUS 1241, 1441, 3242, 3442
MUS 1243, 1443, 3444
MUS 1245, 1445, 3246, 3446
MUS 1247, 1447, 3248
MUS 1249, 1449, 3250, 3450
MUS 1261, 1461, 3262,3462
MUS 1263, 1463, 3264
MUS 1265, 1465, 3466
MUS 1267, 1467, 3268, 3468
MUS 1269, 1469, 3270, 3470
MUS 1271, 1471, 3472
MUS 1473, 3274, 3474
MUS 1275, 1475, 3276, 3476
MUS 1277, 1477, 3278, 3478
MUS 1279, 1479, 3280, 3480

Applied Piano
Applied Voice
Applied Percussion
Applied Harp
Applied Trumpet
Applied French Horn
Applied Trombone
Applied Baritone Horn
Applied Tuba
Applied Violin
Applied Viola
Applied Cello
Applied String Bass
Applied Guitar
Applied Flute
Applied Oboe
Applied Clarinet
Applied Saxophone
Applied Bassoon

MUS 1307 Music Appreciation
fall, spring, summer
An introductory course in the elements, forms and stylistic eras in music. This course meets the Other Humanities option (Group 4) of the University core curriculum requirements in humanities.

## MUS 1308 Mexican Folk Music [3-0]

## fall, spring

An historical survey of Mexican folk music from its origins in ancient Mexican cultures through modern times. Course content will include authentic audio and video tape recordings as well as performance of live music. This course meets the Other Humanities option (Group 4) of the University core curriculum requirements, Section A. Humanities.

MUS $1309 \quad$ World Music
fall, spring, summer
A study of musical traditions of the world including Africa, North America, Japan, India, Central and South America. This course will cover the historical background of each country, elements of music and basic
terminology, specific ensembles, musicians, instrument makers and other participants of the musical traditions studied, instrumentation, overall form and main characteristics of the music genres.

MUS 1313 First-Year Music Theory I [3-3]
fall
Intervals, scales, chord structures, chord progressions, simple cadences, use of inversions, nonharmonic tones, seventh chords, simple modulations and harmonization of melodies, part writing, music reading, aural perception and keyboard skills. Concurrent enrollment in MUS 1221 or MUS 1222 (Class Piano) is required.

## MUS 1314 First-Year Music Theory II [3-3]

spring
Intervals, scales, chord structures, chord progressions, simple cadences, uses of inversions, nonharmonic tones, seventh chords, simple modulations, harmonization of melodies, part writing, music reading, aural perception and keyboard skills. Concurrent enrollment in MUS 1221 or MUS 1222 (Class Piano) is required. Prerequisite: MUS 1313 with grade of "C" or higher or satisfactory achievement level on MUS 1313 placement exam.

## MUS 2120 Diction

spring of alternate (even-numbered) years
This course will undertake in-depth study of the International Phonetic Alphabet, formancy and placement of vowel and consonant sounds, and principles of pronunciation in Italian, German, French and English through readings and standard art song literature.

MUS 2122 Class Percussion
(Texas Common Course Number is MUSI 1188.) spring
Class instruction in the rudiments of performance on and care of a variety of basic percussion instruments.

MUS 2123 Class Brass
(Texas Common Course Number is MUSI 2168.)
fall
Class instruction in the rudiments of performance and care of brass instruments.

MUS 2124 Class Woodwinds
(Texas Common Course Number is MUSI 2166.)
spring
Class instruction in the rudiments of performance and care of woodwind instruments.

MUS 2125 Class Strings
fall
Class instruction in the rudiments of performance and care of standard orchestral string instruments.

MUS 2127 Song Literature
spring of alternate (odd-numbered) years
This course covers two topics, a half semester each and may be team taught. The first involves song literature appropriate to young students in grades seven through 12 , how to select a song for each grade level and how to select the proper key for individual students, including the male adolescent unchanged and changing voice. The second topic is a traditional brief survey of art songs in Italian, German and French. Students will be expected to make class presentations. Knowledge of diction and the International Phonetic Alphabet is recommended.

MUS 2128 Introduction to Music Education spring of alternate (even-numbered) years
This course provides an orientation to music teaching and related issues, including planning and evaluating music instruction, using recognized state and national competencies in music instruction, managing the music teaching environment and advocating for music education.

MUS 2201 Music Literature [3-0] fall, spring, summer
This course is an introduction to the masterworks of the great composers from Western European art music addressing the parameters of structure, performance practice issues and style as its basis. Cultural and historical background information shall provide a context for these studies and further enable the student to formulate thoughtful and intelligent opinions regarding music with an informed basis for the defense of musical judgement. This course is designed specifically for majors and minors.

MUS $2212 \quad$ Music Theory I [3-0]
fall, spring
This course will include a study of standard notation, meter types, conducting gestures, tonality, intervals, scales, modes, key signatures, "moveable do" solfege, species counterpoint in quasi-16th century style, figured bass procedures, triads, seventh chord types and chord inversions. Prerequisite: MUS 1100 Rudiments of Music.

MUS 2213 Aural Skills I
fall, spring
This course focuses on sight singing, ear training, melody singing, basic keyboard skills, singing duets and singing and playing at the beginning level. It includes note reading in treble and bass clefs, note values, major and minor scales, intervals, diatonic melodies with stepwise motion and a few leaps in the tonic and dominant triads and basic elements of interpretation and form. Prerequisite: MUS 1100 Rudiments of Music.

MUS 2214 Music Theory II [3-0]
fall, spring
This course will include a study of resolving dominant sevenths, cadence types, embellishing tones, fourpart (SATB) scoring, figured bass realization, chorale harmonization, dominant substitutions, predominant chords, six-four chord types, submediant and mediant triads, phrase and harmonic period structure and sequence types. Prerequisite: Music Theory I.

MUS 2215 Aural Skills II
fall, spring
This course focuses on sight singing, ear training, melody singing, rhythmic reading, keyboard skills, singing duets and singing and playing at the intermediate level. It includes major and minor scales, all ascending and descending intervals, diatonic melodies with stepwise motion and skips in the tonic, dominant and subdominant triads, major, minor, augmented and diminished triads, basic cadential progressions and elements of interpretation and form. Prerequisite: Aural Skills I.

MUS 2301 Music Literature I [3-0]
fall
A survey of the literature of music for all media from earliest Greek music to contemporary works. A chronological study of the principal composers, their works and the development of music in relation to simultaneous historical developments. A course designed specifically for majors and minors. This course meets the Other Humanities option (Group 4) of the University core curriculum requirements, Section A. Humanities.

MUS 2302 Music Literature II [3-0]
spring
Continuation of MUS 2301. This course meets the Other Humanities option (Group 4) of the University core curriculum requirements, Section A. Humanities.

MUS 2313
2314 Second-Year Music Theory I/II [3-3]
fall/spring
Study of figured bass, alto and tenor clefs, elementary formal concepts, intervals, scales, chord structure, chord progressions, simple cadences, use of inversions, nonharmonic tones, seventh chords, modulations and harmonization of melodies. Includes part writing, sightsinging, keyboard and aural skills. Prerequisite: MUS 1314.

MUS 3102
1101 Guitar Ensemble
fall, spring
Instrumental music organization open by audition to students who play guitar. Each course may be repeated
any number of times; however, only four hours of each course will count toward a degree.

MUS 3104
1103
University Choir
fall, spring
Vocal music organization open by audition to all University students who qualify. Each course may be repeated any number of times; however, only four hours of each course will count toward a degree.

MUS 3105
1104 University Band
fall, spring
Instrumental music organization open by audition to all University students who play appropriate instruments. Each course may be repeated any number of times; however, only four hours of each course will count toward a degree.

MUS 3106
1105 Symphony Orchestra
fall, spring
Instrumental music organization open by audition to students who play appropriate instruments. Each course may be repeated any number of times; however, only four hours of each course will count toward a degree.

MUS $3121 \quad$ Vocal Diagnosis
[0-3]
fall
A study of the diagnosis and classification of selected vocal dysfunctions. Building skills and discovery of appropriate therapeutic mechanisms for their correction. Vocal health required for students pursuing teaching certification who have a major instrument of voice or piano. Prerequisite: MUS 2314 with a grade of " $C$ " or higher.

## MUS 3122 Choral Repertoire <br> fall of alternate (odd-numbered) years

Course content centers on literature appropriate to junior high and senior high treble, tenor-bass and mixed choirs. Topics include the University Interscholastic League prescribed music lists and contest rules, other sources of literature, how to select and edit music for various grade levels and stages of vocal maturity and music appropriate for the changing voice. Prerequisite: Upper-level study in music or permission of the instructor.

MUS 3186
1185 Applied Music Lab
fall, spring
Music majors enrolled in Applied Music must register for Applied Music Lab. Each course may be repeated any number of times.

MUS 3207 Instrumental Conducting [2-2]
fall, spring
This course is designed to develop the student's ability to conduct rehearsals and performances of instrumental ensembles. Topics of study include empathetic gestural communication, effective rehearsal techniques, ability to perceive and correct errors in ensemble performance, ability to deal with advanced literature and conducting problems, develop analytical techniques and musicianship. Prerequisite: Theory IV and successful completion of Clock II of the Piano Proficiency Exam.

MUS 3208
1207 Jazz Ensemble
fall, spring
An instrumental music organization open to all college students who have an ability to play an appropriate instrument. Membership is determined by audition. Organization rehearses and performs popular, rock and jazz music for its own musical development and to satisfy requests on and off the campus. Each course may be repeated any number of times.

MUS 3209 Choral Conducting fall, spring
This course is designed to develop the student's ability to conduct rehearsals and performances of choral ensembles. Topics of study include empathetic gestural communications, effective rehearsal techniques, ability to perceive and correct errors in ensemble performance, ability to deal with advanced literature and conducting problems, develop analytical techniques and musicianship. Prerequisite: Theory IV and successful completion of Block II of the Piano Proficiency Exam.

MUS 3210
1208 Mariachi Ensemble fall, spring
Instrumental and vocal music organization open by audition to all college students who have the ability to sing or play an appropriate instrument. The organization rehearses and performs traditional mariachi music at numerous on- and off-campus occasions. Each course may be repeated any number of times.

MUS 3211 Instrumental Pedagogy fall, spring
Course content includes knowledge of pedagogical methods and materials related to performance and teaching; knowledge of applicable solo, ensemble and pedagogical literature; and the ability to apply musicianship skills to the teaching process. Prerequisite: Junior standing.

MUS 3212 Music Theory III
fall, spring
This course will include a study of secondary functions, four-two chords, phrase rhythmic and motivic analysis, compound melody, modulation methods, binary and ternary forms, modal mixture, altered chords, Neapolitan sixth and augmented sixth chord types and composition projects. Prerequisite: Music Theory II.

MUS 3213 Aural Skills III
fall, spring
The course focuses on sight singing, ear training, melody singing, rhythmic reading, keyboard skills, singing duets and singing and playing at the intermediate-advanced level. It includes major and minor scales and arpeggios in the treble, bass and alto clefs, all chords of the tonality, skips of all diatonic intervals up to an octave chromatic neighbors, basic modulations, seventh chords, harmonic progressions and elements of interpretation and form. Prerequisite: Aural Skills II.

MUS 3214 [3-o] fall, spring
This course is a study of extended tonal techniques including sets and set classes, serialism, 12-tone row matrix, chromatic modulation, 2oth century techniques: modes, scales (whole-tone,pentatonic, octonic, blues) and composition projects. Also included is a study of formal organization - variation forms, rondo, sonata forms, song form and concerto form. Prerequisite: Music Theory III.

MUS 3215 Aural Skills IV
fall, spring
The course focuses on sight singing, ear training, melody singing, rhythmic reading, keyboard skills, singing duets and singing and playing at the advanced level. It includes melodies with chromatic tones, modulations, skips, complex rhythms, chromatic neighbors and passing tones, modulations to the relative major and the dominant, frequent chromatic alterations, skips larger than an 8 ve , skips to chromatic notes, secondary dominants, augmented sixth and Neapolitan chords and advanced elements of interpretation and form. Prerequisite: Aural Skills III.

## MUS 3216 Elementary Music

fall, spring, summer
Designed for music education majors planning to teach music in elementary schools, this course provides knowledge and experiences aimed at improving the student's understanding, skills and confidence as a teacher and musician. A major component of this course is the development of methods vital to the educator as a manager of classroom discipline and primary agent of learning in the music environment. Prerequisite: Junior standing.

MUS $3217 \quad$ Secondary Music [3-0]
fall, spring, summer
Designed for music education majors planning to teach music in secondary schools, this course provides knowledge and experiences aimed at improving the student's understanding, skills and confidence as a teacher, musician and conductor. A major component of this course is the development of methods vital to the educator as a manager of classroom discipline and primary agent of learning in the music environment. Prerequisite: Junior standing.

MUS $3218 \quad$ Piano Repertoire
fall, spring
Course content includes a study of the solo and chamber music repertoire for the piano. The intent is for the student to develop a useful annotated listing, including difficulty level, of some of the major works considered to be essential standard repertoire from various stylistic periods, to develop an understanding of pedagogical issues and performance practice for those works, and, where appropriate, to gain a performer's level of familiarity with the major works for their own instrument.

MUS $3219 \quad$ Woodwind Repertoire
fall, spring
Course content includes a study of the solo, ensemble (within the instrumental family) and chamber music (mixed instrumentation) repertoire for each of the woodwind instruments (flute, oboe, clarinet, bassoon and saxophone). The intent is for the student to develop a useful annotated listing, including difficulty level, of some of the major works considered to be essential standard repertoire from various stylistic periods, to develop an understanding of pedagogical issues and performance practice for those works, and, where appropriate, to gain a performer's level of familiarity with the major works for their own instrument.

MUS $3220 \quad$ String Repertoire
fall, spring
Course content includes a study of the solo, ensemble (within the instrumental family) and chamber music (mixed instrumentation) repertoire for traditional instruments in the string family. The intent is for the student to develop a useful annotated listing, including difficulty level, of some of the major works considered to be essential standard repertoire from various stylistic periods, to develop an understanding of pedagogical issues and performance practice for those works, and, where appropriate, to gain a performer's level of familiarity with the major works for their own instrument.


MUS 3221 Secondary Choral Methods [3-0] fall, spring
This course is required for all choral and keyboard majors and is designed to prepare the student for successful entrylevel teaching. Topics for study include the organization and administration of the secondary choral program, the male and female adolescent voice and techniques and materials for the teaching of music reading. Also included will be strategies for preparing students for University Interscholastic League sight reading contests. Teaching presentations require keyboard ability. Prerequisites: Completed Second-YearTheory (Theory IV) and Block II of the Piano Proficiency Examination.

MUS $3222 \quad$ Choral Repertoire

## fall, spring

Course content centers on literature appropriate to junior high and senior high treble, tenor-bass and mixed choirs. Topics include the University Interscholastic League prescribed music lists and contest rules, other sources on literature and how to select and edit music for various grade levels and stages of vocal maturity and music appropriate for the changing voice. Prerequisite: Upperlevel study in music or permission of the instructor.

MUS 3223 Brass Repertoire
fall, spring
Course content includes a study of the solo, ensemble (within the instrumental family) and chamber music (mixed instrumentation) repertoire for traditional instruments of the brass family. The intent is for the student to develop a useful annotated listing, including difficulty level, of some of the major works considered to be essential standard repertoire from various stylistic periods, to develop an understanding of pedagogical issues and performance practice for those works, and, where appropriate, to gain a performer's level of familiarity with the major works for their own instrument.

MUS 3224 Percussion Repertoire
fall, spring
Course content includes a study of the solo and chamber music repertoire for percussion instruments. The intent is for the student to develop a useful annotated listing, including difficulty level, of some of the major works considered to be essential standard repertoire from various stylistic periods, to develop an understanding of pedagogical issues and performance practice for those works, and, where appropriate, to gain a performer's level of familiarity with the major works for their own instrument.

MUS 3225 Vocal Pedagogy
fall, spring
This course has as its goal teaching students a semantic system for referring to the vocal gesture of singing, an exposition of the mechanism and technique of the singing apparatus and a review of the elements of how to learn and perform a song from warm-up to artistry. Laboratory experience includes teaching beginning vocal techniques to individual students and small groups. Prerequisite: Upper-level study or permission of instructor.

MUS $3301 \quad$ History of Music
every summer I of even-numbered years
Advanced study of the evolution of musical art from its beginnings through the Baroque era. Prerequisites: MUS 2301 and MUS 2302.

MUS 3302 History of Music
every summer I of even-numbered years
Continuation of MUS 3301. Prerequisite: MUS 3301.
MUS 3307 Women in Music

## as scheduled

The course introduces students to women composers in Western culture from Hildegard von Bingen (1098-1179) to the present. Course content includes biographical information, contributions to music and listening.
This course provides an opportunity for students to learn about artistically creative women as well as the elements, structure and appreciation of music and musical styles.

MUS $3311 \quad$ Essential Elements of Music I [3-0] every summer I of even-numbered years Basic elements of music with appropriate techniques and principles of singing, playing, moving and listening to music. Not for music majors. This course meets the Other Humanities option (Group 4) of the University core curriculum requirements in Humanities. Prerequisite: Junior standing.

MUS $3312 \quad$ Essential Elements of Music II [3-0] spring, alternate years
A study of musical activities and creative ideas. Emphasis on developing the child's voice, movement and listening skills. Prerequisite: Music major with junior standing in music.

MUS 3468 Applied String Bass
fall, spring, summer
Private instruction in string bass. Credit is earned on the basis of a one hour lesson per week and two hours minimum daily practice. Instructional fee: $\$ 60$. This course may be repeated four times for credit.

MUS 4108
1107 Women's Chorus
fall, spring
Vocal music organization open by audition to all University students who qualify. Each course may be repeated any number of times.

MUS 4110
1109 Opera Workshop
fall, spring
An organization that stages scenes or complete works from opera and Broadway theater, open by audition to all University students. Each course may be repeated any number of times.

MUS 4201 Form and Analysis [3-0] spring
Historical development of form and consideration of balance, symmetry and the principles of musical structure, analysis of phrase structure, simple part forms, variation forms and contrapuntal forms. Special consideration of the sonata-allegro form as found in the symphony, concerto and sonata. Prerequisite: MUS 2314.

## MUS 4203 Orchestration and Arranging [2-0] every summer I of even-numbered years

Techniques of scoring and editing music for band, orchestra and instrumental ensembles, ranges, timbres, voicings and limitations of the instruments. Prerequisite: MUS 2314.

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MUS 4208 Conducting II
    [1-2]
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fall

Advanced baton technique. Continuation of instruction begun in MUS 3207, with emphasis on gestural communication and score study. Prerequisites: MUS 3207 and junior standing in music.

MUS 4212 Choral Arranging [3-0] Students learn homophonic and contrapuntal techniques for arranging choral music in two to eight voice parts, and
study the characteristics of male and female voices in grades six through 12. Prerequisites: MUS 2314 and junior standing in music.

NURS 2301 Wellness [2-4]
This course is designed to introduce the student to theories, concepts and practices related to wellness, with an emphasis on self-care. The student will have an opportunity to practice and demonstrate competency in selected self-care skills in a simulated situation. (May be taken by students who cannot take two hours of required kinesiology activities to fulfill University core curriculum requirements.) Prerequisite: None.

NURS 3202 Pharmacology
This course introduces the student to pharmacological concepts and nursing responsibilities for drug therapy. Dosage calculations, safe administration and the use of the nursing process in the various methods of medication therapy are emphasized. Prerequisite: Consent of the BSN faculty.

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\begin{equation*}
\text { NURS } 3209 \text { Research } \tag{2-0}
\end{equation*}
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This course enables the student to be a knowledgeable nursing research consumer. An orientation to the research process, various methods of inquiry and ethical considerations are presented to assist the student in critical evaluation and appropriate applications of research findings to practice. Prerequisites: Statistics; consent of the BSN faculty.

NURS 3307 Special Topics in Nursing [3-0] This course is designed to provide students the academic flexibility to study contemporary issues and practices in the nursing profession. The course may be repeated for credit when the topics vary. Prerequisite: Consent of the department.

NURS 3308 Clinical Concentration
This course provides an opportunity to study a selected area of clinical nursing. The student will utilize the nursing process while caring for clients in a supervised clinical site. Prerequisite: Consent of the BSN faculty.

NURS 3309 Women's Health Issues [3-0] This course is designed to introduce the student to theories, concepts, practices and issues related to women's
health, with an emphasis on self care. Psychosociocultural, political and ethicolegal factors will be addressed and analyzed. Prerequisites: WMST 1301 and WMST 2301. Cross-listed as WMST 3309 Women's Health Issues.

## NURS 3403 Client Assessment

This course allows the student to have an opportunity to apply psychological, social, and cultural concepts conjointly with anatomy/physiology and assessment skills used in evaluating the health status of clients. The student will also have an opportunity to use laboratory settings to practice cognitive, affective, and psychomotor skills in the systematic assessment of clients and their environment. Prerequisite: Admission to the BSN Program or consent of the BSN faculty.

NURS 3405 Mental Health Nursing
[2-8]
This course provides continued use of nursing concepts in the care of clients experiencing alterations in mental health. The nursing process is emphasized as it relates to altered psychosocial integrity. Prerequisites: NURS 3202, NURS 3403, NURS 3408, NURS 3604 and/or consent of the BSN faculty.

NURS 3407 Professional Mobility [4-0] This course is designed to assist the learner in developing a personal philosophy of professional nursing. Changes in the health care delivery system (sociocultural, economic, political, ethicolegal, technological) and their impact on nursing will be described. Emphasis will be placed on the nursing process. Prerequisite: Admission to the BSN Program or consent of the BSN faculty.

NURS 3408 Health Promotion and Maintenance Across the Life Span [2.5-6]

## summer

This course expands on the concepts of wellness, health promotion, health maintenance, health restoration and disease prevention across the life span. The nursing process and critical thinking skills will be applied as they relate to selected health alterations. Students will demonstrate competency in performing nursing skills in a variety of health care settings. Emphasis is placed on the application of the theoretical components to the teaching-learning process as it relates to health promotion activities. Prerequisites: NURS 3202, NURS 3403 and NURS 3604.

NURS 3604 Nursing Fundamentals
[3-12]
This course introduces the student to fundamental health care concepts. The student will demonstrate competency in performing skills in a simulated situation prior to their application in a secondary health care setting. Prerequisites: NURS 2301 and admission to the BSN Program.

NURS 3608 Adult Health I
[3-12]
This course provides for continued use of nursing concepts in providing care for two or more adults in a secondary health care setting. The nursing process is emphasized as it relates to alterations of selected body systems/ functions. Prerequisites: NURS 3202, NURS 3403, NURS 3604 and NURS 3408.

NURS 4203 Issues in Nursing [2-0]
This course will enable the student to analyze issues, trends and problems in the delivery of nursing care.
The student will identify an issue, trend or problem and evaluate its impact on the health care delivery system. Prerequisite: Consent of the BSN faculty.

NURS 4404 Community Health Nursing [2-8] This course focuses on the role of the nurse in planning and providing primary care to individuals and groups in a community or rural setting. The course will emphasize complex sociocultural, political, economic and health issues within a community. The student will have an opportunity to use the nursing process to recognize and meet health needs of individuals and groups. Prerequisites: NURS 4601 and NURS 4602 or consent of the BSN faculty.

NURS 4601 Adult Health II
This course provides continued use of nursing concepts in the care of two or more adult clients experiencing crisis and/or complex health alterations in a secondary health care setting. The nursing process is emphasized as it relates to alterations of selected body systems. Prerequisites: NURS 3403, NURS 3405, NURS 3408 and NURS 3608.

NURS 4602 Family Health Care [3-12] This course focuses on the utilization of the nursing process in the care of families throughout the perinatal cycle, childhood and adolescence. Theoretical concepts and selected research findings will be applied to developmental and familial concerns in both normal and high-risk settings. Prerequisites: NURS 3403, NURS 3405, NURS 3408 and NURS 3608.

NURS 4607 Leadership in Nursing [3-12] This course focuses on theories of nursing leadership, organizational structures and management in relation to health care. The nursing process will be emphasized as it relates to leadership and management in clinical settings. The transition from student role to professional role will be explored. Prerequisites: NURS 4601 and NURS 4602 or consent of the BSN faculty.

## 3 Physician Assistant Studies

$\mathcal{\sim}$ Didactic Year Courses

PHAS 3321 Legal \& Ethical Issues in Health Care

[3-○]

## spring

Explores medical jurisprudence and licensing in the state of Texas. Students will be introduced to the dynamics of the legal system, moral problems in health care and the impact of both on professional and institutional interactions with patients. Students will be given opportunity to demonstrate 1) an understanding of ethical principles and legal factors which impinge upon health care, and 2) the ability to apply ethical and legal concepts to the analysis of the roles and responsibilities of the allied health professional. Prerequisite: Admission to the Physician Assistant Studies Program or permission of the instructor.

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\begin{array}{ll}
\text { PHAS } 3337 & \text { Preventive Medicine and } \\
\text { Community Health }
\end{array}
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## fall

Examines the bio-demographics of disease in the United States. Emphasis is on prevention from the perspective of the primary health care provider. Encourages community involvement. Discussions focused on prevention of disease. Special attention is given to the local medical practices and beliefs of the Rio Grande Valley and the Texas-Mexico border region. Guest lectures include topics in rural health, community outreach, HIV/AIDS awareness and prevention, cancer awareness, sexual health and folk and alternative medicine. Prerequisite: Admission to the Physician Assistant Studies Program or consent of instructor.

## PHAS 3401 Medical Human Anatomy

 and Physiology
## summer /

Introduction to medical anatomy and physiology. Emphasis on normal function of the human body, with clinical references and medical terminology. Investigates biochemical function, cell biology, cell membranes, cellular communication, homeostatic mechanisms, hormonal control and energy metabolism. Organ systems studies include: skeletal, muscular, cardiovascular and pulmonary. Laboratory experience enables the student access to cadaver prosections and computer assisted learning (CAL) modules. Prerequisite:

Admission to the Physician Assistant Studies Program or consent of instructor.

PHAS 3402 Medical Human Anatomy and Physiology II
summer //
Continuation of PHAS 3401. Explores the digestive system, kidneys and electrolyte metabolism, reproductive systems and neurological mechanisms. Neuroanatomy and physiology are discussed. Laboratory experience enables the student access to cadaver prosections and CAL modules. Prerequisites: PHAS 3401 and admission to the Physician Assistant Studies Program or consent of instructor.

PHAS 3227 Patient Education
spring
A laboratory workshop course that enables the student the opportunity to rehearse patient education techniques. Promotes teaching patients and families about disease and treatment in lay terms. Stresses addressing various age groups and medical conditions common to each group. Advocates empathy and acceptance. Employs simulated patients and situations. Prerequisites: PHAS 3226 and admission to the Physician Assistant Studies Program or consent of instructor.

PHAS 3211 Studies in the PA Profession [3-1] summer /
Examines the history and concept of the physician assistant profession. Discusses issues that are relevant to professional practice and legal practice. Discussion of future trends in the profession. Prerequisite: Admission to the Physician Assistant Studies Program.

PHAS 3225 Medical Interviewing
summer //
A lecture, laboratory and workshop course designed to provide the means to practice basic techniques of interviewing all age groups, including pediatric and geriatric patients. Details the basic medical history. Cultivates skillful communications with patients and families. Employs simulated patients and situations. Prerequisite: Admission into the Physician Assistant Studies Program or consent of instructor.

PHAS 3226 Medical Psychiatry [2-0] fall
Course material identifies normal, physical, social and psychological processes in distinguishing illness and injury. Explores psychiatric illness and expands on the medical interview with a complicated patient or problem. Directs the ability to assess growth and development for all age groups. Coordinates the relationship of

the history and physical examination to the human psyche. Employs simulated patients and situations with a psychiatric focus. Course provides an overview of psychiatric concepts and an introductory approach to the evaluation of patients with emotional problems, in preparation for clinical rotations. Discussions include topics in human sexuality, substance abuse and mental/ physical abuse. Prerequisite: PHAS 3225.

> PHAS $3262 \quad$ Clinical Clerkship spring

This course covers the indications, contraindications, step-by-step procedures and potential complications of multiple hands-on skills that are commonly performed by physician assistants in clinical practice. Examples include: phlebotomy, injections, IV therapy, urethral and nasogastric catheterization, pulmonary function testing, suturing, casting and splinting, various ENT procedures, electrical cardioversion and use of various types of monitoring devices and restraints. Students will have an opportunity to scrub, gown and glove in an operating room environment. In addition, students will be required to successfully complete an Advanced Cardiac Life Support (A.C.L.S.) training course. Lecture series includes implementation and interpretation of electrocardiograms. The EKG interpretation section provides students with a systematic method of interpreting a 12 -lead EKG with respect to rate, rhythm and blocks, electrical axis determination, hypertrophy, ischemia, injury, infarction, and miscellaneous drug, electrolyte, disease and pacemaker effects. Course also covers documenting in the medical record. Documents to be covered include the complete medical history, admission notes, SOAP notes, progress notes, procedural notes, discharge summaries, hospital orders, etc. Prerequisite: CLSC 3227.

PHAS 3207 Pathophysiology of Disease I [2-0]
fall
This course provides a systematic approach to the physiology and pathophysiology of diseases. The general pathology of cell injury, inflammation, infection and neoplasia is presented along with the disease process of organ system including cardiovascular, pulmonary, dermatology and infectious diseases. Prerequisites: PHAS 3401 and PHAS 3402.

PHAS 3208 Pathophysiology of Disease II [2-0] spring
This course is the continuation of PHAS 3207 with emphasis on pathophysiology of renal, gastroenterology, endocrine and geriatrics. Prerequisite: PHAS 3207.

PHAS 3228 Pharmacology I
fall
This course represents a broad survey of the general principles of pharmacology. Included are the principles of pharmacokinetics and pharmacodynamics, the mechanisms of action, toxicities and interactions of specific drugs and drug groups and an introduction to medical therapeutics. The physiologic basis and clinical characteristics of disease states relative to pharmacologic therapy will also be discussed. The objective of the course is to lay a cognitive foundation in pharmacology and therapeutics that can be refined and applied in clinic practice. Prerequisite: PHAS 3207 and PHAS 3208.

PHAS 3329 Pharmacology II
A continuation of PHAS 3228. Exposes the student to knowledge of conventionally used chemotherapeutic agents and efficacy of use. Promotes the ability to recognize untoward side effects of medications. Enables the student to calculate dosages, write prescriptions, discuss pharmacokinetics and determine the appropriate medication for a particular disease. Emphasis is placed on pharmacotherapeutics of disease. Prerequisite: PHAS 3228.

## PHAS 3407 Client Patient Evaluation [3-3]

fall
Instructs the student in the proper use of instruments and techniques used in performing a physical examination. Correlates information acquired in human anatomy and physiology with application to the physical exam. Connects data gathered from the history to the physical examination. Guides the student in organizing history and physical examination details to present to the physician. Utilizes clinical settings and simulated patients and situations in the laboratory. Recording the clinical data and oral presentation will be stressed. Prerequisites: PHAS 3402 and PHAS 3225.

PHAS $3318 \quad$ Principles of Clinical Medicine I [2-3] fal/
This is an introduction to clinical medicine with emphasis in pathophysiology disease, differential diagnosis and integration of physical exam with diagnostic laboratory procedures. Integration of pharmacology principles with disease management is also emphasized. The fall semester will cover topics in cardiovascular, pulmonary, hematology, dermatology, infectious diseases and pediatrics. Prerequisites: PHAS 3401 and PHAS 3402.

PHAS 3319 Principles of Clinical Medicine II [2-3] spring
This course is the continuation of PHAS 3318 with coverage of topic to include endocrinology, nephrology, gastroenterology, geriatrics and ob/gyn. Prerequisite: PHAS 3318.

PHAS 3115 Medical Research and Statistics [1-0] spring
This is an introduction to clinical medicine with emphasis on research of pathophysiology of diseases, differential diagnosis and integration of physical exam with diagnostic laboratory procedures.

CLSC 3227 Clinical Laboratory Methods [1-3] fall
Lecture, laboratory course that introduces the student to the medical laboratory. Emphasizes appropriate laboratory studies for specific disease, normal laboratory values and procedures for obtaining samples. Students are given the opportunity to perform routine lab studies. Prerequisite: PHAS 3402. Corequisites: PHAS 3401 and PHAS 3402.

## PHAS $4201 \quad$ Clinical Elective <br> spring

This course is available to enhance the physical exam and history-taking skills. It requires a clinical rotation site assigned by the faculty.

## Z Clinical year Courses

PHAS 4431 General Pediatrics I [4-0] as scheduled
Four-week general pediatric rotation that gives the student the opportunity to: 1) elicit and record a complete pediatric history; 2) perform a complete pediatric examination; 3) formulate a management plan for common pediatric problems; 4) perform selected screening, diagnostic and treatment procedures as directed by the precepting physician; 5) advise and educate patients and their parents or guardians regarding optimal health of the child; and 6) monitor
pediatric milestones. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

PHAS 4432 General Pediatrics II [4-0] as scheduled
Four-week general pediatric rotation that is a continuation of PHAS 4431. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

PHAS 4433 Obstetrics \& Gynecology I [4-o] as scheduled
Four-week obstetrics and gynecology rotation that gives the student the opportunity to: 1) elicit, organize, record and present a complete database on an obstetric or gynecologic patient; 2) assist the physician effectively in procedures unique to the discipline; 3) advise the obstetric patient in pre- and post-natal care; and 4) instruct patients on matters of common gynecological problems. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

PHAS 4434 Obstetrics \& Gynecology II [4-o] as scheduled
Four-week obstetrics and gynecology rotation that is a continuation of PHAS 4433. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

PHAS 4435 General Surgery I [4-0] as scheduled
Four-week supervised clinical course provides the student with hands-on experience in the operating room setting. Both pre-operative and post-operative assessment and care will be emphasized. The student will be assigned to a general surgeon in private practice, where, under supervision, he/she engages in a wide variety of activities in each of the phases of surgical intervention: pre-operative, operative, and postoperative recovery. The student is given opportunities to explore the basic considerations involved in the fluid, electrolyte and nutritional management of the surgical patient, infections, wound healing and wound care. Students participate in daily rounds, conferences and serve on call. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

PHAS 4436
General Surgery II
[4-O] as scheduled
Four-week surgery rotation that is a continuation of PHAS 4435. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

PHAS 4440 General Medicine I [4-○] as scheduled
Four-week general medicine rotation that gives the
student the opportunity to: 1) elicit, organize and record necessary data; 2) present data in a comprehensive or problem-oriented fashion; 3) order or recommend appropriate laboratory, radiologic or other diagnostic studies; 4) formulate a management plan for a particular patient problem; 5) follow patient progress by record review and periodic examination; 6) assist the physician in appropriate procedures; 7) advise and educate the patient about health maintenance issues; and 8) understand and establish emergency medical care when necessary. Students will be exposed to a variety of patients and medical conditions, such as infectious diseases, respiratory diseases, cardiovascular diseases and psychiatric conditions. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

## PHAS 4441 General Medicine II <br> [4-0] <br> as scheduled <br> Four-week general medicine rotation that is a continuation of PHAS 4440. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

## PHAS 4442 Emergency Medicine Rotation [4-0]

 as scheduledFour-week rotation allows the student to develop skills in managing patients in the emergency room setting. These skills include those necessary for appropriate triage, stabilization, and initial management of patients with traumatic injuries and illnesses, the management of the less life-threatening problems presented to the emergency room, working with the pre-hospital emergency medical service team, and making appropriate secondary referrals. Where possible, students participate in grand rounds, noon conferences and other clinically-relevant didactic presentations. A set of cognitive objectives guides student reading in preparation for a written examination at the end of the rotation. Prerequisite: Successful completion of the didactic PHAS professional curriculum.

## PHAS 4443 Clinical Elective <br> as scheduled

The four-week elective rotation gives the student the opportunity to: 1) understand and manage complex problems in the particular discipline chosen; 2) understand how additional knowledge and skills can be beneficial in the primary care setting; and 3) understand how to better serve in a primary care setting. This course may include extended clinical care hours, emergency or hospital and community service as deemed appropriate by the precepting physician. Prerequisites: PHAS 4432, PHAS 4434, PHAS 4436 and PHAS 4441.

## PHILOSOPHY

PHIL 1305 Critical Thinking
fall, spring, summer
This class will investigate what it is to think critically. Strong emphasis will be placed on the following: reading critically, analyzing texts, identifying and systematically representing arguments, recognizing formal and informal fallacies and rationally evaluating what is heard and read.

PHIL 1310 Introduction to Philosophy [3-0]
(Texas Common Course Number is PHIL 1301.) as scheduled
An introduction to some of the major philosophical questions that have intrigued mankind over the centuries. This will be done through an examination of the thought of some of the most important figures in the history of philosophy from the early Greeks to modern times. Credit Restriction: Credit may be received in only one of PHIL 1310 or PHIL 1387.

## PHIL 1320 Introduction to Logic <br> (Texas Common Course Number is PHIL 2303.) as scheduled

The subject matter of this course will be clear and effective thinking. It will examine principles for correct reasoning and ways to distinguish good reasoning from bad, and it will consider the kinds of mistakes in reasoning that are most commonly made in everyday life. Credit Restriction: Credit may be received in only one of PHIL 1320 or PHIL 1388.

PHIL 1321 Introduction to Formal Logic [3-0] fall, spring, summer
This class is an introduction to some of the formal techniques available for evaluating the correctness or incorrectness of arguments. Formal techniques likely to be discussed include: symbolization in propositional logic, parsing trees, truth tables or truth trees, natural deduction in propositional logic, Venn diagrams and the probability calculus. Restriction: Credit may be received in only one of PHIL 1320 or PHIL 1321.

PHIL 1387 Introduction to Philosophy (Honors Plan)

## as scheduled

An introduction to philosophical questions through an examination of major figures and themes in the history of philosophy from ancient to modern times. Credit Restriction: Credit may be received in only one of PHIL 1310 or PHIL 1387. Prerequisite: Admission to Honors Studies Program or by permission of the program director.

PHIL 1388 Introduction to Logic
(Honors Plan)
as scheduled
An introduction to the fundamentals of clear and effective thinking through an examination of the principles of correct reasoning, the structure of knowledge and common obstacles to rational thought. Credit Restriction: Credit may be received in only one of PHIL 1320 or PHIL 1388. Prerequisite: Admission to Honors Studies Program or by permission of the program director.

## PHIL 2330 Ethics

[3-0]
(Texas Common Course Number is PHIL 2306.)
as scheduled
This course will be concerned with human values: our own and those of other people. It will ask where those values come from and how we can know they are worth something, and it will examine several related questions such as personal freedom and the meaningfulness of human life.

## PHIL 2350 Introduction to Social and Political Philosophy [3-0] <br> (Texas Common Course Number is PHIL 2307.) <br> fall, spring, summer

A critical introduction to the current and historical relationships that define contemporary society and politics. Topics may include democracy, capitalism, communism, anarchism, political authority, norms, justices, rights, pluralism and rights.

PHIL 2370 Eastern Thought [3-0] as scheduled
An analysis of the major movements in Eastern philosophy and religion and their relationship to basic philosophical developments in the West. This course will examine systems of thought and culture such as Buddhism, Hinduism, Confucianism, Taoism and Shinto.

PHIL 2390 Professional Ethics [3-0] as scheduled
This course will employ the tools of ethical theory to examine moral issues and problems facing professionals in such fields as business, industry and technology, medicine, social work, criminal justice and law. The content of individual sections of this course may be derived from any of the fields listed above or from a combination of them, depending on student need.

PHIL 2391 Professional Ethics: Biomedical [3-0] fall, spring, summer
This course will address the application of moral theories, ethical principles and professional codes to ethical dilemmas faced by professionals in health care or research.

Topics covered may include, but are not limited to, euthanasia, conflicts of interest, physicians as researchers, distribution of scarce resources and the impact of theories like moral relativism and psychological egoism on the application of ethical theory.

## PHIL 2392 Professional Ethics: Business [3-0]

fall, spring, summer
This course will address the application of moral theories, ethical principles and professional codes to ethical dilemmas faced by business professionals, employers and employees. Topics covered may include, but are not limited to, conflicts of interest, globalization, duties to future generations, stakeholder theory, the value of labor and the impact of theories like moral relativism and psychological egoism on the application of ethical theory.

PHIL 2393 Professional Ethics: Engineering [3-0] fall, spring, summer
This course will address the application of moral theories, ethical principles and professional codes to ethical dilemmas faced by business professionals, employers and employees. Topics covered may include, but are not limited to, whistleblowing, integrity, honesty, liability and the impact of theories like moral relativism and psychological egoism on the application of ethical theory.

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\text { PHIL } 3305 \quad \text { Philosophical Methods [3-0] }
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fall, spring, summer
This class will teach the sophisticated critical thinking and reasoning skills, research and writing methods that are expected of advanced students of philosophy. Particular emphasis will be placed on how to construct undergraduate research papers in philosophy using online and other professional resources.

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\begin{align*}
& \text { PHIL } 3320 \text { Symbolic Logic }  \tag{3-০}\\
& \text { fall, spring, summer }
\end{align*}
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This class will be a continuation of Philosophy 1321, Introduction to Formal Logic, and will be concerned with the principles and methods used in symbolic logic to distinguish between valid and invalid arguments. Prerequisite: PHIL 1321 or consent of instructor.

PHIL 3330 Aesthetics
fall, spring, summer
This course will address classic issues in the philosophy of art and beauty and the philosophy of art and art criticism. These issues will be illustrated from the fine arts and contemporary media - literature, drama, music, painting, film and television. Course may focus on a specific genre of art.

PHIL $3331 \quad$ Philosophy of Film
fall, spring, summer
Examines philosophical issues through the lens of film. Possible topics include image and reality, representation and culture, beauty, politics, morality and aesthetic theory.

PHIL 3359 History of Philosophy: Ancient [3-0] fall, spring, summer
This course will discuss the development of Western philosophy (primarily in Ancient Greece) from the preSocratics through to Aristotle. Emphasis is likely to be placed on Plato and Aristotle.

PHIL 3360 History of Philosophy: Medieval [3-0]
fall, spring, summer
This course will survey the major figures and issues of medieval philosophy in their historical context. Philosophers from the Christian, Jewish and Islamic traditions will be examined. Possible topics include realism, nominalism, Augustinianism and scholasticism.

PHIL 3361 History of Philosophy: Modern [3-0] as scheduled
A study of the history of philosophy from the Renaissance through the 18th century, with particular emphasis on Descartes, Spinoza, Leibniz, Hobbes, Locke, Berkeley, Hume and Kant. Prerequisite:Three hours of philosophy or consent of instructor.

## PHIL 3362 From Kant to Nietzsche

fall, spring, summer
This course will address major trends and figures in the development of philosophy in the 19th century. Topics likely to be discussed are German Idealism, Romanticism, dialectical materialism, existentialism and pragmatism as manifest in the thought of Hegel, Kierkegaard, Marx, Pierce and James.

## PHIL 3363 Existentialism and Phenomenology

## fall, spring, summer

This course will address major figures and issues in existentialism and phenomenology. Potential topics to be covered are the historicity of values, the nature of the subject/object distinctions, life, death, meaning and authenticity. Some possible figures for study are Husserl, Bataille, Nietzsche, Sartre, Heidegger, Merleau-Ponty.

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\begin{array}{ll}
\text { PHIL } 3364 & \begin{array}{l}
\text { Contemporary Continental } \\
\text { Philosophy: Deconstruction, } \\
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\text { Postmodernism and } \\
\text { Critical Theory }
\end{array}
\end{array}
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## fall, spring, summer

This course addresses topics in post-Heideggerian
continental philosophy. Some potential movements and thinkers include deconstruction (Derrida), genealogy (Foucault), postmodernism (Lyotard, Agamben, Ranciere, Balibar), hermeneutics (Gadamer) and critical theory and contemporary Marxism (Benjamin, Adorno, Courdieu, Hardt, Negri, Laclau, Mouffe).

## PHIL 3365 Contemporary Analytic Philosophy

## fall, spring, summer

This class is a study of the development of analytic philosophy during the 2oth century. Authors whose work might be discussed include Frege, Russell, Carnap, Quine, Putnam, Davidson, Strawson, Grice, Dummett, Lewis, Kripke, Moore, Chisholm, Rawls, Williams, Austin and Sellars.

PHIL 3370 Philosophy of Religion as scheduled
A philosophic study of the nature and varieties of religious experience, the meaning and validation of religious belief, the act of faith, the nature and existence of God, the problem of evil, mysticism, immortality, religious belief and moral conduct, religion and myth, and religion and culture. Prerequisite: Three hours of philosophy.

## PHIL 3376 Feminist Theories <br> [3-O] as scheduled

This course is designed to examine the variety of existing feminist theories and their roots in diverse modes of philosophical analysis. It will explore how various feminist theories are consonant with or diverge from their base theories and from each other and whether such theories are still cogent. Methodology will incorporate both feminist pedagogy and traditional philosophical analysis, including feminist critique of the tradition. Prerequisite: PHIL 1310.

## PHIL 3380 Latin American Thought [3-0]

as scheduled
An examination of some of the most important and influential contributions to Latin American thought. Material to be studied will be drawn from both past and contemporary sources. Prerequisite: Three hours of philosophy.

PHIL 4310 Epistemology
fall, spring, summer
This course will consider questions about the nature, criteria and sources of (epistemic) justification and knowledge. For example, under what circumstances do perception, memory, consciousness, reason and testimony endow us with justified beliefs? How is context relevant to justification and knowledge? Is there such a thing as religious knowledge? Is skepticism about
the external world a serious threat? Does knowledge have a foundation?

## PHIL $4320 \quad$ Philosophy of Science

 as scheduledA philosophical examination of the assumptions and methodology of scientific inquiry, with examples drawn from the natural sciences. This course will consider the structure, meaning, confirmation and use of scientific theories, as well as the philosophical implications of current theories in science. Previous course number: PHIL 3325; a student may receive credit in only one course. Prerequisite: Three hours of philosophy or consent of instructor.

## PHIL 4330 Metaphysics <br> [3-0] <br> fall, spring, summer

Metaphysics investigates the nature, constitution and structure of reality. In this class we shall discuss some of the major problems in metaphysics. Topics might include existence, modalities and possible worlds, universals and particulars, the structure of concrete particulars, space and time, events, identity across time and realism and anti-realism.

PHIL 4340
Philosophy of Mind
[3-○] as scheduled
A study of consciousness, emphasizing the nature of awareness and experience. Topics concerning the capacities and creative powers of mind will be examined in theories based on physical, functional and metaphysical arguments. Previous course number: PHIL 3341; a student may receive credit in only one course. Prerequisite: Three hours of philosophy or consent of instructor.

PHIL $4350 \quad$ Moral Theory
fall, spring, summer
This course will consider questions about the foundations of moral justification, the nature of moral reasons and whether a convincing case can be made for objectivity in moral judgments. A number of options in ethical theory might be discussed, including moral realism, metaethical relativism, noncognitivism, naturalism, sensibility theories, constructivism and practical reasoning theories.

PHIL 4351 Topics in Applied Ethics [3-0] fall, spring, summer
This course will address the application of ethical theory to contemporary moral problems and the types of issues that arise in such applications. The particular field of applied ethics may vary between areas such as business ethics, biomedical ethics, environmental ethics, research ethics, etc. May be repeated for up to nine credit hours with the consent of the instructor.


PHIL $4390 \quad$ Special Topics in Philosophy [3-0] as scheduled
A study of selected issues or figures in philosophy; content will vary. May be repeated for up to nine hours credit as content changes. Prerequisite: Three hours of philosophy or consent of instructor.

## 1 PHARMACY

PHR 1301 Drugs in Society
[3-०]
fall, spring
This course is designed to introduce students to issues related to drug use in society including prescription, over the counter (non-prescription), dietary supplements and illicit drugs. The goal of the course is to make students better consumers and more aware of issues involving the roles of drugs in society.

## 3 Physics

PHYS 1401 General Physics I
(Texas Common Course Number is PHYS 1401.) fall, spring, summer
An algebra-based introduction to the principles of mechanics, fluids, heat, waves and sound for students fulfilling a natural science requirement and premedical students. The course includes three laboratory hours a week to emphasize course concepts. Prerequisite: MATH 1340. Recommended: Credit for or concurrent enrollment in MATH 1356. \$4 laboratory fee.

PHYS 1402 General Physics II
(Texas Common Course Number is PHYS 1402.)

## fall, spring, summer

A continuation of PHYS 1401 covering the principles of electricity, magnetism, light and modern physics. The course includes three laboratory hours a week to emphasize course concepts. Prerequisite: PHYS 1401. \$4 laboratory fee.

PHYS $2401 \quad$ Physics for Scientists and Engineers I
(Texas Common Course Number is PHYS 2425.) as scheduled
A calculus-based study of mechanics, wave motion, sound and fluids for physics and engineering majors.
The course includes three laboratory hours a week to emphasize course concepts. Prerequisite: MATH 1401 with concurrent enrollment in MATH 1402. \$4 laboratory fee.

PHYS 2402 Physics for Scientists and Engineers II
(Texas Common Course Number is PHYS 2426.) fall, spring, summer
A continuation of PHYS 2401 covering the principles of electricity, magnetism, electromagnetic wave phenomena and optics. The course includes three laboratory hours a week to emphasize course concepts. Prerequisite: PHYS 2401. \$4 laboratory fee.

PHYS 3101 Junior Laboratory Research [0-3] fall, spring, summer
This course is designed to introduce the student to contemporary methods in scientific research. Students will have to opportunity to work directly with faculty on a directed individual research project. The course also acquaints students with the scientific publication process and literature searches. Prerequisites: PHYS 2402 and consent of instructor. $\$ 4$ laboratory fee.

PHYS 3102 Junior Laboratory Research [0-3] fall, spring, summer
A continuation of PHYS 3101. Prerequisites: PHYS 3101 and consent of instructor. \$4 laboratory fee.

PHYS 3301 Electromagnetic Theory I [3-0] fall odd years
This course is designed to provide a basic understanding of electromagnetic theory, covering electrostatics, electrodynamics, magnetism, electromagnetic radiation and Maxwell's Equations. Prerequisites: PHYS 2402 and MATH 2401.

## PHYS 3303 Thermodynamics and Statistical Mechanics

fall even years
This course is designed to provide a basic understanding of the laws of thermodynamics and statistical methods. Concepts covered include basic ideas of conventional thermodynamics including internal energy, entropy and interactions between systems. Course acquaints students with models and equations of state for various systems and provides an introduction to statistical mechanics. Prerequisites: PHYS 2402 and MATH 2401.

PHYS 3305 Classical Mechanics
fall even years
This course is designed to provide a rigorous understanding of classical dynamics. Concepts covered include the motion of a particle to a system of particles in one, two and three dimensions; detailed treatment of the conservation laws, rigid body motion and rotating systems. It introduces students to Lagrange and Hamiltonian dynamics and noninertial reference frames. Prerequisites: PHYS 2402 and MATH 2401.

PHYS 3306 Introduction to BioPhysics [3-0] fall odd years
Topics include the levels of organization within biological systems, flow of energy in living things including an introduction to the thermodynamic systems utilized in biological research, and an introduction to the physical techniques used in the study of biological systems. Prerequisites: PHYS 1401 and 1402.

## PHYS 3307 Introduction to <br> Solid State Physics

spring even years
An introduction to the field of solid state physics.
Topics includes crystal structure, bonding in condensed matter, X-ray diffraction, crystal binding energies, free electron theory of solids, energy bands, boundaries and interfaces, and mechanical, electronic, optical, magnetic and superconducting properties of materials. Prerequisite: PHYS 2402.

PHYS 3308 Introduction to Nanotechnology [3-0] spring
This course is an introduction to nanoscale physics in order to understand nanoscience and nanotechnology. It will investigate size effects and fabrication methods of nanoscale systems. Topics covered in the course include the role of size effects on the physical, chemical and biological properties of nanoparticles, nanotubes and catalysts and self-assembly approaches for nanoparticlebiomaterials hybrid systems in nanobiotechnology and medical teatment. The course will also examine the
uses of nanotechnology and the impact it has on our society. Prerequisites: MATH 1340 and either one of the following courses: PHYS 1402, PHYS 2402, PSCI 1422, CHEM 1302, BIOL 1402.

PHYS 3309 Introduction to Medical Imaging [3-0] spring
This course will look at the wide range of techniques used for medical imaging and the underlying physical principles they are based on. This course is an introduction to medical diagnosis imaging techniques, e.g. magnetic resonance imaging, scanning tomography and general imaging by x-rays. Topics covered also include the interaction of light on living cells and use of ionizing radiation in diagnosis and therapy. Prerequisites: MATH 1340 and either one of the following courses: PHYS 1402, PSCI 1422, CHEM 1302 or BIOL 1402.

PHYS 3310 Radiation Biophysics [3-0] spring
This is an advanced course in radiation biophysics. It will cover radiation chemistry, radiation carcinogenesis, genetic effect of ionizing radiation, metabolism and biological effects of deposited radionuclides, radiation inactivation of enzymes, nucleic acids and viruses, biological effects of ultraviolet radiation, photosensitization, radiation protection and sensitization, radiation effects in vivo, cancer radiation therapy and phototherapy. Prerequisites: PHYS 1402 or PHYS 2402.

PHYS 3402 Modern Physics
spring odd years
An introduction to 2oth century physics including physics of atoms and solids, radioactivity, relativity and other topics. Laboratory exercises illustrate key course principles and reproduce historic experiments. Prerequisite: PHYS 2402. \$4 laboratory fee.

PHYS 3404 Optics
spring odd years
This course is designed to provide a basic understanding of physical optics. Concepts covered include diffraction, interference, polarization, geometrical optics and spectroscopy. The course includes three laboratory hours a week to emphasize course concepts. Prerequisites: PHYS 2402 and MATH 2401. \$4 laboratory fee.

PHYS 4101 Senior Laboratory Research [0-3] fall, spring, summer
The course is designed to acquaint the student with advanced research techniques. The student will have the opportunity to perform experiments of greater complexity and difficulty than those in Junior Laboratory. Students work directly with faculty on a
directed individual research project. Prerequisites: PHYS 3101 and consent of instructor. \$4 laboratory fee.

PHYS 4102 Senior Laboratory Research [0-3]
fall, spring, summer
A continuation of PHYS 4101. Prerequisites: PHYS 4101 and consent of instructor. $\$ 4$ laboratory fee.

PHYS 4103 Senior Laboratory Research [0-3]
fall, spring, summer
A continuation of PHYS 4102. Prerequisites: PHYS 4102 and consent of instructor. \$4 laboratory fee.

PHYS 4104 Research Laboratory in Physics Education
fall, spring, summer
This course is designed to acquaint students with elements of the research field. It includes the study, understanding and the design of modern topics in physics and classroom demonstrations. The methodology of effective presentations will also be developed and emphasized. The student will have the opportunity to learn to develop a project which will be presented in a designated UTPA course or conference for student appeal and its ability to convey a principle of physics. Prerequisite: PHYS 1402 or equivalent.

PHYS 4303 Quantum Mechanics
spring even years
This course is designed to provide an introduction to the breakdown of classical physics and the postulates of quantum mechanics. Concepts to be covered include wave functions, operator-eigenvalue formalism, bound states of the potential well, the harmonic oscillators, and selected examples such as the solutions of the hydrogen atom, angular momentum and spin. Prerequisites: PHYS 3305, MATH 2401 and MATH 3349.

PHYS 4308 Seminar in Physics
spring even years
Investigations of problems and progress in contemporary physics will be undertaken, based on the expertise of the instructor. Course may be repeated once for credit. Prerequisites: One year of physics and consent of instructor.

PHYS $4309 \quad$ Nuclear and Particle Physics [3-0] fall even years
A study of atomic nuclei and the fundamental constituents of matter. Topics include nuclear structure, natural and artificial radioactivity, nuclear reactions, fission, fusion, particles, and their interactions, standard model of particle physics, particle accelerators, cosmic rays, experimental methods and examples from current research topics.
Prerequisite: PHYS 3402.

PHYS 4310 Introduction to Atomic Physics [3-0] fall odd years
This elective course will introduce to the undergraduate students a variety of topics in atomic and nuclear physics such as properties of atoms, atomic models, the periodic system of elements, modern atomic spectroscopy, quantum mechanical probabilities, properties of stable nuclei, nuclear decays and excitations, nuclear reactions, nuclear models, particles, applications of nuclear techniques and nuclear and atomic energy. Prerequisite: PHYS 4303.

## 3 Political SCIENCE

## POLS 1333 Introduction to Political Science [3-0]

 (Texas Common Course Number is GOVT 2304.) fall, springEmphasis on political fundamentals, public law, theory and organization of the modern state, political dynamics and institutions. Open to freshmen. (Does not meet University core curriculum or state-mandated American and Texas government requirement.)

## POLS 2313 U.S. and Texas <br> Government and Politics [3-0] <br> (Texas Common Course Number is GOVT 2301.) fall, spring, summer <br> The origins and development of the American

 governmental system; U.S. and Texas constitutions; federal, state and interstate relations; the individual as a citizen, person and voter; political parties; civil rights and the judicial system. Fulfills three hours of the legislative requirements of six hours of American and Texas government. Open to freshmen. Credit Restriction: Credit may be received in only one of POLS 2313 or POLS 2387.POLS $2314 \quad \begin{aligned} & \text { U.S. and Texas } \\ & \text { Government and Politics [3-0] }\end{aligned}$
(Texas Common Course Number is GOVT 2302.)
fall, spring, summer
A functional study of the U.S. and Texas constitutions and governments in relation to the legislative, executive and administrative processes; and a study of the policy process, including domestic and foreign policy areas. Fulfills three hours of the legislative requirements of six hours of American and Texas government. Open to freshmen. Credit Restriction: Credit may be received in only one of POLS 2314 or POLS 2388.

POLS $2334 \quad$ Political Economy
[3-0] as scheduled
This course examines various economic models including private enterprise, capitalism, state capitalism and socialism; the impact of monetary and fiscal policy on the economy; and alternative viewpoints as to the appropriate extent of government regulation of the economy.

## POLS 2387 U.S. and Texas Government and Politics (Honors Plan)

fall
The origins and development of the American governmental system; U.S. and Texas constitutions; federal-state and interstate relations; the individual as a citizen, person and voter; political parties; civil rights and the judicial system. Fulfills three hours of the legislative requirements of six hours of American and Texas government. Credit Restriction: Credit may be received in only one of POLS 2313 or POLS 2387. Prerequisite: Admission to Honors Studies or by invitation.

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\begin{array}{ll}
\text { POLS } 2388 & \begin{array}{l}
\text { U.S. and Texas Government } \\
\text { and Politics (Honors Plan) [3-o] }
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\end{array}
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spring
A functional study of the U.S. and Texas constitutions and governments in relation to the legislative, executive and administrative processes; and a study of the policy process, including domestic and foreign policy areas. Fulfills three hours of the legislative requirement of six hours of American and Texas government. Credit Restriction: Credit may be received in only one of POLS 2314 or POLS 2388. Prerequisite: Admission to Honors Studies or by invitation.

POLS 3185 Internship as scheduled
This course is designed for students seeking credit through an internship placement. The internship must be directly related to government; the student must be under direct academic supervision and must complete written assignments to be evaluated by the supervising teacher. The course may be repeated for credit with a maximum of four hours counted as an elective toward fulfillment of the requirements for a major in political science. (Must receive approval of political science department chair.) Prerequisites: POLS 2313 and POLS 2314.

POLS 3314 American State and Local Government
as scheduled
A study of the basic functions, structure, procedures and problems of American state and local government, with an emphasis upon intergovernmental relations. Prerequisites: POLS 2313 and POLS 2314.


POLS 3316 American Public Policy
[3-0] as scheduled
An analysis of rationales underlying selected governmental programs and assessments of the effectiveness of these programs. Prerequisites: POLS 2313 and POLS 2314.

## POLS 3318 <br> Special Topics <br> [3-○] as scheduled

Significant issues and problems in politics and political systems. Course may be repeated for credit provided different topics are the focus of each class. (Does not count toward fulfillment of any of the six political science fields.) Prerequisites: POLS 2313 and POLS 2314.

POLS 3323 Introduction to Public Administration
as scheduled
A survey of public administration in the United States, highlighting a wide variety of topics in the discipline, but with emphasis upon the general machinery of the national bureaucracy and on the powers, problems and control of its agencies. Prerequisites: POLS 2313 and POLS 2314.

POLS 3324 Government Organization and Administrative Theory
[3-0]
as scheduled
An analysis of the various theories of public administration and government organization. The contribution of such theorists as Weber, Taylor, Mayo, McGregor, Maslow, Simon and others will be studied. The development of public administration will be surveyed. Prerequisites: POLS 2313 and POLS 2314.

POLS $3325 \quad$ Public Personnel Administration [3-0] as scheduled
Fundamental concepts of public personnel management with analysis and evaluation of employee-employer relations at the national, state and local levels. Treats topics such as environmental influences on the personnel function, career systems, human resources planning and management, performance evaluation, ethics in public
service and collective bargaining. Prerequisites: POLS 2313 and POLS 2314.

POLS 3331 Methods of Political Science Research
as scheduled
Analysis of the study of politics, models of inquiry, research methods and introduction to the use of computers in political science research. Prerequisites: POLS 2313 and POLS 2314.

POLS 3333 Classical Political Theory [3-0] as scheduled
A study of classical political philosophy from Socrates to Machiavelli. Prerequisites: POLS 2313 and POLS 2314.

POLS 3334 Modern Political Theory [3-0] as scheduled
A study of political philosophy from Machiavelli to the end of the 19th century. Prerequisites: POLS 2313 and POLS 2314.

POLS 3343 International Politics as scheduled
A study of the political principles, problems and factors involved in the foreign policies and relations of the nationstate with particular emphasis on the sources and uses of national power and the difficulties in limiting the use of such power. Prerequisites: POLS 2313 and POLS 2314.

POLS 3344 Contemporary Political Theory [3-0] as scheduled
A study of 20th century political philosophy. Prerequisites: POLS 2313 and POLS 2314.

POLS 3363 Latinos and Latinas
in U.S. Politics
[3-0]
as scheduled
The political issues facing various Latino groups in the United States will be examined by focusing on the histories, socialization, culture, participation and policy issues relevant to the selected groups. Prerequisites: POLS 2313 and POLS 2314.

POLS 3365 Politics of Race, Immigration and Citizenship
as scheduled
The relationship between immigration, citizenship policy and the social constructions of race and ethnicity are examined. The course analyzes the historical experiences of different racial/ethnic groups in the immigrant process and the evolution of the concept of U.S. citizenship viewed through the lens of race relations. Prerequisites: POLS 2313 and POLS 2314.

| POLS 3367 | Race and Ethnicity <br> in U.S. Politics |
| :--- | :--- |
| as scheduled |  |

This course analyzes the political experiences of racial and ethnic groups in U.S. politics. Both traditional (e.g., voting) and non-traditional (e.g., protest movements) strategies of political empowerment are explored. Prerequisites: POLS 2313 and POLS 2314.

POLS $3375 \quad$ Politics of Germany [3-0] as scheduled
A study of the politics and government of Germany in the context of German history and culture. Examines the leading role of Germany within the European Union. Prerequisites: POLS 2313 and POLS 2314.

POLS $3380 \quad$ Gender in U.S. Politics as scheduled
This course examines multidimensional aspects of gender and political life in the U.S. It analyzes the relationship between gender, culture, political behavior and public policy, and explores the historical evolution of the role of women in the United States political system.
Prerequisites: POLS 2313 and POLS 2314.
POLS $3381 \quad$ Women in World Politics [3-0] as scheduled
This course analyzes women's social and political movements in a global context. Prerequisites: POLS 2313 and POLS 2314

## POLS 4300 Legal Research and Writing I

 as scheduledAn introduction to the techniques and skills involved in conducting legal research. Special attention is given to translating research into different forms of legal writing (i.e., memorandums and briefs).

POLS 4301 Legal Research and Writing II as scheduled
Continued development of legal research and writing skills, with special attention paid to reading comprehension and logical reasoning relating to legal issues. Prerequisites: POLS 2313 and POLS 2314.

## POLS 4310 Comparative Public Administration

## as scheduled

A comparative analysis of the administrative systems of different governments. Particular attention is focused on the relationship of administrative practices and decisionmaking processes in the various states. Prerequisites:
POLS 2313 and POLS 2314.

| POLS 4313 | Comparative Governments: Western Democracies |  |
| :---: | :---: | :---: |
| as scheduled |  |  |
| A study of the major democracies of Europe - Great |  |  |
| Britain, France, Germany, Italy, low countries, |  |  |
| Scandinavian countries, Switzerland and Austria. A comparative study of peoples and their institutions. |  |  |
| Prerequisites: POLS 2313 and POLS 2314. |  |  |
| POLS 4314 as scheduled | Politics of the Middle East |  |
| A comparativ and theologi Prerequisites: | xamination of the social, e components of Middle Eas LS 2313 and POLS 2314. |  |

POLS 4320 American Constitutional Law: Federalism
as scheduled
A study of national-state relations by use of court cases, with special emphasis on the impacts of the commerce and taxation clauses; a study of Congressional-presidential relationships by use of court cases. Prerequisites: POLS 2313 and POLS 2314.

POLS 4321 American Constitutional Law: Liberties
[3-O]
as scheduled
A study of the limitations of governmental powers in the United States by use of court cases, with primary emphasis on civil and political rights. Prerequisites: POLS 2313 and POLS 2314.

POLS 4332 American Political Theory [3-0] as scheduled
An analysis of American political theory and values from the Colonial period to the present. The work of Jefferson, Jackson, Calhoun, Bellamy, Hoover and Galbraith are included. Prerequisites: POLS 2313 and POLS 2314.

POLS 4353 International Organization [3-0] as scheduled
An analysis of the judicial-political foundations. Actual machinery and activities of the principal international organizations, particularly the United Nations and related bodies. An appreciation of their achievements toward international peace. Prerequisites: POLS 2313 and POLS 2314.

POLS 4360 American Executive Process as scheduled Advanced study of the development of the power and influence of the president and other American executives; procedures and politics of the executive process; executive policy outputs; the relation of the
executive to the other elements of the political system. Prerequisites: POLS 2313 and POLS 2314.

POLS 4363 American Legislative Process [3-0] as scheduled
Advanced study of the legislative process; structure, powers, organization, political control and procedures of Congress, state legislatures and local legislative bodies in the rest of the political system. Prerequisites: POLS 2313 and POLS 2314.

POLS 4367 American Judicial Process [3-0] as scheduled
Advanced study of the structure, functions and procedures of the national, state and local judicial systems; the interrelationship between the American judiciary and other components of the political system; the impact of judicial decision-making on public policy; jurisprudence. Prerequisites: POLS 2313 and POLS 2314.

POLS 4370 Political Socialization and Civic Engagement [3-0]

## as scheduled

This course analyzes the relationships between political culture, social characteristics and demography, and their impact on political values, attitudes and participation.
Prerequisites: POLS 2313 and POLS 2314.
$\begin{array}{ll}\text { POLS } 4371 & \begin{array}{l}\text { Interest Groups and } \\ \\ \\ \\ \text { Political Movements } \\ \text { in U.S. Politics }\end{array}\end{array}$
[3-0]

## as scheduled

This course analyzes the relationships between the role of collective action in the U.S. political system and its impact on the democratic process. Particular attention is paid to the role of organized interest groups and their influence on the political process. Prerequisites: POLS 2313 and POLS 2314.

POLS 4372 Voting Behavior, Campaigns and Elections in U.S. Politics [3-0]

## as scheduled

This course examines voting behavior and political campaigns in U.S. politics, including analysis of the effects of political parties, issues, interest groups, campaign finances, media and campaign strategies on election and policy outcomes. Prerequisites: POLS 2313 and POLS 2314.

POLS 4373 American Political Parties and Politics [3-0] as scheduled
A study of the history, organization, function and leadership of political parties and the role they play in
the operation of national, state and local governments in the United States and a study of the role of group politics and voting behavior in the American political process. Prerequisites: POLS 2313 and POLS 2314.

POLS $4374 \quad \begin{aligned} & \text { Public Opinion and } \\ & \text { Political Behavior }\end{aligned}$
[3-0]
as scheduled
An analysis of public opinion and political behavior, with emphasis on the nature, origins, distribution and measurement of public opinion, as well as its impact on citizen participation in the U.S. political system.
Prerequisites: POLS 2313 and 2314.
POLS 4375 American Foreign Policy [3-0] as scheduled
Study of the politics, formulation, conduct and consequences of U.S. foreign policy. The roles of the president, Congress, interest groups, political parties, the military and intelligence agencies and public opinion are examined. Specific cases of major foreign policy decisions to be examined. Prerequisites: POLS 2313 and POLS 2314.

POLS 4383 Politics of Central America and the Caribbean
as scheduled
A survey of governmental structures and politics in Central America and the Caribbean. Examines competing ideologies, group developments, party interests, influence of revolution, relationships among political, social and economic structures and Latin America's role in the world political arena. Prerequisites: POLS 2313 and POLS 2314.

POLS 4386 South American Politics [3-0] as scheduled
A survey of governmental structures and politics in South America. Examines competing ideologies, group developments, party interests, influence of revolution, relationship between political, social and economic structures and South America's role in the world political arena. Prerequisites: POLS 2313 and POLS 2314.

POLS 4387 Politics of Mexico [3-0] as scheduled
A study of the politics and government of Mexico focusing on the political system in the context of history and culture. Study of Mexico's relations with the United States and other nations. Prerequisites: POLS 2313 and POLS 2314.

## $\boldsymbol{\lambda}_{\text {Physical }}$ SCIENCE

PSCI $1421 \quad$ Physical Science I<br>[0-3]<br>(Texas Common Course Number is PHYS 1415)<br>\section*{fall, spring, summer}<br>A survey course designed to provide an introduction to the concepts and principles of physical science for nonscience and elementary teaching majors. The topics covered include mechanics, thermodynamics, electricity, magnetism and astronomy. Prerequisite: MATH 1334. \$4 laboratory fee.

PSCI 1422 Physical Science II
(Texas Common Course Number is PHYS 1417)

## fall, spring, summer

A continuation of PSCI 1421. A survey course designed to provide an introduction to the concepts and principles of physical science for nonscience and elementary teaching majors. The topics covered include waves, sound, light, atomic structure, chemistry, Earth science, and weather. Prerequisite: PSCI 1421. \$4 laboratory fee.

PSCI $3310 \quad$ Planet Earth and its Place In the Solar System
[2-3] as scheduled
This is a one semester course devoted to the formation and interaction of the solar system and the Earth. The evolution of the Earth's atmosphere and surface will be discussed as well as the impact that these have had on the origin of life. Prerequisites: PSCI 1421, 1422 and GEOG 2313.

PSCI 3408 Survey of Physical Science [3-3] as scheduled Introduction to topics of the physical sciences drawn from physics, chemistry and geology. Basic concepts from mechanics, electricity, magnetism, light, atomic structure, the elements and compounds, and simple reactions will be covered. The study of rocks, minerals and geological processes will be included. \$4 laboratory fee.

## PSCI 4311 Topics in Physical Science

[3-O] as scheduled
A course that incorporates many different topics in physical science. Guest lecturers, student participation and basic concept presentation will be utilized for each topic. The course may be taken more than one semester for different topics. Prerequisites: MATH 1334 and eight hours of a physical science, or consent of instructor.

PSY 1310 Introduction to Psychology

fall, spring
An introduction to the discipline of psychology as a natural science and as an applied social science. This course includes topics such as the biological bases of behavior, sensation and perception, learning and memory, emotions, personality, abnormal psychology, therapy, developmental and social psychology. Previous course numbers: PSY 1310 replaces the previous PSY 1313/1323 sequence. PSY 1310 may be repeated to replace a grade for PSY 1313.

PSY $2331 \quad$ Psychology of Disability [3-0] as scheduled
Provides a survey of psychological aspects of disability, with emphasis on physical disability. Includes an overview of research areas and findings. Describes major disability groups and the general psychological processes that are observed in patients and their families as they react and adjust to their disabilities.

PSY $2401 \quad$ Basic Statistics for Psychologists [3-3] (Texas Common Course Number is PSYC 2317.) fall, spring
A practical study of the procedures used in handling psychological data including descriptive statistics, central tendency, variation, correlation and inference. Equivalent Course: May be counted as ANTH 2401; a student may receive credit in only one course. Prerequisites: MATH 1340 or higher (except EMAT 2306) and three hours of the following: PSY 1310, ANTH 1323, ANTH 1324 or ANTH 1342.

PSY 3324 Social Psychology
as scheduled
An overview of how groups and society influence behavior and thinking. The main topics include conformity, obedience, prosocial behavior (cooperation and helping others), the behavior of groups, attitudes and prejudice, as well as research on interpersonal attraction, including physical attractiveness and romantic love. The course also examines how everyday people are implicit psychologists, trying to explain and understand the behavior of others as well as their own. Prerequisite: Three hours of social science credit.

PSY 3325 Research Methods in Psychology [3-0]
fall, spring
This course provides a lecture-laboratory approach
to learning the scientific methodology of empirical psychological research. Basic principles and methods of research design, hypothesis testing, data collection and analysis and result interpretation are covered in this course. Prerequisites: PSY 1310 and PSY 2401.
$\begin{array}{ll}\text { PSY } 3332 & \text { Developmental Psychology: } \\ & \text { Infancy Through Adolescence [3-0] }\end{array}$
fall, spring, summer
An overview of human development from conception through adolescence. Topics include biological foundations, physical growth, language and cognition, social and personality development and important environmental/ contextual factors which affect development. Traditional and recent theoretical perspectives are reviewed.
$\begin{array}{ll}\text { PSY } 3333 & \text { Psychology of Adulthood: } \\ & \text { Maturity and Old Age }\end{array}$
[3-0]

## as scheduled

A study of such aspects of adulthood as job selection, marriage, child rearing and old age. Prerequisite: Six hours of psychology.

PSY 3337 Developmental Psychology: Lifespan

## as scheduled

The field of developmental psychology is an overview of the physical, cognitive, social, emotional and personality domains of the changes that occur over time. The course focuses on normal development from conception through death. Traditional and theoretical perspectives are reviewed. Prerequisites: PSY 1310 and junior standing.

## PSY $3338 \quad G e n d e r$ Development in International Context

[3-○]

## fall, spring, summer

Using current knowledge regarding gender role socialization in the United States as a frame of reference, this course examines how societies create and attach meaning to the categories of male and female. It explores the differential effects of worldwide trends as they intersect gender roles and opportunities available to women in the context of economic globalization. This course promotes awareness of gendered cognitive development, appreciation for the diversity of identities of men and women, and enhanced critical thinking about social justice and gender-just society. Equivalent Course: May be counted as WMST 3338; a student may receive credit in only one course.

PSY $3340 \quad$ Stress Management

## as scheduled

This course introduces the student to a wide variety of stress reduction techniques and their implications for
health. Practical experiences as well as research in such areas as biofeedback, relaxation training and meditation are provided. Prerequisite: PSY 1310.

PSY 3343 Tests and Measurements in Psychology
[3-O]
fall, spring
Concentrates on the theoretical aspects of test construction and on extensive survey of the major types of standardized tests used in industry, schools and mental health settings. Prerequisites: PSY 1310 and PSY 2401.

PSY 3345 [3-0] as scheduled
An introduction to the methods, results and interpretations of experimental studies of learning, including both animal conditioning and human memory. Emphasis will be placed on classical and instrumental conditioning procedures.

## PSY 3353 Physiological Psychology [3-0]

as scheduled
An analysis of the basic physiological mechanisms underlying behavior with emphasis on the role of the central nervous system in sensation, emotion, motivation, learning and memory. A knowledge of biology is helpful but not necessary. Prerequisite: PSY 1310.

PSY 3373 Sensation and Perception [3-0] as scheduled
A study of the basic mechanisms underlying sensation and perception. Experimental methods, research findings and theory are emphasized. Prerequisite: PSY 1310.

PSY 3383 Animal Behavior [3-0] as scheduled
An introduction to the methods, results and interpretation of studies of animal behavior from the perspectives of comparative psychology and ethology. An emphasis will be placed on social and communicative behavior. Prerequisite: PSY 1310.

PSY 3405 Behavior Modification as scheduled
An overview of principles of social learning, operant conditioning and the application of these principles to personal development, relationships and problem behavior. Three hours lecture and a three-hour lab. Prerequisite: PSY 1310.

PSY $4302 \quad$ Primate Behavior as scheduled
A review of the behavior of selected representatives of the order primates, based upon research conducted in both laboratory and field. In addition, students will collect data
on a representative primate group at the Gladys Porter Zoo. Equivalent Course: May be counted as ANTH 4302; a student may receive credit in only one course. Previous course number: PSY 3384; a student may receive credit in only one course. Prerequisites: PSY 1310 and PSY 3383, or ANTH 1324, or consent of instructor.

PSY 4312 Female and Male [3-0] as scheduled
An examination of the physiological and psychological influences of sex role development, including such topics as human liberation, sexual behavior, child rearing practices and career opportunities. Prerequisite: Nine hours of psychology or consent of instructor.

PSY 4313
fall, spring $\quad$ Abnormal Psychology $\quad[3-0]$
A comprehensive analysis of various emotional disorders, neuroses and psychoses, their symptoms, etiologies and treatment and approaches. Prerequisite: PSY 1310.

## PSY 4318 Theories of Learning [3-0]

 as scheduledA historical review of major theoretical positions in the field of animal and human learning. Prerequisite: PSY 1310 or consent of instructor.

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PSY 4319 Cognitive Processes [3-0]
as scheduled
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The experimental study of conscious, voluntary mental processes. Topics include recognition of written words and other patterns, recognition of speech and comprehension of language, limits on ability to divide attention, concept formation, problem solving and reasoning. Emphasis is on adult processes rather than on development of the processes in children. Prerequisite: PSY 1310.

$$
\begin{array}{ll}
\text { PSY } 4320 & \text { Memory }  \tag{3-0}\\
\text { as scheduled } &
\end{array}
$$

The experimental study of the acquisition, storage, retrieval and forgetting of verbal information. Emphasis is on basic research and theory about adult processes, and little consideration is given to either applications or development of the processes in children. Prerequisite: PSY 1310.

## PSY $4326 \quad$ Cross-Cultural Psychology

[3-O] as scheduled
The course examines how culture shapes our cognition and behavior. In addition to exploring intercultural contact and cross-culturalresearch methods, the following areas in psychology are analyzed from a cross-national perspective: perception, cognition, human development, attitudes and interpersonal relations. Prerequisite: PSY 1310.

$|$| PSY 4328 | Psychological Issues in the <br>  <br> as scheduled |
| :--- | :--- |
| Mexican-American Community [3-0] |  |

Mexican-American personality development and assessment, ethnic identity and acculturation are examined in the course, as are Chicano perceptions of abnormal conduct and the use of alternative therapists. Selected community issues, such as immigration and prosocial behavior, are also explored from a psychological perspective. Prerequisite: PSY 1310.

$$
\begin{equation*}
\text { PSY } 4333 \quad \text { Theories of Personality } \tag{3-0}
\end{equation*}
$$ as scheduled

Emphasis is placed on the major theories of personality that attempt to explain the psychological nature and behavior of people. Some consideration is given to the process involved in developing a theory of personality. Prerequisite: PSY 1310.

PSY 4342 Psychology and Law as scheduled
This course is designed to give students an appreciation of behavioral phenomena as they apply to our legal system. A general survey of related topics such as the trial process, the psychology of evidence and the psychology of juries will be covered.

PSY $4343 \quad$ Human Factors
fall
Human Factors is concerned with the optimal interaction between humans and their working environments, including machines, instruments, psychology, including sensation, perception, memory, cognition, physiology, learning and motivation. The goal is to optimize the design of operation systems by considering human capabilities and limitations. Prerequisites: PSY 1310 and a course in perception of memory.

PSY $4355 \quad$ Psychology and Mythology as scheduled
This course will study the impact and interrelationships of psychological thought and mythological theory. The impact of the theories of Freud, Adler, Jung, Levi-Strauss and others on mythology will be studied. Equivalent Course: ANTH 4355; a student may receive credit for only one course. Prerequisite: PSY 1323 or ANTH 1323 or ANTH 1353 or instructor's consent.

PSY 4356 Mind-Body Interactions [3-0] spring
The course is designed to demonstrate the inseparability of mind and body. Although our Western approach to medicine still focuses on illness and treatment as biologically-based, there is increasing evidence that
psychological and social factors play a part in the healing process. The course is divided into three areas of content - examination of how alterations of the body can affect the mind, examination of how the mind can affect the body, especially as a result of stress and, lastly, an evaluation of complementary/alternative medicine.
$\begin{array}{ll}\text { PSY } 4363 & \begin{array}{l}\text { Systems and Theories } \\ \text { in Psychology }\end{array}\end{array}$
as scheduled
A history of the development of psychology and a study of theories in contemporary psychology. Prerequisite: Twelve hours of psychology.

PSY $4380 \quad$ Research Seminar

## as scheduled

Students will have the opportunity to conduct facultysupervised research in an area of mutual interest resulting in oral and written presentations of their work to other students and faculty. The course will provide an opportunity to obtain hands-on research experience for undergraduate students who intend to pursue graduate degrees. May be repeated for up to six hours credit.
Prerequisites: PSY 2401, PSY 3325 and consent of instructor.
$\begin{array}{ll}\text { PSY } 4383 & \text { Special Problems [3-0] }\end{array}$ as scheduled
Selected topics assigned according to the interest of the class and/or student. Sequential registration for up to nine hours is permitted as topics vary. Prerequisites: Nine hours of psychology and consent of instructor.

## Q Quantitative METHODS

QUMT 2340 Introduction to Quantitative Methods in Business
[3-0]

## fall, spring, summer

This course is an introduction to the quantitative techniques and models applicable to business decisionmaking. Topics include optimization models of deterministic and non-deterministic systems used in the business curriculum (accounting, computer information systems, economics, finance, management, marketing, production and operations). The course integrates computers as tools in solving business problems. Prerequisites: MATH 1341 or MATH 1340; CIS 1301.


QUMT 2341 Elementary Business and Economic Statistics
[3-0]
fall, spring, summer
An analysis of descriptive statistics and statistical inference. Topics include collection, organization and presentation of numerical data; central tendency, variation, skewness, probability, probability distribution, sampling distributions, estimation theory and hypothesis testing. Computer laboratory assignments covering the above topics will be assigned. Prerequisites: MATH 1341 or 1340; CIS 1301 or CIS 1101.

QUMT 3342 Intermediate Business and Economic Statistics
fall, spring, summer
A continuation of elementary statistics, including regression and correlation, index numbers, time series, nonparametric statistics and other decision-makingtools. Computer laboratory assignments covering the above topics will be assigned. Prerequisites: QUMT 2341 and MATH 1322 or QUMT 2340.

QUMT 3343 Statistical Methods for Business [3-0] fall, spring, summer
Students will study descriptive and inferential statistical techniques used to solve business-related problems. Topics include descriptive techniques, probability, confidence intervals, tests of hypotheses, analysis of variance, chi-square tests, correlation and regression. Prerequisites: MATH 1342 or QUMT 2340.
$\begin{array}{ll}\text { QUMT } 4343 & \begin{array}{l}\text { Quantitative Methods for } \\ \text { Decision-Making in Business [3-0] }\end{array}\end{array}$
fall, spring, summer
This course provides students with the methodologies to approach problems in a rational and logical manner by developing their analytical maturity, their ability to identify alternative actions and their ability to select a solution from viable alternatives. Different problemsolving techniques will be implemented along with software applicable to decision-making in business. Prerequisite: QUMT 3343.


REEATNG


## as scheduled

Examines the processes utilized to provide clues to understanding text: identification of relevant information of text and how events in the text are related; utilizing information of text to determine that which is not stated; evaluating and judging text; monitoring what is read for the purpose of clarifying text.

## READ 3323 Reading Acquisition

[3-O] as scheduled
Psychological, sociological, cultural, physical and linguistic factors related to reading acquisition; analysis of scope and sequence of word recognition processes: sight word vocabulary, phonics, structural, morphemic and contextual analysis; analysis of organizational and management parameters of learner-centered reading instruction at the primary levels; diagnostic and prescriptive processes as they pertain to readiness, structural and phonetic analysis, vocabulary skills and classification skills. (Field-Based Approved Course.)

## READ 3325

Cognitive Development and Reading Comprehension [3-0]
as scheduled
Examination of principles of comprehension; factors that affect comprehension of text; cognition and reading comprehension; components of the learner-centered instructional program of reading comprehension and the correlation of reading processes to the writing processes; analysis of comprehension processes as they apply to various text structures; extending and enriching reading comprehension through literature; diagnostic and prescriptive processes as they pertain to literal, interpretive and evaluative comprehension processes. (Fie/d-Based Approved Course.)

READ 3326 Reading Across the Curriculum Content Areas
as scheduled
Analysis of research, study and library skills; examination of reading as applied to the various content areas with focus on effective reading processes across text types and subject-specific vocabulary. Prerequisites: READ 3323 and READ 3325.

READ 3327 Assessment/Diagnosis of Special Needs Students
as scheduled
Examination of the affective, cognitive, cultural and linguistic correlates of reading disabilities; examination of the characteristics of gifted readers; analysis of learner reading styles across the modalities of auditory, visual, kinesthetic and tactile; analysis of the principles of assessment and relationships to both remediation and enrichment. Prerequisite: READ 3323.

READ 3329 Language Arts Curriculum as scheduled
Reading as an integral part of the language arts process; study of the relationships between listening, speaking, reading and writing. Prerequisite: READ 3323.

READ 4351 Developmental Reading in Secondary Schools
as scheduled
Analysis of the relation of reading ability to academic achievement; reading skills needed in content area reading; reading difficulties encountered by students in secondary schools. Prerequisites: READ 3323 and READ 3325 (except for meeting requirements of secondary professional development certification).


# REHABILITATION SERVICES 

REHS 2301 Introduction to Rehabilitation [3-0] fall, spring and as scheduled

Introduction to the field of rehabilitation and rehabilitation professions and specialties (e.g., rehabilitation counseling, vocational evaluation, job placement). The course addresses theory and practice of rehabilitation as well as the history, philosophy and legislative basis for the programs and professions. Includes an overview of the needs of individuals with disabilities and the effects disabilities have upon personal, social and vocational adjustment. The independent living rehabilitation movement and the vocational rehabilitation process are discussed, along with the impact individuals with disabilities have upon the nation's economy. Community resources and agencies that provide services to people who have disabilities are explored. May include field trips, guest lectures and community-oriented assignments.

## REHS 2321 Introduction to Addiction Studies

## fall, spring and as scheduled

Provides an introduction to the antecedents and the rehabilitation of the disability of substance abuse in the areas of vocational, social, familial, personal and physical areas. Includes information about multiple disabilities (e.g., physical and emotional disability and substance abuse).

## REHS 2331 Psychology of Disability [3-0] fall, spring

Provides a survey of psychological aspects of disability with an emphasis on physical disability. Includes an overview of research areas and findings. Describes major disability groups, and their psychological processes that are observed in consumers and their families as they react and adjust to their disabilities. Equivalent Course: PSY 2331; a student may receive credit for only one course.

REHS 3303 Case Management I [3-3] fall, spring
Introduction to case management skills and techniques including interviewing will be taught. Applied and supervised learning experiences will be emphasized.
Prerequisites: REHS 2301, REHS 2331 and formal admission.

| REHS 3311 | Disability Policy and <br> Independent Living | $[3-0]$ |
| :--- | :--- | :--- |

fall, spring
This course provides an in-depth review and analysis of legislation and policies (both federal and state) that impact people with disabilities and the rehabilitation professional. Major legislation that will be covered includes The Americans with Disabilities Act, Rehabilitation Act of 1973, Social Security, The Ticket to Work and Work Incentives Improvement Act of 1999, Individuals with Disabilities Education Act and state workers compensation laws. The independent living and disability rights movements will be studied in context to their influence on changes in disability policy. The consumer focus of empowerment and control over one's life will also be covered.

REHS 3315
Hearing Disorders and
Assistive Technology
fall, spring
The seminar course includes a basic orientation to sound, anatomy and physiology of the human hearing mechanism, pathology of hearing, impact of age of onset, with an emphasis in pure tone and speech discrimination. Extensive training in types of hearing losses, techniques and technology used in aural rehabilitation and other aspects of vocational rehabilitation for the deaf and hard of hearing are provided.

REHS 3320 Family and Disability fall, spring
Covers relevant issues concerning the family of a person with a disability. Topics such as family dynamics, family support systems and the role of the family in adjustment to disability will be explored. Particular attention will be given to the Mexican-American family. Prerequisites: REHS 2301, REHS 2331 and consent of instructor.

REHS 3325 Medical Aspects of Rehabilitation I

## fall, spring

This course provides information on human anatomy as it relates to disability. The student will have the opportunity to review and learn to understand general and specialty medical reports and integrate medical information with vocational potential using functional capacity evaluations. Information on comprehensive medical rehabilitation including service delivery and payment systems will be presented. Allied health and related medical professions will be described to provide a comprehensive understanding of their involvement on the treatment team. Alternative medicine and its relationship to rehabilitation will be presented.

REHS 3330 Medical Aspects of Rehabilitation II

## fall, spring

This course will provide extensive medical information on etiology, prognosis, treatment procedures and vocational implications of various disabilities. The major disabilities to be covered are diabetes, spinal cord injury, traumatic brain injury, visual impairments, hearing impairments, neuromuscular disorders, cardiovascular disorders, cerebral palsy, mental retardation, HIV/AIDS, epilepsy and neurological disorders. An overview of other disabilities will be covered. Prerequisite: REHS 3325 with a grade of "C" or better.

## REHS 3335 Sign Language III

fall, spring, summer
This course is a continuation of intermediate sign language (COMD 1320), and emphasizes expansion and refinement of functional grammatical structure while focusing on medically-related vocabulary and situations. The spontaneous use of American Sign Language is stressed through discussion of the deaf community and other activities being held by the deaf community. Prerequisite: COMD 1320.

REHS 3340 Intermediate Aspects in Addiction Studies

## spring, as scheduled

Examines the addictions process from the molecular to the social level. This course focuses on the familial, social, cultural, ethical, legal, biological, neurological and psychopharmacological aspects of addiction. Principles of drug action, drug classification, variable of drug responses, and psychiatric issues, including dual diagnosis, will be addressed. An overview of harm reduction principles will be presented.

REHS 4100 Independent Study [1-0] as scheduled
Individualized study and investigation of rehabilitation topic under the direct supervision of a faculty member. A minimum of 25 clock hours per credit hour is required. May be repeated a total of four times. Prerequisite: Consent of instructor.

REHS 4301 Vocational Assessment
[3-0]
fall, spring
This course will focus on the vocational assessment of people within the rehabilitation process. Students will have the opportunity to be oriented to vocational evaluation, psychometrics, behavioral observations, work samples, situational assessments as well as modifications in assessment techniques needed to effectively evaluate people with disabilities. Prerequisites: REHS 2301, REHS 2331 and formal admission.

REHS 4302 Job Placement [3-0]
fall, spring
A study of job placement theories, approaches and techniques will occur. The student will be have the opportunity to be introduced to the vocational implications of disability. Job-seeking skills, labor market surveys, job analysis, résumé writing and transferable skills analysis are some of the skills that are taught. Prerequisites: REHS 4301 with a grade of "C" or better and formal admission.

REHS 4303 Case Management II [3-0]
fall, spring
Advanced case management skills and techniques such as interviewing, case history development and program planning within the rehabilitation process will be taught. IWRP development and reviews of client case records will occur in an applied, supervised environment. Legal and ethical issues in service delivery will be addressed. Prerequisites: REHS 3303 with a grade of "C" or better and formal admission.

REHS 4310 Rehabilitation Research as scheduled
This course provides an examination of research methods, designs and statistical analysis as it applies to the field of rehabilitation. The application of research information and literature to guide effective practice for the rehabilitation professional will be covered. The course will address research with a conceptual rather than a statistical approach.

REHS $4315 \quad$ Psychological and Social Aspects of Deafness

## fall

This course provides an applied psychological perspective to the field of deafness. Psychological processes: sensory, perceptual, cognitive and linguistics will be reviewed.
Current issues and topics: demographic trends, culture, human rights, literacy, communication methods, bilingual/bicultural, mental health, multiple disabilities, low-functioning deafness, accessibility and impact of technology will be reviewed.

REHS $4330 \quad$ Clinical Topics in Rehabilitation [3-0]
fall, spring
This course will focus on priority clinical issues
and provide concentrated study in specific areas in rehabilitative services that appear timely. The focus will be placed on independent projects, presentation of papers and group discussion. A field-based clinical study project will be required. Prerequisites: REHS 2301 and REHS 2331 or consent of instructor.
REHS 4335 Sign Language IV [3-0]
fall, spring, summer

Sign Language IV is a continuation of Sign Language III and emphasizes expansion and refinement of functional grammatical structure while focusing on vocational and job placement related vocabulary and situations. The spontaneous use of American Sign Language is stressed through discussion of the deaf community and other activities being held by the deaf community. Prerequisite: REHS/COMD 3335.

REHS $4340 \quad$ Clinical Issues in Addiction Studies [3-0] as scheduled
The course focuses on treatment, prevention and intervention approaches as these relate to addictions. Therapeutic rehabilitation approaches (group, individual, family, conjoint) are addressed in relation to the various populations. Evaluation, assessment, consultation and referral are processed in the therapeutic approaches that are covered. Crisis intervention is an essential area when working with the addictive populations and is included in the therapeutic approaches. Prerequisite: REHS 2321 or consent of instructor.

REHS 4345 Culture, Family and Prevention in Addictions [3-0]
fall, spring
This course overviews diverse populations in order to present the impact of family, culture and society upon substance use and abuse. Evaluation, treatment, prevention and intervention techniques and practices will be addressed. Legal and ethical aspects related to diverse populations who have addictions will be explored. Prerequisite: REHS 2321 or consent of the instructor.

REHS $4350 \quad$ Special Topics in Rehabilitation [3-0] as scheduled
Selected topics in rehabilitation. May be repeated for up to six hours credit when topic varies. Prerequisites: REHS 2301 and REHS 2331 or consent of instructor.

REHS 4355 Multicultural Issues in Human Services
as scheduled
This is a multidisciplinary course with the purpose of providing students with an overview of the complex relationship between culture and values. Students will have the opportunity to explore their personal values, the roles of education and language as transmitters of culture and values and how that interrelationship is reflected in the human services. Students will develop an awareness of and the ability to articulate cross-cultural perspectives on social, psychological, educational, cultural and interpersonal issues. The course includes conceptual models for resolving cross-cultural conflicts.

REHS 4360 Assistive Technology [3-0] as scheduled
Issues related to technology and people with disabilities will be examined. Types of technology, service delivery models, funding, training and technology abandonment will be covered. Examples of technology will be brought into the classroom. Prerequisites: REHS 2301 and REHS 2331 or consent of instructor.

REHS 4602 Clinical Practicum in Rehabilitation fall, spring
Supervised, field-based clinical experience in a public or private setting serving the disabled. The practicum setting must meet specific program requirements and be approved by the University practicum supervisor. Weekly assignments will focus on daily components within the rehabilitation process and will be treated in a weekly group session. Three hundred twenty clock hours, 20 field hours weekly plus two hours of regularly scheduled group supervision per week. Prerequisites: Completion of all REHS concentration courses and program approval.

## (MILITARY SCIENCE)

ROTC 1201 CPR/First Aid and Marksmanship<br>[2-1.25]

as scheduled
Course will examine basic first aid procedures to include evaluation of victims/casualties, cardiopulmonary resuscitation, clearing the airway and administering first aid. The course studies healthy lifestyle habits (diet, exercise, stress reduction) promoting health and wellness. Course includes studies in the fundamentals of rifle and pistol marksmanship along with practical experience on an outdoor range. Students have the opportunity to earn both CPR and first aid certification through national organizations. Students are encouraged to participate in the ROTC early morning fitness program and leadership laboratories.

ROTC 1202 Survival and Land Navigation Training
as scheduled
An introduction to basic military science. Studies in basic military skills. Emphasis is placed on methods and techniques of survival and land navigation, but the course
is also designed to enhance self-confidenceand physical fitness through active participation in adventure training. Includes a leadership laboratory to teach these principles. An optional weekend field training exercise is offered.

## ROTC 2201 Applied Leadership and

 Management [2-1.5]
## as scheduled

An application of basic leadership and management principles. The course ethics apply based on leadership skills that develop individual abilities and contribute to the building of effective teams. Study the role of the U.S. Army and Army communication skills such as oral presentations, writing concisely, planning of events, coordination of group efforts and fundamentals of ROTC's Leadership Development program. Two hours and a required leadership lab. Optional weekend field training exercises are offered.

ROTC 2202 Intermediate Leadership and Management Techniques
[2-1.5]

## as scheduled

Learn techniques for training others as an aspect of continued leadership development. Supervisory personnel and motivational techniques are studied through placement of students in positions of small unit leaders given assigned tasks. Introduction to basic tactical mission applications and principles. Two hours and a required leadership lab. Optional weekend field training exercises are offered.

## ROTC 3201 Basic Army Physical Development <br> as scheduled

An in-depth study of the Army's physical fitness program. From this curriculum, a student can develop a physical fitness program that best suits one's ability or physical desire. One can learn to perform individual physical assessments. Other topics include nutrition, stress management, mental fitness/performance enhancement and physical training. Includes limited outdoor physical conditioning and a leadership laboratory.

ROTC 3202 Advanced Army Physical Development

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[3-1.25]
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## as scheduled

A practicum in physical development where a student applies the physical development skills learned in Basic Army Physical Development and applies them to a program that best suits the individual. The student will be tested in accordance to FM 21-20 and The Army Physical Fitness Test to determine his or her ability and AR 600-9 in attainment of a physical goal. Includes extensive outdoor physical conditioning and a leadership laboratory.

ROTC 3401 Advanced Military Leadership [2-3] as scheduled
This course introduces the student to the responsibilities, character and uniqueness of the commissioned officer as a professional. Topics include the role of the small unit leader, radio communications, advanced military leadership, tactical operations and oral communications. Weekend field training exercises are mandatory.
Prerequisite: Advanced ROTC standing.
ROTC 3402 Small Unit Tactics
as scheduled
Analysis of the leader's role in directing and coordinating the efforts of individuals and platoon-sized units in the execution of offensive and defensive tactical missions, make-up and preparation of the five paragraph field order, land navigation and patrolling. Prerequisite: Advanced ROTC standing.

ROTC 3604 Internship in Military Science as scheduled
The purpose of the Advanced Camp is to train leadership and evaluate officer potential. Technical/tactical proficiency and leadership skills will be put to the test in a carefully planned and stressful training sequence. Light infantry tactics are the individual training vehicle. Prerequisite: ROTC 3402.
$\begin{aligned} \text { ROTC } 4401 & \begin{array}{l}\text { Staff Management and } \\ \text { Responsibilities }\end{array}\end{aligned}$
as scheduled
An examination of the garrison and administrative responsibilities of the commissioned officer. An indepth analysis of staff procedures, the military writing program, advanced leadership assessment and the decision-making process. Precommissioning actions will also be conducted. Weekend field training exercises are mandatory. Prerequisites: Advanced standing, ROTC 3401 and ROTC 3402.

ROTC 4403 Advanced Military Science as scheduled
This course includes the ethical and professional responsibilities of the commissioned officer and studies the military justice system as well as the Army training system and customs and traditions of the Army from the perspective of a newly commissioned second lieutenant. Weekend field training exercises. Prerequisites: Advanced ROTC standing, ROTC 3401 and ROTC 3402.

# n Science Teacher Certification 

SCIE $4240 \quad$ Capstone Course as scheduled

[1-3]
This course will be designed to review TEKS requirements for the grades 4-8 certification in science. Students will have the opportunity to conduct science education research, and learn how to present and evaluate various investigative techniques used in biology, chemistry and the physical sciences. Students will be assigned laboratory topics that they will have to present and teach to other students in the class. The presenter will be expected to evaluate the students participating in his/her lab, and the students will have the opportunity to evaluate the presenter. Prerequisites: Students enrolled in SCIE 4240 are expected to be in their final semester of on-campus instruction, and should either be enrolled in or have completed all requirements for the interdisciplinary science major.

## SCIE 4350 Local and Global <br> Environmental Science

## as scheduled

The course is designed to integrate concepts of life sciences and chemistry and apply them to both local and global environmental issues. Important local topics include water quality of the Rio Grande and Arroyo Colorado Rivers, atmospheric transport of pollutants and aerosols, effects of chromic exposure to hydrocarbons, Lower Laguna Madre seagrass decline, brown tides, and local recycling programs. Important global issues include global warming, ozone depletion, deforestation, ocean dumping, fisheries sustainability, atmospheric pollutant loading, acid rain and habitat restoration. Prerequisites: CHEM 1301 and BIOL 2305.

## SCIE 4360 Forensics: Applications of the Natural Sciences for Teachers [2-3] <br> as scheduled

This is an integrated course designed to introduce middle school and secondary teachers to the science of forensics used in investigating and solving crimes. Principles of physics will be utilized to show how crime scenes and accidents can be reconstructed. Students will study how chemistry and spectroscopy are used to investigate crimes involving drugs, detection of explosives,
fiber analysis, arson investigations and detection of contraband in airports and harbors. Some time will be given to DNA analysis and genetic testing. Prerequisites: BIOL 1401, CHEM 1301 and 1101, PSCI 1421 and 1422.

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\begin{array}{ll}
\text { SCIE } 4370 & \text { Planet Earth and } \\
& \text { Its Inhabitants } \tag{2-3}
\end{array}
$$

as scheduled
This course is designed to cover the history of the earth from the various theories of origin, to the beginning of life, and through various evolutionary processes and extinctions that have resulted in the planet as we know it today. Students will learn about continental drift and understand the role of environmental forces in evolution, and why there are different species in different climates. Students will study about ecosystems and the roles of the various components of an ecosystem. Prerequisites: BIOL 1402 and 2305, PSCI 1421 and 1422.

## SCIE $4480 \quad$ Applications of Chemistry and Physics in Society

as scheduled
This course will involve a detailed study of industries and technologies that involve principles of physics and chemistry. Examples of topics that will be included in the course are: electronics in society, the physics of medical imaging, radiation in microwaves and other types of conduction used in industry and in everyday life, the role of ultraviolet radiation in health, applications of chemistry in the food industry and a look at the physics and chemistry involved in the petroleum industry. Prerequisites: CHEM 1301 and 1101, PSCI 1421 and 1422.

SOCI 1313 Principles of Sociology [3-0]
(Texas Common Course Number is SOCl 1301.) fall, spring, summer
This course will introduce students to the study of society, focusing on the use and critique of the main sociological theories and techniques used to investigate the human condition. We will examine social institutions, processes and practices across a range of social structures, cultures and historical periods.

SOCl 1323 [3-○]
(Texas Common Course Number is SOCl 1306.)
fall, spring, summer
This course helps students understand contemporary
social issues, evaluate and critique alternative explanations of these issues and analyze and critically assess various proposed solutions to key public policy problems and issues. Students will have the opportunity to develop writing, speaking, listening and critical thinking skills that will enable them to assume an informed role as citizens in a democratic society. Much of the course will come from information in the news media and other appropriate information sources about cultural, political, economic and public policy issues, with special emphasis on issues related to our unique location in South Texas.

## SOCI 1387 Principles of Sociology

(Honors Plan)
[3-0]

## fall, spring, summer

A sociological analysis of major concepts such as social group, culture, socialization, social interaction and group relations. The course is discussion-centered with emphasis on independent study. Credit Restriction: Credit may be received in only one of SOCI 1313 or SOCI 1387.
Prerequisite: Admission to Honors Studies or by invitation.
SOCI 2301 Statistics for the
Behavioral Sciences
[3-O]

## fall, spring

An introduction to the procedures used in handling sociological data including frequency distributions, central tendency, variability, correlation and elementary hypothesis testing. Prerequisites: Three hours of mathematics (except EMAT 2306) and SOCI 1313 and SOC 1323 or consent of instructor.

SOCI 2332 Community
as scheduled
A consideration of community organization and problems and strategies for change. Special attention will be given to community organization and problems in the Rio Grande Valley.

SOCI 3301 Quantitative
Social Research [3-0]
as scheduled
This course introduces students to the basic survey methods used in social sciences. Emphasis is on the logic of social science and the implications of the major forms of quantitative research methodology. Allows students to recognize and analyze merits of research in the social sciences. Prerequisite: SOCI 2301.

SOCI 3302 Qualitative Social Research [3-0] as scheduled
Logic and philosophy of qualitative methodology in sociology. The process of research design, data collection, analysis and interpretation of results and final write-up is
elaborated with specific reference to research conducted in the Rio Grande Valley and elsewhere. Discussion of the politics and ethics of fieldwork, including protection of the rights of human participants in research projects. Prerequisite: SOCI 1313 or 1387.

SOCI 3310
Sports and Society
[3-O]
fall, spring
This course investigates the relationship between sports and society by examining the role and impact of agents of socialization such as the family, the peer group and the mass media on athletes and their personalities. This course also explores the issues of racism, sexism and violence in various sports. The assumption that participation in sports builds character will be examined along with cultural issues such as deviance, retirement and competition.

SOCl 3324 Sociology of Health
as scheduled
Analysis of basic problems in the maintenance and preservation of health and delivery of health care services by social class. Focus is on environmental causes of disease; social-psychological response to illness; and family cohesion, strain and resources as affected by illness. Prerequisite: Three hours of sociology or consent of instructor.

SOCI 3325 Social Psychology
fall
This course examines the sociological perspective of symbolic interactionism. Topics include the development of social psychology and symbolic interactionism, participant observation, the differences between animals and humans, symbolic language, the instinct controversy and Goffman. Prerequisite: SOCI 1313.

SOCI 3333 Urban Sociology as scheduled
The culture, history and growth patterns of cities; demographic, ecological patterns and trends. Problems of housing and community organization. Prerequisite: SOCI 1313 or consent of instructor.

SOCI 3343 Social Issues in Japan
as scheduled
An examination of the social issues that Japanese society is facing in its attempt to maintain ancient traditions while changing into a post-industrial society. Prerequisite: SOCI 1313, SOCI 1325, or consent of instructor.

SOCI 3344 Societies in Global Perspective [3-0] spring
The course is rotated to examine the cultures of Asia,
Africa and Latin America, with one of these regions as

the focus of study in any particular semester. The course looks into cultures of various societies in terms of their social institutions such as language, religion, education, family, customs, traditions, etc., in contemporary and historical perspective and how such institutions provide the value system that is subsequently internalized in the socialization process and become part of the personality.

SOCI 3393 Sociology of Aging
[3-0] as scheduled
Analysis of the basic problems faced by the aged within a social context. Within an institutional framework, focus is on health, income, work, religion, leisure and interpersonal relationships of the aged. Prerequisite: Three hours of sociology or consent of instructor.

SOCl 4313 American Minorities [3-0] as scheduled
An analysis of intergroup relations among minority groups and the dominant group with special focus on patterns of conflict, change, adjustment, power and inequality among such groups. Some in-depth description of the problems and characteristics of major American minorities. Prerequisite: Six hours of sociology or consent of instructor.

SOCI 4314 Sociology of Deviance as scheduled
The nature and extent of deviancy examined through a review of theory and research on deviant behavior. Selective examination of particular types of individual and subcultural deviance (e.g.,homosexuality, physical handicaps, prostitution). Prerequisite: Six hours of sociology or consent of instructor.

SOCl 4320 The Sociology of the Family [3-0] as scheduled
A comparative historical approach will be used to examine sociological issues concerning the family in contemporary America. An in-depth analysis will focus on many of the social problems that affect the most important social institution in society.

SOCl 4323 The Mexican-American People [3-0] fall, spring
Presents an examination of the Mexican-American's economic status, cultural values, style of life, educational attainment, family status and political participation as affected by current socio-economic conditions and their historical antecedents. Prerequisites: Six hours of sociology and/or anthropology or consent of instructor.

SOCI 4324 Contemporary Research
in Social Psychology
as scheduled
This course is a review of selected topics from the empirical literature in social psychology such as gender, ethnicity, attitudes, prejudice and discrimination, persuasion and helping behavior with emphasis on research from professional articles. Prerequisite:Three hours of statistics in any department or approval of instructor.

SOCI 4325 Cultural Sociology [3-0] as scheduled
The rise of cultural sociology has been one of the most important developments in recent American social science. This course will introduce the student to one of the most popular and important new areas within sociology. The major lines of inquiry - text, code, production, reception and culture in action, which have made cultural sociology flourish in the past 10 years - will be examined. This will be accomplished by relying on the mass media as a concrete and shared mechanism through which culture is produced, received and put into action. This class will use movies, television, magazines, newspapers and the recording industry extensively as sources for examination and analysis of major and timely cultural themes.

SOCI 4330 Gender Research in Social Psychology
fall, spring, summer
The course examines gender in research taken from articles found within the peer-reviewed professional journals in social psychology. Prerequisites: Any statistics course.

SOCI 4333 Classical Social Theory as scheduled
The nature and function of social theory and its development, especially from the Enlightenment to the early 20th century. Emphasis on the cumulative insights and ideas which have contributed to sociology and on the role of social theory in understanding modern society. Prerequisite: SOCI 1313 or 1387.

SOCI 4334 Contemporary Social Theory [3-0] as scheduled
The main trends, basic problems and unresolved issues of
modern and post-modern sociological thought. Essential aspects of the logic of scientific inquiry focusing on contemporary theories as model building in sociology. Prerequisite: SOCI 1313 or 1387.

## SOCI 4352 Social Inequality

as scheduled
A discussion of research, concepts and theory related to inequality in social life, its causes and consequences. The social order of relations between the affluent and the poor and how inequality among the social classes is built into the culture and institutions of society (e.g., government, economics, religion, family). Prerequisite: SOCI 1313 or consent of instructor.

SOCI 4373
as scheduled
The aim of this course is to present a general perspective of social change in Latin America and how the United States is being affected by this change. A better understanding of the growing complexity of the relationship between the United States and Latin America requires paying careful attention to a number of key issues and problems, such as how this relationship cuts across differing national histories, gender and ethnic issues, industrialization, democratization, the illicit drug trade, economic and political integration and the growing northbound tide of Latin American unskilled migrant workers. The course will contribute to a growing understanding of the paradox of fragmentation and shared cultural identity in the subcontinent as well as the strikingly different views each country has about U.S. policy, society and culture.

SOCl $4380 \quad \begin{aligned} & \text { Social Protest and } \\ & \text { Social Movements }\end{aligned}$ Social Movements

## as scheduled

An investigation of the careers of protest and movement organizations. Special attention is directed to the structure of these organizations and the dilemmas and problems they encounter. Case studies are included. Prerequisite: SOCI 1313 or consent of instructor.

SOCI 4383 Independent Studies
as scheduled
Designed to give students experience in research or in-depth theoretical/empirical readings in a substantive area not normally covered within standard courses. Research projects or advanced readings will vary according to student interest and faculty availability. Sequential registration for up to nine hours is permitted as topics vary. Prerequisites: Nine hours of sociology and consent of instructor.

SOCl 4385 Special Topics in Sociology [3-0] as scheduled
Selected topics in sociology. Course may be repeated once as topics change with a maximum of six credit hours. Prerequisites: SOCI 1313, 1323 or 1387, plus six credit hours of 3000- or 4000-level sociology courses or consent of instructor.

SOCI 4390 Internship
as scheduled
The course is designed to provide students with supervised sociology-relatedwork experience in a community agency. Students must contact the Department of Sociology and the Office of Career Services (SSB, 2.101) for approval before registering for the course. Prerequisites: Declared sociology major and 15 hours completed in sociology and the consent of the department chair and the director of Career Services.

SOCW 1313 Introduction to the Social Work Profession
(Texas Common Course Number is SOCW 2361.) fall, spring, summer
Traces the philosophy and historical development of social work, reflecting its social welfare European roots and its historical evolution in America. A general overview of the social work profession, functions and services as they relate to various fields of practice will be studied. Volunteer work in the community will be required.

SOCW 2314 The Social Welfare Institution [3-0] fall, spring
This course emphasizes the social welfare institution, its laws, societal responses and parallel social work services. Specific welfare legislation and programs that impact the profession of social work will be examined.

SOCW 2375 Statistical Methods [3-0] This course orients the students to basic statistics concepts and procedures that are needed for generalist social work practice. Students have the opportunity to learn techniques for data analysis using chi-square, t-test, Pearson Correlation Coefficient, and ANOVA. Additionally, students use statistical software to compute inferential statistics. Prerequisite: Math 1340 or higher math.


SOCW 3314
Social Welfare Policy and Programs
[3-0]

## fall, spring

Examines economic, political, intellectual, sociocultural, leadership, values and ideologies and other such factors that shape social welfare policy, programs and services. Addresses various frameworks for studying social policy and examines the roles of policy-makers, process of social change and the role of the social worker as a facilitator of change. Prerequisites: SOCW 1313 and SOCW 2314.

## SOCW 3321 Human Behavior and the Social Environment I [3-0]

## fall, spring

This course presents an overview of theories that form social work practice with individuals and families. There is an emphasis on application of theory to practice. Prerequisite: SOCW 1313.

SOCW 3322 Human Behavior and the Social Environment II [3-0]

## fall, spring

This course presents an overview of theories that form social work practice with groups and communities. There is an emphasis on application of theory to practice.
Prerequisite: SOCW 1313.

SOCW 3323
Social Work Practice I
[3-○]
fall, spring
Through classroom and skills lab, the student will have the opportunity to examine some of the necessary knowledge, values, and skills upon which problem-solving is based. The student will also have the opportunity to learn the generalist approach to practice. Prerequisites: SOCW 1313, SOCW 2314 and admission to BSW Program.

SOCW 3333 Special Topics in Social Work Issues as scheduled
An analysis of conceptual frameworks, content, laboratory experiences and research opportunities in current social issues with particular relevance to our community, requiring the social worker's intervention, problem-solving knowledge, values and skills, and preparing the social work student and other helping professionals for interdisciplinary collaboration in achieving effective social change objectives. Sequential registration for up to six hours is permitted as topics vary. Topics will vary according to timeliness of issues, student demand and availability of faculty.

SOCW 3334 Social Work Practice with the Aging Family as scheduled
Students will have the opportunity to study interviewing, assessment and intervention, demographics of an aging population in America, roles and functions of families, the quality of life of the elderly, societal and cultural issues for older adults, supportive resources and networks as well as services for the aged and their family members. The generalist approach is applied to work with older clients through case examples and community assignments.

SOCW 3342 Substance Abuse and the Family
as scheduled
Provides an introduction to the basic dynamic nature of the substance-abusing family, including structures, relationships and development in the process of its societal evolution. The function of the family as a socialization agent will be studied. Focus will be given to value transmission, learning patterns of interaction, impact on varieties of relationships and coping styles.
Prerequisite: Junior standing or consent of the instructor.
SOCW 3351 School Social Work [3-0] Examines the major social issues confronting education, as well as how school social workers can interface with educators to address the problems of student absenteeism and underachievement, and the violence, racism and discrimination that are perpetuated by and against students. The roles and functions of school social workers are described. Prerequisite: Junior standing or consent of instructor.

SOCW 3360 Child Welfare
as scheduled
Examines child welfare history, policies, programs and practices. Best practices in child risk assessment, foster care and adoption and prevention of child abuse and
neglect are highlighted. Prerequisites: SOCW 1313 and SOCW 2314.

SOCW 3370 Interviewing Culturally Diverse Spanish-Speaking Clients [4.5-0]

## fall

This course is designed to increase the student's ability to culturally relate to Spanish-speaking ethnic groups and to be able to distinguish between formal and informal colloquial terminologies. Students will have the opportunity to be able to understand various cultural considerations such as folklore, customs, beliefs, diversity of Latinos and their Spanish-speaking variations that impact the interviewing process. Additionally, this course is designed to improve the student's comfort level to communicate effectively with native Spanish-speaking clients and/or patients.

## SOCW 4301 Social Work Practice II [3-0]

 fall, springDesigned to provide social work students with knowledge of direct practice with families and small groups using the problem-solving approach. Students will have the opportunity to selectively use concepts and techniques from various models, e.g., systems perspective, psychosocial theory, behavior modificationand familyfocused work as frameworks to develop strategies in clinical and cross-cultural intervention. Prerequisite: SOCW 3323.

## SOCW 4302 Social Work Practice III

## fall, spring

This course provides students with knowledge of direct practice with communities and large organizational systems. Students will have the opportunity to learn how to apply the problem-solvingprocess to bring about social and economic justice. Prerequisite: SOCW 3323.

SOCW 4311 Research for the Social Services [3-0] fall, spring
This course introduces students to the scientific method and how it is used by social workers to effect social change, improve the delivery of social services and to evaluate practice. Prerequisite: SOCW 2375 or equivalent.

SOCW 4320 Social Work in Health Care [3-0] as scheduled
This course focuses on the health care system, clients as consumers of health and health care issues as they relate to social work practice. An examination of health-related settings and the diverse skills, roles and functions of social workers will be studied within a team intervention approach with emphasis on gender, ethnic and cultural aspects of health care. Prerequisite: Junior standing or consent of instructor.

SOCW 4321 Domestic Violence in Society [3-0] fall, spring, summer
This course will examine the phenomenon of domestic violence. Students will have the opportunity to study family structure in which violence occurs, the range of abuse (from verbal to homicide) and its extent in society and the various attitudes toward it. Understanding of the basic theories, identification of support services and systems for victims of domestic violence and development of basic communication skills for assisting the victims will be expected of the student. Prerequisite: Junior standing or consent of instructor.

SOCW 4352 Substance Abuse Counseling in the Community
as scheduled
Patterns of street substance abuse, community education and agency consultation, resource evaluation of such support systems as AA, halfway houses, networking, divergency programs, therapy with the abuser and family are emphasized as follow-up and outreach social work intervention at the community level. Counseling processes studied will include vocational rehabilitation. Cultural assessment, evaluation of treatment effectiveness and legal-ethical issues will be examined in the context of social service delivery. Prerequisite: Junior standing or consent of instructor.

SOCW 4353 Integrative Field Seminar [3-0] This course is taken concurrently with SOCW 4619 Field Education. A seminar format facilitates the intern's integration of the field education experience and the program's generalist curriculum. Emphasis is placed on linking classroom learning with practice in the field and integrating theory with professional practice. Field practicum situations and issues are used for discussion and analysis.

SOCW 4399 Independent Studies
as scheduled
Designed to give students experience in research or in-depth theoretical/empirical in a substantive area not normally covered within standard courses. Research projects or advanced readings will vary according to student interest and faculty availability. Prerequisite: Consent of instructor.

SOCW 4619 Field Education
[0-0-36]

## fall, spring

This course requires a minimum of 480 hours (four days a week for one semester) of in-the-field experiences in established social agencies or community settings under joint supervision of the agency social worker and a Department of Social Work faculty member. SOCW 4619 is taken concurrently with SOCW 4353. Prerequisite: Approval by the Office of Field Instruction.

## SPANISH

MCLL 2301 Special Topics in Modern/ Classical Literature
[3-0]
This special topics course explores the literary manifestations of the classical and modern world. Using a historical approach to the study of literature, the students examine the evolution of literary genres or movements in classical and modern cultures. The objective of this course is to expand the student's knowledge of the human condition and human cultures, especially in relation to behaviors, ideas and values expressed in literary works.

## SPAN 1301 Beginning Spanish <br> (Texas Common Course Number is SPAN 1313.) <br> fall, spring, summer

[3-0]

A course designed to develop the ability to understand, speak, read and write the Spanish language. Open only to persons who are monolingual. Credit Restriction: A student may receive credit in only one of SPAN 1301, SPAN 1303 or SPAN 1387.

SPAN 1302 Beginning Spanish [3-0]
(Texas Common Course Number is SPAN 1314.)
fall, spring, summer
A continuation of SPAN 1301. Credit Restriction: A student may receive credit in only one of SPAN 1302, SPAN 1304 or SPAN 1388. Prerequisite: SPAN 1301.

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SPAN 1303 Beginning Spanish [3-0]
(Texas Common Course Number is SPAN 2313.)
fall, spring, summer
A course designed to develop the ability to read and to write the Spanish language. For students who are bilingual. Credit Restriction: A student may receive credit in only one of SPAN 1301, SPAN 1303 or SPAN 1387.
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SPAN 1304 Beginning Spanish [3-0] (Texas Common Course Number is SPAN 2315.) fall, spring, summer
A continuation of SPAN 1303. Credit Restriction: A student may receive credit in only one of SPAN 1302, SPAN 1304 or SPAN 1388. Prerequisite: SPAN 1303.

SPAN 1387 Beginning Spanish
(Honors Plan)
[3-○]
as scheduled
A beginning Spanish course designed to meet the needs of Honors students interested in learning to read and write Spanish fluently at an accelerated pace. Some readings and culture will be introduced. Open to
students needing systematic introduction to the Spanish language. Credit Restriction: A student may receive credit in only one of SPAN 1301, SPAN 1303 or SPAN 1387.

SPAN 1388 Beginning Spanish
(Honors
Plan)
[3-○]
as scheduled
A beginning Spanish course designed to meet the needs of Honors students interested in learning to read and write Spanish fluently at an accelerated pace. Some readings and culture will be introduced. Open to students needing systematic introduction to the Spanish language. Credit Restriction: A student may receive credit in only one of SPAN 1302, SPAN 1304 or SPAN 1388.

## SPAN 2301 Technical Spanish I

[3-0]
In this course we will review grammatical structures and introduce the student to technical terminology in Spanish. The student will have the opportunity to read and translate technical texts. We will discuss cultural aspects affecting technology in the Hispanic world. Prerequisite: SPAN 1302 or 1303.

SPAN 2302 Technical Spanish II [3-0]
This course is a continuation of SPAN 2301. The student will have the opportunity to apply the knowledge acquired in Spanish technical terminology to the writing of technical and business reports related to engineering and science. Prerequisite: SPAN 2301.

SPAN 2307 Intermediate Spanish for Native Speakers
(Texas Common Course Number is SPAN 2311.)
fall, spring, summer
A comprehensive review of Spanish grammar with special emphasis on writing. Prerequisite: SPAN 1304.

SPAN 2308 Intermediate Spanish
for Native Speakers
(Texas Common Course Number is SPAN 2312.)
fall, spring, summer
A continuation of SPAN 2307. Prerequisite: SPAN 2307.
SPAN 3301 Spanish Literature
(from 1100 to 1750)
as scheduled
A survey of the literature of Spain from El Cid to the middle of the 18th century. Prerequisite: SPAN 2308.

SPAN 3302 Spanish Literature
(1750 to the present) [3-0]
as scheduled
A survey of the literature of Spain from Romanticism to the Modern period. Prerequisite: SPAN 2308.

SPAN 3303 Advanced Spanish Composition [3-0] as scheduled
Intensive training in Spanish composition. Prerequisite: SPAN 2308.

SPAN 3304 Advanced Spanish Composition [3-0] as scheduled
Additional work in composition. Prerequisite: SPAN 2308.

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SPAN 3306 Basic Concepts of Spanish
    Phonetics and Phonology [3-0]
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as scheduled

An analysis of the phonetic and phonological system of Spanish with special emphasis on the relationship between the phonetic system and writing. Prerequisite: SPAN 2308.

SPAN 3309 Techniques of Literary Analysis [3-0] as scheduled
A study and practical application of the fundamentals of literary criticism. Several different approaches to literary analysis will be presented in order to construct a solid basis for the interpretation of literature. Prerequisite: SPAN 2308.

## SPAN 3310 Masterpieces of Spanish-American Literature I [3-0]

 as scheduledAn investigation of the literary works of the principal narrators, poets and dramatists of Spanish America from the beginnings of Spanish colonialism to modernism. Analysis of form and content and study of the historical background and literary currents in each work.
Prerequisite: SPAN 2308.
SPAN 3311 Masterpieces of Spanish-American Literature II [3-0] as scheduled
An investigation of the literary works of the principal narrators, poets and dramatists of Spanish America from modernism to the present. Analysis of form and content and study of the historical background and literary currents in each work. Prerequisite: SPAN 2308.

SPAN 3316 The Mexican Novel [3-0] as scheduled
The study of the major novels of Mexico. Prerequisite: SPAN 2308.

SPAN 3319 Introduction to Hispanic Linguistics

## fall, spring, summer

An overview of the scientific study of the Spanish language. A general introduction to linguistic theories followed by application to the phonology, morphology,
syntax and language variation and change in Spanish. Prerequisite: SPAN 2308.

SPAN 3330 Spanish Grammar as scheduled
A study of grammatical concepts with concentration on basic sentence structure, the paragraph, principles of punctuation and functional grammar. Course designed for Spanish majors and minors as well as those interested in bilingual endorsement. Prerequisite: SPAN 2308. Prerequisites for aspirants to bilingual/bicultural endorsement: SPAN 2308 and ENG 3319.

SPAN 3334
Business Spanish
fall, spring
Review of basic principles and Spanish nomenclature of political economy, accounting, marketing, management and finance. Theory and practice of commercial and civil registers. Correspondence and report writing.

## SPAN 3340 Introduction to <br> Latin American <br> Literature

## fall, spring, summer

An introduction to the major literary movements and figures of Latin America from pre-Columbian times to the present. Focuses on the roles of race, class, gender and ethnicity of literary canons in Latin America.
Prerequisite: Spanish 2308.
SPAN 3341 Introduction to Spanish Literature
fall, spring, summer
An introduction to the major literary movements and figures of Spain from medieval times to the present. Highlights major works that have influenced world literature. Prerequisite: SPAN 2308.

SPAN 3343 Spanish Language Media Studies
fall, spring, summer
Introduction to the methods and styles of coverage of new trends and events in Spanish focusing on both writing and diction. Practice in writing newspaper articles and newscast scripts for radio and television. Practice in English and Spanish translation for the media.

SPAN 4303 Spanish Civilization as scheduled
A survey course covering the entire range of Iberian history outlining the major differences between Spanish culture and the cultures of other Western nations. Given in Spanish. Prerequisite: SPAN 2308.

SPAN 4304 Spanish Lyric Poetry as scheduled
A survey of lyric poetry from the beginning to the present. Given in Spanish. Prerequisite: SPAN 2308.

$$
\begin{aligned}
& \text { SPAN } 4305 \quad \text { Cervantes } \\
& \text { as scheduled } \\
& \text { A study of the principal works of Miguel de Cervantes } \\
& \text { with particular emphasis on Don Quixote. Given in } \\
& \text { Spanish. Prerequisite: SPAN } 2308 \text {. }
\end{aligned}
$$

SPAN 4306 History of the Spanish Language [3-0] as scheduled
A detailed study of the Spanish language from the beginning to the contemporary period. Historical aspects of each period will be discussed to relate the contributions of different people whose language contributed to the development of the Spanish language. Prerequisite: SPAN 2308.

## SPAN 4307 Spanish-American Novel [3-0]

 as scheduledBegins with a study of literary and historical influence in the 19th century Spanish-American Gaucho and Costumbrista novels and those showing European influence: Guiraldes, Blest Gana, Gamboa. Examination of recent literary trends: Mallea, Sabato, Roa Bastos, Vargas Llosa. Prerequisite: SPAN 2308.

SPAN 4308 Medieval Spanish Literature as scheduled
A study of the principal literary works of Spain from El Cid to the Romancero. Given in Spanish. Prerequisite: SPAN 2308.

SPAN 4309 Contemporary Spanish Literature [3-0] as scheduled
A study of the principal literary works of Spain from the Generation of 1898 to the present. Given in Spanish. Prerequisite: SPAN 2308.

## SPAN 4311 Mexican Literature I

as scheduled
A study of the principal works of Mexican literature beginning with the period of the Spanish conquest until 1850. Prerequisite: SPAN 2308.

## SPAN 4316 Problems and Issues Related to Language

[3-0]

## as scheduled

Concentrated study of language theory, language acquisition, functions and role of language in society, and current trends and problems related to the topic. Prerequisite: SPAN 2308.

SPAN 4317 Golden Age Prose [3-0] fall, spring
A critical study of the most representative prose works of Golden Age Spain. Given in Spanish. Prerequisite: SPAN 2308.

SPAN 4318
Theater and Poetry of the Golden Age
as scheduled
Study of the principal dramatists and poets of the Golden Age such as Lope de Vega, Tirso de Molina, Juan Ruíz de Alarcón, Garcilaso de la Vega, Fernando de Herrera, Luis de Góngora and others. Prerequisite: SPAN 2308.

SPAN 4325 Caribbean Literature [3-0] as scheduled
A critical review and analysis of Caribbean literature with emphasis on the literary techniques and the cultural reflection in the literature.

SPAN 4329 Mexico's Contemporary Literature [3-0] as scheduled
An investigation of Mexico's latest literature taking into account the psychological effects stemming from the industrial surge, the problems of the migration of the poor, the rebirth of the malinchista spirit, the new identity and the erosion of old traditions in the last two decades. Prerequisite: SPAN 2308.


SPAN 4331 Problems in Grammar, Dialects and Language Performance
[3-0]

## fall

A study of the second language learner's transition from regional Spanish to standard English. Emphasis on the particular characteristics of the English and Spanish dialects of the region and the manner in which they interrelate.

SPAN 4335 Spanish-English Legal Translation [3-0] fall, spring
Intensive practice in the translation from Spanish to English and English to Spanish of selected documents from legal, business and medical fields.

SPAN 4336 Grammar and Composition as scheduled
The study of the Spanish language applicable to the concerns of secondary school classroom teachers and the acquisition of skills and knowledge essential to testing and teaching advanced grammar and composition are the goals of this course. Prerequisite: SPAN 2308.


SPAN 4337 Eighteenth Century Spanish Literature
fall, spring
A survey of the literature of Spain covering the neoclassic from Feijoo to Fernández de Moratín. Prerequisite: SPAN 2308.

SPAN $4338 \quad$ Nineteenth Century Spanish Literature

## as scheduled

A survey of the literature of Spain covering the two main literary movements: Romanticism and Realism. Prerequisite: SPAN 2308.

SPAN 4339 The Spanish-American Short Story
as scheduled
A study of the evolution of this genre in Spanish-American literature themes, techniques and literary movements will be investigated. The writers studied in this course will include: Echeverría, Palma, Gutiérrez, Nájera, Quiroga, Borges, García Márquez, Fuentes and others.

SPAN 4340
The Spanish-American Essay
[3-0]
fall, spring
A study of this genre in Spanish-American literature. Themes, content, style and literary movements will be studied.

SPAN 4391
Special Topics in
Hispanic Linguistics
spring
A capstone seminar designed for focused study of a single topic of importance in the field of Hispanic linguistics. Topics may include Spanish in the United States, History of Spanish in the Americas, Heritage Language Teaching, Language Policy, etc. (May be repeated twice for credit as topic varies.)

SPAN 4392 Special Topics in Hispanic Literatures
spring
A capstone seminar designed for focused study of a single topic of importance in the field of Hispanic literature. Topics may include in-depth study of a single author, a group of authors or a literary movement. (May be repeated twice for credit as topic varies.)

## 3 Special EdUCATION

## SPED 1305 Introduction to the Exceptionalities

## fall, summer

Focus of this course will include the identification and analysis of characteristics of exceptional individuals. This includes various characteristics of the exceptionalities and the educational and treatment needs through the lifespan. Historical and current social, cultural, legal, educational and professional topics related to the development of special education will be covered. Course may be taken without admission into the College of Education.
$\begin{array}{ll}\text { SPED } 2304 & \begin{array}{l}\text { Adaptations for Individuals } \\ \text { with Disabilities }\end{array} \\ \text { [3-0] }\end{array}$ spring, summer
The focus of this course will be assistive technology on software and equipment to meet the educational needs of individuals with disabilities. Course may be taken without admission into the College of Education.

SPED 3302 Theories of Learning Disabilities [3-0] spring, summer
This course surveys the theories basic to the study of learning disabilities. The course emphasizes the inactive learner theory and related cognitive and metacognitive learning strategies. Prerequisite: SPED 1305 or consent of the instructor.

SPED 4300 Testing and Assessment of Exceptional Individuals

## fall, summer

The content of this course will include norm and criterion referenced measures, systematic observational procedures and clinical observation techniques. There will be an emphasis on the assessment of individuals with disabilities who are at variance linguistically and socioculturally. Field experiences are required. (FieldBased Approved Course.) Prerequisite: SPED 1305.

SPED 4301 Strategies, Methods and Materials for Teaching Individuals with Mild to Moderate Disabilities

## fall, spring

This course will include topics such as learning styles, cooperative learning, whole language, manipulatives, materials and strategies for teaching individuals with disabilities. Field-based experiences are required.

Prerequisite: SPED 1305 or consent of instructor.
SPED 4303 Theories of Social Competence and Behavioral Interventions
fall, summer
The content of this course includes the diverse intervention processes and theories in social skills intervention, behavior modification, cognitivebehavioral strategies and crisis prevention intervention.
Field experiences are required. Prerequisite: SPED 1305 or consent of instructor.

SPED 4309 Program Planning of Secondary Special Education
fall, spring
This course will address the needs of secondary special education students, including vocational and career assessment, vocational programming and transitional planning. Field experiences are required. (Field-Based Approved Course.) Prerequisite: SPED 1305 or consent of instructor.

## 3 Statistics

STAT 2330 Elementary Statistics and Probability
as scheduled
This course is intended to provide students with an elementary overview of the mathematical nature and uses of descriptive and inferential statistics. Topics include the definition and fundamental theorems concerning measures of central tendency and dispersion, empirical and theoretical concepts of probability, the central limit theorem, tests of hypotheses, interval estimation, chi-square tests, and regression and correlation. Equivalent Course: MATH 2330; credit may be received for only one course. Prerequisite: MATH 1334 with a grade of "C" or better or satisfactory score on ACT or placement exam.

STAT 3337 Applied Statistics I
as scheduled
This course concerns itself with probabilistic models, regression analysis, nonparametric statistics and the basics of experimental design. Computer laboratory experience will be an important part of the course. Equivalent Course: MATH 3337; credit may be received for only one course. Prerequisites: Junior standing and either MATH 1340 or MATH 1341. It is highly
recommended that the student have some knowledge of statistics such as is offered in STAT 2330.

STAT 4336 Sampling
as scheduled
This course surveys the basic elements of sampling, including concepts of population and sample, the organization of a sample survey, coverage content error, questionnaire design, basic survey designs and computation of estimates and variances. Prerequisite: STAT 3337 or MATH 3337.

## Film Studies

Although UTPA does not have a formal program leading to a degree in Film Studies, a number of faculty members offer courses on films. The courses are listed below:

COMM 3324 Cinematography/Videography Principles of single camera "film style" location video production. Using video equipment, students will produce short productions based on careful preproduction planning (scripting and storyboarding). Major stress on post-production editing and quality of finished product.

COMM 3325 Motion Picture History and Significance Historical survey of motion pictures from 1890s to the present. Students will have the opportunity to view, study and review major motion pictures from various periods, noting important periods, styles, genres and movements in the dramatic film (including foreign films and TV). Viewing lab arranged.

## POLS 3318 Special Topics in Political Science:

 The Political FilmOffered during the fall semester of odd-numbered years. This course explores how films have addressed various political topics, including such issues as racism and sexism, politics and corruption, crime as a metaphor for the U.S. political system, individual autonomy vs. institutional obligations and the concept of community.

## 3 OTHER

UNIV 1301 Learning Framework [3-0] as scheduled
The purpose of the course is to provide an opportunity for students to understand the psychology of learning and its application to their own university experience and to their chosen major/profession. The course will focus on the assessment, understanding and application of the psychology of learning, cognition and motivation.

## WOMEN'S Studies

## WMST 1301 Introduction to Women's Studies

as scheduled
This course is an introductory study of the status, roles and representations of women in society. Topics include interdisciplinary approaches to social variables such as gender, class and ethnicity as they intersect in women's lives.

WMST 2301 Women's Studies Theory, Method and Practice
as scheduled
This course builds on the core concepts, theories and methodologies particular to women's studies scholarship and examines the historical unfolding of the multiplicity of analytical perspectives applicable to the field.
Prerequisite: WMST 1301 with a "C" or better.
WMST 3307 Women in Music
[3-0]
as scheduled
The course introduces students to women composers in Western culture from Hildegard von Bingen (1098-1179) to the present. Course content includes biographical information, contributions to music and listening. This course provides an opportunity for students to learn about artistically creative women as well as the elements, structure and appreciation of music and musical styles.

WMST 3308 Emerging Female Identity [3-0] as scheduled
This course will focus on the emerging identity of women in the literary works of the American South and Southwest since 1960. Although several themes, such as family life, geography and migration will be examined, the development of the female individual and the quest for identity as represented in works of different generations and regions will be emphasized.

WMST 3309 Women's Health Issues [3-0] as scheduled
This course is designed to introduce the student to theories, concepts, practices and issues related to women's health, with an emphasis on self care. Psychosociocultural, political and ethicolegal factors will be addressed and analyzed. Prerequisites: WMST 1301 and WMST 2301. Cross-listed as NURS 3309 Women's Health Issues.

## WMST 3338 Gender Development in International Context

## fall, spring, summer

Using current knowledge regarding gender role socialization in the United States as a frame of reference, this course examines how societies create and attach meaning to the categories of male and female. It explores the differential effects of worldwide trends as they intersect gender roles and opportunities available to women in the context of economic globalization. This course promotes awareness of gendered cognitive development, appreciation for the diversity of identities of men and women and enhanced critical thinking about social justice and gender-just society. Equivalent Course: May be counted as PSY 3338; a student may receive credit in only one course.

WMST 3341 Women's Rhetoric and Language
[3-0]

## spring

This course provides a focus on rhetoric and language in women's experiences. Related topics will include the contribution women have made to the Western rhetorical tradition as well as the consideration of the differences in actual language uses and conventions by and about women.

WMST 3342 Ethnic Women Writers [3-0] spring
This course provides a focus on women's writing from a multicultural perspective. Centered on the study of literary works and literary theory either by or about women, this course offers a global perspective and pursues insights about various approaches to the question of ethnic women and their representation.

WMST 3343 Women's Literature [3-0]
spring
This course provides a focus on literature by women and the contributions that such literature has made to a variety of cultural and social contexts. The focus will be on feminist perspectives and theories in critical analysis.

WMST 3344 Gender, Crime and Criminal Justice
as scheduled
The course will focus on female criminality, gendered victimization, punishment/treatment/correction of female offenders, female inmate subculture and women workers in the criminal justice system. Social ideologies about race, class and gender will be examined as to their relevance in shaping and defining crime, criminology and the sociolegal treatment of offenders, victims and professionals.

WMST 3375 Women in History -Topics [3-0] as scheduled
This course will introduce students to the growing and diverse field of women's and gender history. It will examine the experiences, roles and contributions of women in politics, economics, labor and culture. The time period, focus and geographical area will change according to the instructor. Suggested topics inclue Mexican American-Chicana History and Latina History.

WMST 3376 Feminist Theories [3-0] as scheduled
This course is designed to examine the variety of existing feminist theories and their roots in diverse modes of philosophical analysis. It will explore how various feminist theories are consonant with or diverge from their base theories and from each other and whether such theories are still cogent. Methodology will incorporate both feminist pedagogy and traditional philosophical analysis, including feminist critique of the tradition. Prerequisite: PHIL 1310.

WMST 3380
as scheduled $\quad$ Gender in U.S. Politics
This course examines multidimensional aspects of gender and political life in the United States The course analyzes the relationship among gender, culture, political behavior and public policy, and explores the historical evolution of the role of women in the U.S. political system.

WMST 3381 Women and Global Political Movements
as scheduled
This course analyzes women's social and political movements in a global context. The course provides a comparative examination of women's political and social participation and development.

WMST 4301 Capstone Seminar in Women's Studies

## as scheduled

This seminar course is designed to emphasize the various intersections of women's opportunities and constraints across social variables, categories and institutions. Students will discuss, design, research, construct and present a project on topics relevant to issues addressed in women's studies. Topics and assignment particulars may vary by instructor. Prerequisites: WMST 1301,WMST 2301, at least two cross-listed WMST advanced electives (all with a "C" or better), and consent of program coordinator.

## WMST 4309 The Anthropology of Women [3-0] fall

This course is concerned with anthropological studies done by women and about women, and studies of gender roles and gender inequality beginning in the late 19th century. Employing a historical perspective, it encourages critical assessment of gender studies and uses cross-cultural studies to focus on gender in certain
aspects of social life. Prerequisites: ANTH 1323 or consent of instructor.

WMST 4310 Gender in a Global Perspective [3-0] fall, spring, summer
An exploration of the sociological meaning of gender and gender roles in contemporary society. The focus is on the status of women vís-á-vís that of men in the institutional structure - family, marketplace, school and politicallegal arena. The nature and the causes of sex role differentiation, of changing sex roles and the future of sexual equality will be discussed. Prerequisite: Six hours of sociology or social studies or consent of instructor.

## WMST 4330 Gender Research in Social Psychology

## fall, spring, summer

The course examines gender in research taken from articles found within the peer-reviewed professional journals in social psychology. Prerequisite: Any statistics course.


# Glossary OF TERMS 

- [3-0] or [3-0-12] (for example)

Regularly scheduled classes at UT Pan American have prescribed contact hours (the actual number of hours each week a student will spend in lecture, laboratory and/or clinical sessions for that class) that are shown in brackets to the right of the course title in each department's course listings. The first number denotes the number of lecture contact hours, the second number denotes the laboratory contact hours, and a third number, if included, is the number of clinical contact hours. These numbers apply to the courses as they are scheduled for the fall or spring semester. Summer weekly contact hours will be adjusted to compensate for the shorter duration of the semester. Examples:
[3-o] The class will have three hours of lecture per week.
[2-3] The class will meet for two hours of lecture and three hours of laboratory per week.
[3-0-12] The class will have three hours of lecture and 12 hours of clinical experience each week.

- Accreditation - College or University

A college or university in the United States is considered accredited if it is recognized by one of the following regional accrediting agencies:

- Middle States Association of Colleges and Schools
- New England Association of Schools and Colleges
- North Central Association of Colleges and Schools
- Northwest Association of Schools and Colleges
- Southern Association of Colleges and Schools
- Western Association of Schools and Colleges


## - Accreditation - High School

A high school in Texas is considered accredited if it is recognized by the Texas Education Agency (TEA). High schools outside of Texas are considered accredited if they are recognized by their state accreditation agency.

## - Advanced-level Work

Courses numbered 3000-4000 are advanced or upper-division courses. Courses numbered 3000 are designated as junior level, and 4000-numbered courses are designated as senior level. Approval of the department chair or dean of the college is required for enrollment in advanced-level courses by students who have not reached
junior standing. Students who have not passed all portions of the TASP exam may not enroll in any advanced-level coursework if, upon completion of the work, the student would have completed 60 or more hours.

## - Attempted Hours

Attempted hours are the total number of hours for courses that a student has attempted, including failing grades such as "F," "DF" and "WF." Repeated courses, failing grades over seven years old, incomplete grades and credit (CR) grades are not included in attempted hours at the undergraduate level.

## - Census Date

The official census date for The University of TexasPan American is the 12th class day for regular fall and spring semesters or the fourth class day for summer sessions.

## - Common Course Number

If the course is generally equivalent to other lowerdivision courses taught at universities and community colleges within the state, the Texas Common Course Number is shown in the course description for informational purposes. See page 27 for further information.

## - Contact Hours

Number of regularly scheduled hours per week that a lecture, laboratory or clinical experience is scheduled to meet during a long semester. (See [3-0] above.)

- Coursework in Residence

Coursework in residence refers to coursework actually completed on the UT Pan American campus. Extension, credit by examination, ` and transfer credit may not be used to complete the residency requirement for graduation.

- Dean's List

After each regular semester, a dean's list is published listing the names of all undergraduate students enrolled in a minimum of 12 college-level hours who have a grade point average of 3.5 or better for courses taken that semester. A dean's list is not produced during the summer sessions.

## - Designated Electives

Students have choices within the category of designated electives but must complete the required number of courses or hours from those specified.

## - Elective Hours

Required semester hours for which specific courses are not prescribed are listed as elective hours.

## - Entering Freshman

A student admitted as an entering freshman has not attended any accredited college or university.

## - Full-time Graduate

A graduate student who is enrolled for at least nine hours of credit during a regular semester, or at least four hours of credit during a summer session, is considered fulltime.

## - Full-time Undergraduate

An undergraduate student who is enrolled for at least 12 semester hours during a regular semester, or at least six hours of credit during a summer session, is considered fulltime.

## - Half-time Graduate

A half-time graduate student is one who is enrolled for six to eight hours of credit during the regular semester or three hours of graduate credit during a summer session.

- Half-time Undergraduate

A half-time undergraduate student is one who is enrolled for six to 11 semester hours during the regular semester or three hours of credit during a summer session.

## Three-Quarter Time Undergraduate

A three-quarter time undergraduate student is one who is enrolled for nine to 11 semester hours during the regular semester.

## - Hours

College credit at UT Pan American is measured in terms of semester credit hours. Ordinarily, a class that meets one 50-minute period per week for a regular semester will carry a credit of one hour. The majority of classes meet three periods or their equivalent each week and carry three hours of credit. Two or three laboratory hours per week are usually required for one hour of laboratory credit.

## - Leveling Work

Coursework designed to eliminate deficiencies in educational background of students admitted or being considered for admission to a graduate program is called leveling work. (Graduate programs are designed on the assumption that students have a common body of
knowledge.)

## Maximum Course Load

The maximum load for a full-time undergraduate student is 18 hours in a regular semester and 15 for each summer session. Students may be permitted to enroll for additional hours with the approval of his or her undergraduate advisor and the dean of the college.

## MTEL

The MTEL (Michigan Test of English Language) is one of the two major English-language proficiency tests for non-native speakers of English. The other exam is the TOEFL (Test of English as a Foreign Language). Only the TOEFL is administered at UT Pan American.

## - Prerequisite

A course listed with a prerequisite means that specified requirements must be met before one can enroll in the course. Specific prerequisites are listed in course descriptions.

## - Probation

Students are placed on scholastic probation when they fail to achieve the required overall grade point average. Students may be placed on disciplinary probation for infraction of any University regulation. In either case, they must satisfy specific requirements before they can return to a non-probationary status. For further information, refer to the section in this catalog on scholastic probation and suspension on page 67 for undergraduate students and to the Graduate Catalog for graduate students. The Student Conduct and Disciplinary Code is discussed on page 87.

## - Regular Semester

A regular semester is any 15 -week fall or spring semester.

## - Returning Student

A student whose last institution attended was UT Pan American is admitted as a returning student after an absence of at least one regular semester.

## Semester (see Regular Semester)

## Special Student

A student holding at least a bachelor's degree from an accredited institution who does not wish to enter the graduate school may be permitted to register as a special student in one of the undergraduate colleges and is subject to all rules and regulations of that college.


Special Graduate Student
Special graduate students are those holding a master's degree from an accredited institution who do not wish to enter a graduate program but wish to attend courses.

## Summer Session

As part of its regular program, the University offers two summer sessions, each five-and-one-half weeks long.

- Three-Quarter Time Undergraduate

A three-quarter time undergraduate student is one who is enrolled for nine-11 semester hours during the regular semester.

## - Transfer Students

Students admitted as transfer students have last attended an accredited college or university other than, or in addition to, UT Pan American.

Upper Division (see Advanced-level Work)

## 3 FACULTY LISTING

Abraham, John P., Professor, Department of Engineering and Computer Engineering; Networking; Ed.D., University of Houston, 1986.

Acevedo Jr., Baltazar A., Professor, Department of Educational Leadership; Director, Center for Applied Research in Education; Southwest Texas State University, 1969; MA, Western Michigan University, 1974; Ph.D., The University of Texas at Austin, 1979.

Adair, Penelope A., Associate Professor, Department of History and Philosophy; History; Ph.D., University of California-Santa Barbara, 1993.

Affeldt, Robert J., Assistant Professor, Department of English; Language and Rhetoric; Ph.D., The University of New Mexico, 2001.

Agbese, Aje-Ori, Assistant Professor, Department of Communication; Writing for the Mass Media, Copy Editing, Mass Media Law and Ethics, Intercultural Communication; Ph.D., Bowling Green State, 2004.

Ahluwalia, Punit, Assistant Professor, Department of Computer Information Systems and Quantitative Methods.

Ahmad, Hassan, Professor and Department Chair, Department of Chemistry; Biochemistry; Ph.D., Aligarh Muslim University, 1983.

Ahn, Seokyoung, Assistant Professor, Department of Mechanical Engineering; Mechanics of Solids, Motion Element Design, Modern Control Systems, Introduction to Laser Material Processing, Optimal Control; Ph.D., The University of Texas at Austin, 2005.

Aldridge, James W., Jr., Professor, Department of Psychology and Anthropology; Psychology, Perception, Cognition, Memory; Ph.D., State University of New York at Binghamton, 1976.

Alianak, Sonia, Assistant Professor, Department of Political Science; Comparative Government, International Relations, American Government; Ph.D., The University of Texas at Austin, 1987.

Almaguer, Isela, Assistant Professor, Department of Curriculum and Instruction; Curriculum and Instruction, Emphasis on Teacher Education; Ed.D., University of Houston, 2003.

Alvarado, Frances E., Lecturer, Department of Mathematics; Elementary Algebra, Intermediate Algebra, College Algebra, Business Algebra, Trigonometry; MEd, The University of Texas-Pan American, 1994.

Alvarado, Victor, Professor, Department of Educational Psychology; Educational Leadership, Guidance and Counseling; Ed.D., Western Michigan University, 1976.

Alvarez Martinez, Stephanie, Lecturer, Department of Modern Languages and Literature; Spanish, Literature.

Ambriz, Frank, Program Chair and Assistant Professor, Physician Assistant Studies Program; Pediatrics, Pulmonology, Internal Medicine; BS, The University of Texas Medical Branch-Galveston, 1979.

Anderson-Mejias, Pamela, Associate Professor, Department of English; Applied Linguistics, Second Language Acquisition; Ph.D., Indiana University, 1980.

Anshen, David W., Assistant Professor, Department of English; Ph.D., State University of New York at Stony Brook, 2004.

Aounallah, Abdallah, Lecturer, Department of Electrical Engineering.

Appiahene-Gyamfi, Joseph, Associate Professor, Department of Criminal Justice; Criminology, International Criminal Justice, Corrections; Ph.D., Simon Fraser University, 1999.

Ardalani, Elvia G., Assistant Professor, Department of Modern Languages and Literature; Spanish; Ed.D., Texas A\&I University-Kingsville, 1990.

Arizmendi, Lydia González, Associate Professor, Department of Social Work; Generalist Social Work Practice and Marco Practice; J.D., University of California-Davis, 1978; MSW, University of MichiganAnn Arbor, 1973.

Arredondo, Sonja L., Lecturer, Department of Social Work.

Atamian, Rubik, Associate Professor, Department of Accounting and Business Law; Accounting; Ph.D., The University of Texas at Austin, 1984.


Avellano, George, Professor, Department of Management, Marketing and International Business; Marketing; Ph.D., The University of Oklahoma, 1975.

Ayala, Kara J., Assistant Professor, Department of Communication Sciences and Disorders.

Baik, Ellen R., Assistant Professor, Department of Political Science.

Baker, Willard R., Assistant Professor, Physician Assistant Studies Program.

Balogh, Andra's, Associate Professor, Department of Mathematics; Mathematics; Ph.D., Texas Tech University, 1997.

Banatoski, Edward, Lecturer, Department of Electrical Engineering; Ph.D., The University of Texas at Arlington, 2000.

Banik, Bimal K., Associate Professor, Department of Chemistry; Organic Chemistry; Ph.D., Jadavpur University-India.

Bastida, Elena, Professor, Department of Sociology; Aging, Theory, Gender Roles; Ph.D., University of Kansas-Lawrence, 1979.

Bautista, Beatriz (Betty), Lecturer, Department of Nursing; MSN, University of South Carolina-Columbia, 1990.

Behar, Stella, Associate Professor, Department of Modern Languages and Literature; French; Ph.D., University of California at Los Angeles, 1991.

Belau, Linda, Associate Professor, Department of English; Philosophy, Literature, and the Theory of Criticism; Ph.D., State University of New York at Binghamton, 2000.

Ben Ghalia, Mounir, Associate Professor, Department of Electrical Engineering; Systems Modeling and Robust Control, Robotics, Neural Networks, Knowledge-Based Systems; Ph.D., Tennessee Technological University, 1995.

Benham, Grant, Assistant Professor, Department of Psychology and Anthropology; Psychology; Ph.D., The University of Tennessee-Knoxville, 2000.

Bernard, John E., Professor, Department of Mathematics; Mathematics Education; Ph.D., The University of Texas at Austin, 1978.

Beverly, William T., Assistant Professor, Department of Social Work; Ph.D., Virginia Commonwealth UniversityRichmond, 2003.

Bhat, Narayan, Professor, Department of Chemistry; Organic Chemistry; Ph.D., University of Poona-India, 1982.

Bhatta, Dambaru D., Assistant Professor, Department of Mathematics; Ph.D., Dalhousie University-Canada, 1995.

Bhatti, Muhammad Idrees, Professor, Department of Physics and Geology; Atomic Physics; Ph.D., University of Notre Dame, 1987.

Blankenship, Charlene J., Undergraduate Coordinator and Assistant Professor, Department of Rehabilitation Services; Ph.D., Southern Illinois University.

Blomquist, Melinda, Lecturer, Department of Health and Kinesiology; Dance; MA, Brigham Young University, 1998.

Bokina, John, Professor, Department of Political Science; Political Theory, Western and Eastern Europe; Ph.D., University of Illinois, 1979.

Borrego, Espiridion A., Program Director and Associate Professor, Department of Public Administration.

Bose, Subhash C., Beecherl Professor, Manufacturing Engineering Department; Process and Product Design, Computer-Aided Manufacturing, Robotics and Control; Ph.D., The University of Wisconsin-Madison, 1987.

Bowe, George, Lecturer, Department of Criminal Justice.
Bowen, Judith E., Associate Professor and Chair,
Department of Occupational Therapy; MA, Memphis State University, 1979.

Bracken, Paul, Assistant Professor, Department of Mathematics; Applied Mathematics; Ph.D., University of Waterloo, Ontario-Canada, 1995.

Braithwaite, Jean, Assistant Professor, Department of English.

Brazier, Pearl W., Associate Professor, Department of Computer Science; Programming Languages, Software Engineering; MS, Virginia Polytechnic Institute and State University, 1981.

Brewerton, F.J., Professor, Department of Management, Marketing and International Business; Management; DBA, Louisiana State University, 1968.

Brickman, Stephanie J., Associate Professor, Department of Educational Psychology; Ph.D., University of Oklahoma, 1998.

Brown, Cynthia, Interim Vice Provost for Graduate Studies; Associate Professor, Department of Economics and Finance; Finance; Ph.D., The University of Texas-Pan American, 1998.

Brown, Danika M., Assistant Professor, Department of English; Rhetoric, Composition; Ph.D., The University of Arizona, 2003.

Browne, Peter E., Associate Professor, Department of Modern Languages and Literature; Spanish; Ph.D., University of Nebraska-Lincoln, 1993.

Brush, Timothy, Professor, Department of Biology; Zoology; Ph.D., Rutgers University, 1985.

Buckman, Kenneth L., Associate Professor, Department of History and Philosophy; Philosophy, Continental Philosophy, Oriental Philosophy, Social Philosophy, 19th and 2oth Century Philosophy; Ph.D., Southern Illinois University, 1990.

Butler, Alley C., Professor, Department of Manufacturing Engineering.

Cabrera, Fernando, Lecturer, Department of Nursing.
Cain, Roy E., Associate Professor, Department of Psychology and Anthropology; Psychology, Physiological

Psychology, Biofeedback, Psycho-Physiology, Stress Management; Ph.D., University of Houston, 1972.

Calarge, Carla A., Assistant Professor, Department of Modern Languages and Literature; French, Literature.

Cameron, Edward T., Assistant Professor, Department of English; Ph.D., State University of New York at Birmingham, 2000.

Canales, Patricia, Assistant Professor, Cooperative Pharmacy Program; Pharm.D.; The University of Texas at Austin, 1995.

Cantú-Cabrera, Juana, Lecturer, Department of Nursing; MSN, The University of Texas Health Science CenterHouston, 1994.

Canty, Dean R., Associate Professor, Department of Music; High Brass, University Band Director, Jazz Ensemble Director; DMA, The University of Texas at Austin, 1980.

Cárdenas, Blandina, President, The University of TexasPan American, Professor, Department of Curriculum and Instruction.

Cardona, Debra, Lecturer, Department of Political Science.

Carlson, Ralph, Professor, Department of Educational Psychology; Psychology, Quantitative Methods, Statistics, Theories of Personality; Ph.D., University of Houston, 1974.

Carren, David B., Associate Professor, Department of Communication; TV/Theatre/Film.

Casebeer, Cindy M., Assistant Professor, Department of Educational Psychology; Ph.D., University of AlabamaTuscaloosa, 2006.

Castillo, Yvonne O., Assistant Professor, Department of Educational Psychology.

Castro, Veronica, Assistant Professor, Department of Educational Psychology; Ph.D., Texas A\&M-Corpus Christi, 2005.

Cavazos, Alonzo, Associate Professor, Department of Social Work; Clinical Social Work, Administration; Ed.D., University of Houston, 1994; MSSW, The University of Texas at Austin, 1975.

Chakraborty, Santanu, Assistant Professor, Department of Mathematics; Ph.D., Indian Statistical Institute, 2002.

Chandler, Karen, Assistant Dean, College of Health Sciences and Human Services, Associate Professor and Program Coordinator, Clinical Laboratory Sciences Program; MT (ASCP), CLS(NCA), MA, Central Michigan University, 1983.

Chang, Yanrong, Assistant Professor, Department of Communication; Communication Studies.

Charlton, Colin T., Assistant Professor, Department of English.

Charlton, Jonikka P., Assistant Professor, Department of English; Ph.D., Purdue University, 2005.

Chen, Banglin, Assistant Professor, Department of Chemistry; Inorganic Chemistry; Ph.D., University of Singapore, 2000.

Chen, Roy Kuan-Yu, Assistant Professor, Department of Rehabilitation Services.

Chen, Xi, Assistant Professor, Department of Political Science.

Chen, Zhixiang, Associate Professor and Chair, Department of Computer Science; Theoretical Computer Science, Machine Learning and Data Mining; Ph.D., Boston University, 1996.

Chipara, Mircea, Assistant Professor, Department of Physics and Geology; Physics; Ph.D., Institute for Atomic Physics, 1996.

Christensen, Matthew J., Assistant Professor, Department of English; Comparative Literature; Ph.D., University of California at Los Angeles, 2002.

Cohen, Nigel, Visiting Professor, Department of Accounting and Business Law; Business Law.

Cole, Deborah L., Assistant Professor, Department of English; Ph.D., University of Arizona-Tucson, 2004.

Cole, Julian C., Assistant Professor, Department of History and Philosophy.

Contreras, Victoria, Associate Professor, Department of Modern Languages and Literature; Spanish; Ph.D., The University of Texas at Austin, 1989.

Corpuz, Edgar, Assistant Professor, Department of Physics and Geology; Physics; Ph.D., Kansas State University, 2006.

Cortes, Angelica, Associate Professor, Department of Management, Marketing and International Business; Marketing; Ph.D., University at Albany-CT, 1997.

Cortina, Maria Guadalupe, Associate Professor, Department of Modern Languages and Literature; Ph.D., University of Arizona, 1996.

Crews, R. Michael, Associate Professor, Department of Computer Information Systems and Quantitative Methods; Computer Information Systems; Ph.D., Utah State University, 1982.

Crews, Ruth, Associate Professor, Department of Music; Voice; MM, The University of Texas at Austin, 1974.

Crisafulli, Anthony, Professor and Chair, Department of Art.

Crown, Stephen W., Associate Professor, Department of Engineering; Mechanical Engineering; Ph.D., University of Colorado, 1993.

Croyle, Kristin, Assistant Dean, College of Social and Behavioral Sciences, Assistant Professor, Department of Psychology and Anthropology; Ph.D., The University of Montana, 2000.

Cunningham, Mark A., Associate Professor, Department of Physics and Geology; Physics; Ph.D., Yale University, 1982.

Curts, James, Associate Professor, Department of Curriculum and Instruction; Ph.D., University of Wisconsin-Madison, 1985.

Dabrowski, Peter P., Associate Professor, Department of Music; Valley Symphony Conductor; DMA, Northwestern University, 1998.

Damianov, Damian, Assistant Professor, Department of Economics and Finance.

Daniel, Clay L., Associate Professor, Department of English; 17th Century British Literature, Milton; Ph.D., Texas A\&M University, 1988.

Dantzker, Mark, Professor, Department of Criminal Justice; Police Administration, Police Issues, Research Methods; Ph.D., The University of Texas at Arlington, 1989.

Darcy, John, Assistant Professor, Department of Accounting and Business Law; Ph.D., The University of Oklahoma, 2002.

Darsow, Fred, Assistant Professor, Department of Health and Kinesiology; Dance Choreography; MFA, Arizona State University, 1998.

Davelos-Baines, Anita L., Assistant Professor, Department of Biology.

Dávila, Alberto, Neuhaus Professor and Chair, Department of Economics and Finance; General Business, Economics; Ph.D., Iowa State University, 1982.

Davis, Richard, Associate Professor, Department of Music; Voice; DMA, Indiana University, 1985.

Dean, André, LTC, Chair, Department of Military Science; ROTC 4401, 4403; MPA, The University of Texas at Austin, 1990.
de Alba, Roman Garcia, Assistant Professor, Department of Educational Psychology; Ph.D., Texas A\&M University-Kingsville, 2006..

Debnath, Lokenath, Professor and Chair, Department of Mathematics; Pure and Applied Mathematics, Mathematical Physics; Ph.D. (Pure Mathematics), University of Calcutta, 1965; Ph.D. (Applied Mathematics), University of London, 1967.

DeLassus, Phillip, Professor, Department of Chemistry; Physical Chemistry; Ph.D., The University of Chicago, 1972.

DeLeon, Leticia, Assistant Professor, Department of Curriculum and Instruction; Ph.D., University of Houston, 2005 .

Delgado, Diana, Clinical Specialist, Department of Nursing.

Delossantos, Gilberto, Professor, Department of Management, Marketing and International Business; Marketing; Ph.D., The University of Texas at Austin, 1972.

De Los Santos, Josephine, Assistant Professor, Department of Educational Psychology; Ph.D., Oklahoma State University, 2002.

De los Santos, Miguel A., Associate Professor, Department of School Administration and Supervision; Educational Administration; Ph.D., The University of Texas at Austin, 1980.

Dearth, Daniel K., Associate Professor, Department of Criminal Justice; Police Administration, Correctional Administration, Policing Issues, Criminal Procedures and Evidence; Ph.D., Sam Houston State University, 1984.

Delgado, Diana, Clinical Specialist, Department of Nursing; MS, The University of Texas at Austin, 1980.
deSharp, Monica Diaz, Assistant Professor, Department of Modern Languages and Literature; Spanish, Literature; Ph.D., Indiana University, 2002.

DeYoe, Hudson, Associate Professor, Department of Biology; Algal Ecology, Sea Grass Ecology; Ph.D., Bowling Green State University, 1991.

Diaz, Hector L., Professor and Chair, Department of Social Work.

Diaz, Maria I., Assistant Professor, Department of Nursing.

Diaz, Sylvia, Lecturer, Department of Chemistry; MA, The University of Texas at Austin, 2000.

Dietrich, Gustavo G., Lecturer, Department of Computer Science; Programming Languages and Methodology; MS, Texas A\&M University-Kingsville, 1988.

Dimakis, Nikolas, Assistant Professor; Department of Physics and Geology; Ph.D., Illinois Institute of TechnologyChicago, 1997.

Dominguez, Sylvia M., Professor Emeritus, Department of Modern Languages and Literature; Spanish; Ph.D., The University of Arizona, 1971.

Du, Hui, Assistant Professor, Department of Accounting and Business Law; Ph.D., Rutgers University, 2002.

Dugas, Donna, Associate Professor and Chair, Department of Health and Kinesiology; Physical Education Pedagogy; Ph.D., The Ohio State University, 1983.

Ebaseh-Onofa, Benjamin O., Associate Professor, Department of Mathematics; Statistics; Ph.D., Texas A\&M University, 1988.

Edionwe, Alexander O., Associate Professor, Coordinated Program in Dietetics; Registered Dietitian; Ph.D., University of Nebraska-Lincoln, 1991.

Edwards, Robert J., Professor, Department of Biology; Ichthyology, Ecology, Population Biology; Ph.D., The University of Texas at Austin, 1980.

Egle, Ardath L., Lecturer, Department of Biology;
Anatomy and Physiology, Vertebrate Biology; MS, Pan American University, 1988.

Egle, David L., Lecturer, Department of Computer Science; Numerical Analysis, Systems Programming, Computer Organization; MS, Texas A\&M University, 1977.

Eisenman, Russell, Associate Professor, Department of Psychology and Anthropology; Clinical Psychology; Ph.D., The University of Georgia, 1966.

Emery, John T., Professor, Department of Economics and Finance; Ph.D., University of Washington, 1969.

Eom, Minhee, Assistant Professor, Department of English.

Ernst, Frederick A., Acting Assistant Dean, College of Social and Behavioral Sciences, Professor, Department of Psychology and Anthropology.

Esquierdo, Jennifer J., Assistant Professor, Department of Curriculum and Instruction.

Estrada, Veronica L., Associate Professor, Department of Curriculum and Instruction; Curriculum and Instruction Education; Ph.D., The Ohio State University, 1997.

Ethridge, Philip, Associate Professor, Department of Criminal Justice; Criminal Justice Generalist, PoliceCommunity Relations, Privatization, Corrections Law; Ph.D., Sam Houston State University, 1990.

Eyambe, George Sona, MT (ASCP), Associate Professor, Clinical Laboratory Science Immunology; Ph.D., University of North Texas, 1991.

Faraji, Bahram, Program Coordinator and Professor, Coordinated Program in Dietetics; Registered Dietitian; Ph.D., University of California, 1982.

Faria, Joao R., Associate Professor, Department of Economics and Finance; Ph.D., University of Kent at Canterbury, 1998.

Farooqi, Mohammad, Ibrahim Husain, Assistant Professor, Physician Assistant Studies Program; BS, The University of Texas-Pan American, 2002.

Farooqui, Mohammed, Professor and Chair, Department of Biology; Physiology, Toxicology, Entomology, Cell Biology; Ph.D., University of Illinois, 1979.

Farruggio, Peter, Assistant Professor, Department of Curriculum and Instruction; Ph.D., University of California-Berkley, 2004.

Fatehi, Mohammed, Lecturer, Department of Mathematics; Linear Algebra, Statistics; Ph.D., New Mexico State University, 1996.

Faubion, Michael L., Chair and Associate Professor, Department of History and Philosophy; History, Diplomate, Military and Environmental History; Ph.D., Texas Tech University, 1992.

Faulkes, Zen, Assistant Professor, Department of Biology; Neurobiology and Ethology; Ph.D., University of Victoria, 1996.

Faver, Catherine Ann, Professor, Department of Social Work; MSSW, The University of Texas at Arlington, 1975; Ph.D., University of Michigan, 1979.

Feinberg, Martin, Associate Professor, Department of Computer Information Systems and Quantitative Methods; Quantitative Methods; Ph.D., Louisiana Tech University, 1999.

Feldman, Janis B., Assistant Professor, Department of Social Work; MSW, Hunter College, 1975; Ph.D., Barry University-Florida, 1997.

Feng, Baofeng, Assistant Professor, Department of Mathematics; Applied Mathematics; Ph.D., Kyoto University, Japan, 2000.

Feng, Zhaosheng, Assistant Professor, Department of Mathematics; Ph.D., Texas A\&M University, 2000.

Field, Philip S., Professor, Department of Art; Printmaking, Painting, Aesthetics; MFA, Syracuse University, 1965.

Fielding, Cheryl, Associate Professor, Educational Psychology; Ph.D., Texas A\&M University, 2000.

Figueroa-Lozano, Andres, Assistant Professor, Department of Computer Science.

Finck, James W., Lecturer, Department of History and Philosophy.

Firat, Asim Fuat, Professor and Chair, Department of Management, Marketing and International Business; Marketing; Ph.D., Northwestern University, 1978.

Flores, Maria E., Lecturer, Department of Modern Languages and Literature; Spanish, Language.

Flores-Vela, Alma, Assistant Professor, Department of Nursing; MSN, The University of Texas-Pan American, 1998.

Foltz, Heinrich D., Associate Professor and Chair, Department of Electrical Engineering; Ph.D., The University of Texas at Austin, 1993.

Fowler, Richard H., Professor, Department of Computer Science; Information Visualization and Interactive Systems; Ph.D., University of Houston, 1980.

Freeman, Robert A., Professor, Department of Engineering; Mechanical Engineering; Ph.D., University of Florida, 1985.

Freeman, Samuel, Associate Professor, Department of Political Science; Political Parties, U.S. Presidency, Congress, Foreign Policy; Ph.D., University of Kentucky, 1978.

Fu, Bin, Assistant Professor, Department of Computer Science.

Fuentes, Arturo A., Assistant Professor, Department of Mechanical Engineering; Ph.D., Rice University, 1999.

Fuentes, Lilia A., Clinical Specialist, Department of Nursing; Family Nurse Practitioner; MSN, The University of Texas-Pan American, 2001.

Galstyan, Anahit, Assistant Professor, Department of Mathematics; Ph.D., University of Cincinnati-Ohio, 2005.

Ganguli, Gouranga, Professor, Department of Accounting and Business Law; Accounting; CPA, CMA, CIA; Ph.D., The University of Mississippi, 1983.

Garcia, Carmela, Lecturer, Department of Modern Languages and Literature; Spanish; MAIS, Pan American University, 1986.

Garcia, Criselda, Assistant Professor, Department of Curriculum and Instruction; Educational Administration, MEd, The University of Texas-Pan American, 2002.

Garza, Joe M., Lecturer, Department of Management, Marketing and International Business.

Garza, Juanita, Lecturer, Department of History and Philosophy; History, U.S. History; MAIS, Pan American University, 1984.

Garza, Viola, Lecturer, Department of Nursing; MSN, The University of Texas-Pan American, 1996.

Gasquoine, Philip, Associate Professor, Department of Psychology and Anthropology.

Ghanem, Salma, Associate Professor and Chair, Department of Communication; Journalism; Ph.D., The University of Texas at Austin, 1996.

Gilson, Gregory, Assistant Professor, Department of History and Philosophy; Ph.D., University of WisconsinMadison, 1998

Gittins, Colleen, Lecturer, Department of Communication Sciences and Disorders.

Glazer, Mark, Professor, Department of Psychology and Anthropology; Anthropology, Folklore, Anthropological Theory; Ph.D., Northwestern University, 1973.

Gómez, Leo, Professor, Department of Curriculum and Instruction; Philosophy, Curriculum and Instruction, Bilingual/ESL; Ph.D., Texas A\&M University, 1994.

Gonzales, Stanley Z., Lecturer, Department of Criminal Justice; MA, Sam Houston State University, 1980.

Gonzalez, Genaro, Professor, Department of Psychology and Anthropology; Psychology, Social, Cross-Cultural; Ph.D., The University of California, Santa Cruz, 1982.

Gonzalez, Irasema S., Lecturer, Department of Curriculum and Instruction; MEd, The University of Texas-Pan American, 1995; Ed.D., Texas A\&M UniversityKingsville, Present.

Gonzalez, Miguel A., Associate Dean, College of Science and Engineering; Associate Professor, Department of Manufacturing Engineering; Training Simulators, Integrated Logistics Support, Manufacturing Systems, Work Science and Ergonomics, Applied Operations Research and Quality Management; Ph.D., University of Houston, 1995.

Gonzalez, Roberto, Lecturer, Department of Mathematics; Mathematics; MS, Pan American University, 1981.

Grabowski, Thomas E., Associate Professor, Department of Communication; Theatre/TV/Film; MFA, University of Illinois at Urbana-Champaign, 1981.

Graf, Noreen, Associate Professor, Department of Rehabilitation Services; Ph.D., Southern Illinois University-Carbondale, 1995.

Gregorius, Roberto, Associate Professor, Department of Chemistry; Polymer Science and Engineering; Ph.D., University of Massachusetts, 1991.

Grossman, Morley K., Associate Professor, Department of Music; Piano; DMA, Indiana University, 1983.

Guajardo, Francisco, Assistant Professor, Department of Educational Leadership; Ph.D., The University of Texas at Austin, 2003.

Guajardo, Maritoni S., Assistant Professor, Department of Curriculum and Instruction; Ed.D.; Texas A\&M University-Kingsville, 1999.

Guerra, Dahlia, Dean, College of Arts and Humanities; Professor, Department of Music; Piano and History of Mexican Folk Music; DMA, The University of Oklahoma, 1997.

Guerra, Petra, Assistant Professor, Department of Communication; Journalism; Ph.D., Washington State University-Pullman, 2003.

Guerra, Raymond S., Associate Professor, Department of Sociology; Japanese Society, Mexican-Americans, Ethnicity and Religion; Ph.D., Southern Methodist University, 1989.

Guerrero, Michael, Associate Professor, Department of Curriculum and Instruction; Educational Linguistics; Ph.D., The University of New Mexico, 1994.

Guinn, Robert, Professor, Department of Health and Kinesiology; Health; Ph.D., Texas A\&M University, 1974.

Gunn, Scott J., Professor, Department of Biology; Genetics, Vertebrate Zoology; Ph.D., Texas A\&M University, 1986.

Guo, Chiquan, Assistant Professor, Department of Management, Marketing and International Business; Marketing; Ph.D., Southern Illinois UniversityCarbondale, 2001.

Gutierrez-Gonzales, José J., Assistant Professor, Department of Chemistry; Organic Chemistry; Ph.D., The University of Texas at Dallas, 2002.

Guzmán, Isabel (Penny), Clinical Specialist, Department of Nursing; MSN, University of Puerto Rico, 1972; MS, Texas A\&M University-Corpus Christi, 1995.

Guzmán, Priscilla, Lecturer, Department of Political Science; MA, St. Mary's University.

Hamilton, Lee, Associate Professor, Department of English; 19th Century British Literature, Bibliography; Ph.D., Louisiana State University, 1982.

Hamilton, Rebekah, Associate Professor, Department of English; English Literature, World Literature, Composition; Ph.D., Texas A\&M University, 1993.

Hannan, Mohammad Abdul, Associate Professor, Department of Physics and Geology; Solar Energy; Ph.D., University of London-United Kingdom, 1976.

Hansmann, Sandra E., Assistant Professor, Department of Rehabilitation Services; Ph.D., The University of Texas at Austin, 2000.

Harlow, Charles, Professor and Lloyd Bentsen Endowed Chair, Department of Electrical and Computer Engineering; Ph.D., The University of Texas at Austin, 1967.

Haule, James M., Professor, Department of English; Modern and Contemporary British Literature; Ph.D., Wayne State University, 1974.

Hawks, Stephanie, Assistant Professor, Department of Communication; TV/Theatre/Film.

Hay, Amy M., Assistant Professor, Department of History and Philosophy.

Hayes, Robert L., Lecturer, Department of Political Science.

Headrick, R. Wayne, Associate Professor, Department of Computer Information Systems and Quantitative Methods; Ph.D., University of Missouri, 1978.

Heckler, Edward, Associate Professor, Department of English; Linguistics, ESL; Ph.D., Michigan State University, 1975.

Heller, William, Associate Professor, Department of Mathematics; Ph.D., University of Maryland, 1991.

Henry, Brad, Associate Professor, Department of Biology; Aquatic Entomology, Ecology; Ph.D., Texas A\&M University, 1989.

Hernandez, José E., Assistant Professor, Department of Modern Languages and Literature; Spanish, Linguistics; Ph.D., University of New Mexico-Albuquerque, 2004.

Hernandez, Judith, Lecturer, Department of

Undergraduate Studies; Ph.D., University of MichiganAnn Arbor, 1980.

Hernandez, Leila M., Assistant Professor, Department of Art; Graphic Design; MFA, University of Florida, 1999.

Hernandez, Sonia, Assistant Professor, Department of History and Philosophy.

Herrera Erdem, Orelia, Clinical Specialist, Department of Nursing; MSN, Texas A\&M University-Corpus Christi, 1989.

Herrscher, Barton Robert, Lecturer, Department of Educational Leadership; Ed.D., The University of California-Los Angeles, 1967.

Himmel, Kelly F., Advisor for the Undergraduate Program and Associate Professor, Department of Sociology; Methodology, Community, Social Change; Ph.D., The University of Texas at Austin, 1995.

Hinojosa, Servando Z., Associate Professor, Department of Psychology and Anthropology; Anthropology, Maya of Guatemala, Chicano Culture, Medical Anthropology, Latin America; Ph.D., Tulane University, 1999.

Hinthorn, Richard W., Lecturer, Department of Mathematics; EDS, Emporia State University, 1975.

Howlett, Dela, Lecturer, Department of Undergraduate Studies.

Huang, Su-ching, Assistant Professor, Department of English.

Huddle, John W., Lecturer, Department of English; Creative Writing; MFA, University of Houston, 2000.

Huerta, Carolina, Professor and Chair, Department of Nursing; Adult Education; Ed.D., Texas A\&M University, 1990.

Hughes, Jerald K., Assistant Professor, Department of Computer Information Systems and Quantitative Methods.

Hyslin, Richard P., Professor, Department of Art; Ceramics, Sculpture, Drawing; MA, The University of New Mexico, 1968.

Ibrahim, Elamin, Associate Professor, Department of Chemistry; Analytical Chemistry; Ph.D., Mississippi State University, 1995.

Innis, Wendy, Assistant Professor, Department of Chemistry; Biochemistry; Ph.D., Emory University, 1988.

Jackson, Dave O., Assistant Professor, Department of Economics and Finance; Ph.D., Florida Atlantic University, 2002.

Jackson, Edward J., Lecturer, Department of Political Science.

Jain, Sachin, Assistant Professor, Department of Educational Psychology; Counselor Education and Supervision; Ph.D., University of Wyoming, 2006.

James, Barbara, Clinical Specialist, Department of Nursing; MS, The University of Health Science Center at San Antonio, 1994.

James-Aldridge, Valerie G., Chair and Associate Professor, Department of Psychology and Anthropology; Psychology, Animal Behavior, Primate Behavior, Research in Zoos; Ph.D., Oklahoma State University, 1975.

Joardar, Arpita, Assistant Professor, Department of Management, Marketing and International Business; Management; Ph.D., University of South Carolina, 2005.

Johnson, Aaron D., Assistant Professor, Department of Communication; Communication Studies; Ed.D., West Virginia University, 2004.

Johnson, Michael B., Assistant Professor, Department of Educational Psychololgy; Counseling and School Psychology; Ph.D., Florida State University, 2006.

Johnson, Robert, Associate Professor, Department of English; American Literature, Southern Women Writers; Ph.D., University of Southern California, 1994.

Jones Jr., Robert E., Associate Professor, Department of Engineering; Mechanical Engineering; Ph.D., Texas A\&M University, 1990.

Jorgensen, Layne, Professor and Graduate Program Coordinator, Department of Health and Kinesiology; Biomechanics and Research Methods; Ph.D., Louisiana State University, 1971.

Jou, Jerwen, Professor, Department of Psychology and Anthropology; Psychology, Cognitive Psychology; Ph.D., Kansas State University, 1990.

Judd, Frank W., Research Professor, Department of Biology.

Jung, Joo Young, Assistant Professor, Department of Management, Marketing and International Business; Mechanical Engineering; Ph.D., University of Connecticut, 1992; MBA, 2002.

Kaynak, Hale, Associate Professor, Department of Management, Marketing and International Business; Management, Production and Operation; Ph.D., University of North Texas, 1996.

Keller, Christopher, Assistant Professor, Department of English; Ph.D., University of Florida, 2001.

Kendrick, Sherrill, Assistant Professor, Department of Psychology and Anthropology; Psychology, Clinical, Behavior Modification; Ph.D., The University of Southern Mississippi, 1974.

Knight, Thomas D., Assistant Professor, Department of History and Philosophy; Early American History; Ph.D., University of Oxford, 2004.

Knobel Jr., Roger A., Associate Professor, Department of Mathematics; Differential Equations, Applied Mathematics; Ph.D., Rensselaer Polytechnic Institute, 1991.

Koo, Felix Chong Wah, Clinical Coordinator and Assistant Clinical Professor, Physician Assistant Studies Program; Pediatrics; Ph.D., The University of Texas Medical Branch-Galveston, 1981; M.D., The University of Texas Health Science Center at San Antonio, 1990.

Koong, Kai S., Professor, Department of Computer Systems and Quantitative Methods; Ph.D., Mississippi State University, 1987.

Kranz, Peter, Assistant Professor, Department of Educational Psychology; Child Psychology; Ph.D., Utah State University, 1969.

Kuang, Anxiu, Associate Professor, Department of Biology; Plant Development, Plant Physiology, Cell Ultrastructure; Ph.D., Auburn University, 1991.

Kuang, Weidong, Assistant Professor, Department of Electrical and Computer Engineering; Ph.D., University of Central Florida, 2003.

Kuhn, Lisa L., Academic Coordinator and Assistant Professor, Physician Assistant Studies Program; Family Practice, Obstetrics and Gynecology; MMS, Nova Southeastern University-Florida, 2004.

Kumar, Sanjeev, Associate Professor, Department of Electrical and Computer Engineering; Communications Networks, Protocols, Computer Architecture; Ph.D., North Carolina State University, 1995.

Kypuros, Javier A., Assistant Professor, Department of Mechanical Engineering; Ph.D., The University of Texas at Austin, 2001.

Lang, Yong, Associate Professor, Department of English; Linguistics, ESL; Ph.D., The Ohio State University, 1998.

Lantz, Keith W., Chair and Professor, Department of Accounting and Business Law.

LaPrade, Douglas E., Associate Professor, Department of English; 2oth Century American Literature; Ph.D., University of Illinois, 1988.

Lawrence-Fowler, Wendy A., Vice Provost for Research; Professor, Department of Computer Science; Databases, Large Open Information Systems, Information Retrieval, Artificial Intelligence; Ph.D., The Ohio State University, 1983.

Leach, Stephen, Assistant Professor, Department of History and Philosophy; Ph.D., University of New Mexico-Albuquerque, 1999.

Lee, Kye-Hwan, Assistant Professor, Department of Manufacturing Engineering; CAD, Plastics Processing and Product Design, Mold Design and Analysis; Ph.D., University of Massachusetts-Lowell, 1997.

Lemanski, Jennifer, Assistant Professor, Department of Communication, Journalism.

LeMaster, Edwin W., Dean, College of Science and Engineering; Professor, Department of Electrical Engineering; Electrical Engineering, Remote Sensing, Solid State Physics; Ph.D., The University of Texas at Austin, 1970.

LeMaster, Jane, Professor, Department of Management, Marketing and International Business; Management; Organization Theory and Policy; Ph.D., University of North Texas, 1994.

Li, Jianzhi (James), Assistant Professor, Department of Manufacturing Engineering Industrial Engineering; Ph.D., Texas Tech University, 2003.

Li, Junfei, Assistant Professor, Department of Electrical Engineering; Electrical and Computer Engineering; Ph.D., The University of Texas at Austin, 2002.

Liebowitz, Stephen W., Associate Professor, Department of Sociology; Social Psychology, Statistics; Ph.D., University of Missouri-Columbia, 1979.

Lieman, Jonathan H., Assistant Professor, Department of Biology; Biology/Biomed Science (MOL Cell Biol.); Ph.D., Washington State University-St. Louis, 2004.

Lin, Yuankun, Assistant Professor, Department of Physics and Geology; Physics; Ph.D., University of British Columbia-Canada, 2000.

Liu, Lai, Associate Professor, Department of Computer Information Systems and Quantitative Methods; Ph.D., Mississippi State University, 1989.

Liu, Liping, Assistant Professor, Department of Mathematics; Ph.D., University of Alberta-Canada, 2002.

Loera, Francisco, Lecturer, Department of Modern Languages and Literature; Spanish, Music and Popular Culture.

Lonard, Robert I., Research Professor, Department of Biology.

Lowdermilk, John L., Assistant Professor, Department of Educational Psychology; Assistive Technology; Ph.D., University of North Texas, 2004.

Lowe, Jerry M., Professor, Department of Educational Leadership; Ed.D., Texas A\&M University, 1989.

Lowe, Kristine L., Assistant Professor, Department of Biology; Applied Biology; Ph.D., Georgia Institute of Technology, 1999.

Lozano, Karen, Associate Professor, Department of Mechanical Engineering; Composites, Nano-Structured Materials, Polymer Engineering; Ph.D., Rice University, 1999.

Lynch, Cynthia E., Assistant Professor, Department of Public Administration.

Lynch, Robert, Lecturer, Department of Criminal Justice.
Macossay-Torres, Javier, Assistant Professor, Department of Chemistry; Organic/Polymer Chemistry; Ph.D., Louisiana State University, 1995.

Mahdi, Hashim S., Professor and Chair, Department of Engineering; Mechanical Engineering, Computational Methods in Thermal and Fluid Systems; Ph.D., The University of Arizona, 1989.

Maloy, Lee R., Master Sgt., Senior Military Instructor, Department of Military Science.

Mann, Frederick D., Lecturer, Department of Communication; Journalism, Educational Technology; MEd., Texas A\&M University-Commerce, 1976.

Marini, Irmo, Graduate Coordinator and Professor, Department of Rehabilitation Services; Certified
Rehabilitation Counselor; Ph.D., Auburn University, 1992.
Martin-Ochoa, Luz Maria, Assistant Professor, Department of Modern Languages and Literature; Spanish, Literature and Creative Writing.

Martinez, Glenn A., Chair and Associate Professor, Department of Modern Languages and Literature; Spanish, Linguistics; Ph.D., University of Massachusetts, 2000.

Martinez, José M., Associate Professor, Department of Modern Languages and Literature; Hispanic Literature; Ph.D., Universidad de Valladolid, Spain, 1991.

Martinez, Pedro, Assistant Professor and Chair, Department of Music; DMA, University of Minnesota, 2004.

Maruno, Kenichi, Assistant Professor, Department of Mathematics.

Mata, Jennifer R., Assistant Professor, Department of History and Philosophy; American Studies; Ph.D., Washington State University-Pullman, 2004.

Mata-Pistokache, Teri, Associate Professor and Interim Chair, Department of Communication Sciences and Disorders; Multicultural/Multilingual; Ph.D., The University of Texas at Austin, 1995.

Materon, Luis A., Associate Professor, Department of Biology; Food Microbiology, Microbial Ecology, Biological Nitrogen Fixation; Ph.D., Mississippi State University, 1982.

Matthews, Linda Sargent, Associate Professor, Department of Management, Marketing and International Business; Management; Ph.D., University of Washington, 1996.

Maville, Janice A., Interim Chair, Department of Communication Sciences and Disorders and Professor, Department of Nursing; Ed.D., Texas A\&M University, 1992.

Mazariegos, Ruben A., Associate Professor, Department of Physics and Geology; Geophysics; Ph.D., Texas A\&M University, 1993.

McBride, John, Professor, Department of Curriculum and Instruction; Elementary, Science Education, Mathematics Education; Ed.D., University of Houston, 1978.

McAdams, Glynn, Assistant Professor, Department of Political Science.

McDonald, J. Andrew, Assistant Professor, Department of Biology; Botany; Ph.D., The University of Texas at Austin, 1982.

McKee, Arnold J., Visiting Associate Professor, Department of Accounting and Business Law.

McQuillen, Jeffrey, Associate Professor, Department of Communication; Communication Studies; Ph.D., The University of Oklahoma, 1984.

McWilliams, Cynthia, Assistant Professor, Department of History and Philosophy; Ph.D., University of Missouri, 2001.

Medrano, Hilda, Professor, Department of Curriculum and Instruction; Curriculum and Instruction, Reading and Language Arts; Ph.D., The University of Texas at Austin, 1985.

Mejias, Hugo, Associate Professor, Department of Modern Languages and Literature; Spanish, Linguistics; Ph.D., State University of New York at Buffalo, 1978.

Mellen, Graciela Maria, Lecturer, Department of Nursing.
Menchaca, Velma, Professor, Department of Educational Leadership; Curriculum and Instruction; Ph.D., Texas A\&M University, 1991.

Mery, Adelle, Lecturer, Department of English; American Literature, World Literature; Ph.D., Texas A\&M University, 1990.

Mihut, Donna, Lecturer, Department of Mechanical Engineering.

Mikolasky, Peter (Trey) S., Lecturer, Department of Communication; Communication Studies, TV/Theatre/ Film.

Milan, Cindy L., Associate Professor, Department of Nursing; Administration and Supervision; Ed.D., University of Houston, 1997.

Miles, Caroline S., Assistant Professor, Department of English; Ph.D., University of Southern Mississippi, 2002.

Miles, Michael G., Enlisted Instructor, Department of Military Science; Master Sgt. (Retired), U.S. Army.

Miller, Christopher L., Associate Professor, Department of History and Philosophy; History, U.S. Colonial, 19th Century, Native American; Ph.D., University of California, Santa Barbara, 1981.

Miller, Eva, Associate Professor, Department of Rehabilitation Services; Rehabilitation Psychology; Ph.D., University of Arizona, 1999.

Minor, Michael, Professor and Director of Ph.D. Program, Department of Management, Marketing and International Business; Marketing; Ph.D., Vanderbilt University, 1987.

Mitchell, Jo Ann, Professor, Department of Educational Psychology; Special Education, Educational Psychology, School Psychology; Ph.D., The University of Oklahoma, 1979.

Mitchell, Rebecca N., Assistant Professor, Department of English; Comparative Literature; Ph.D., University of California, 2003.

Molinar, Monica, Lecturer, Department of Communication Sciences and Disorders; Communication Disorders/ Pediatrics; MA, The University of Texas-Pan American, 1993.

Mollick, André V., Associate Professor, Department of Economics and Finance; Socio-Economic Planning; Ph.D., University of Tsukuba, 1996.

Mondal, Jalal U., Professor, Department of Chemistry; Inorganic Chemistry; Ph.D., University of New South Wales, 1979.

Monforte, Jessica Lavariega, Assistant Professor, Departmentof Political Science.

Monta, Marian F., Professor Emeritus, Department of Communication; Theatre/TV/Film; Ph.D., Cornell University, 1971.

Montero-Aguilar, Sophia, Lecturer, Department of Undergraduate Studies.

Montgomery, Gary T., Professor, Department of Psychology and Anthropology; Psychology, Developmental, Psychophysiology; Ph.D., Texas Tech University, 1972.

Montiel, Ivan, Assistant Professor, Department of Management, Marketing and International Business; Management.

Mora, Marie T., Professor, Department of Economics and Finance; Ph.D., Texas A\&M University, 1996.

Morgan, Glynn, Associate Professor, Department of Political Science; U.S. and Texas Politics; MA, The University of Mississippi, 1961.

Mottet, TImothy, Professor, Department of Communication; Communication Studies.

Mounce, Gary, Associate Professor, Department of Political Science; Mexico, Central and South American Politics; Ph.D., The University of Texas at Austin, 1977.

Moyes, Glen, Associate Professor, Department of Accounting and Business Law; Accounting; DBA, U.S. International University-California, 1991.

Munn, Christopher, Professor, Department of Music; Music Theory, Music History; University Choir Director; DMA, The University of Oklahoma, 1991.

Munn, Vivian, Associate Professor, Department of Music; Voice, Music Theory; DMA, The University of Oklahoma, 1990.

Muñoz, Francisco, III, Lecturer, Department of Health and Kinesiology; Health and Physical Education and Educational Supervision; MEd, Pan American University, 1977.

Myers, Deborah L., Assistant Professor, Department of Health and Kinesiology; Exercise Science; Ph.D., University of Mississippi, 1998.

Nadeau, Nancy G., Lecturer, Department of Nursing.
Nambiar, Rajiv V., Associate Professor, Department of Manufacturing Engineering; Computer-Aided Design, Manufacturing Processes; Mechanical Engineering; Ph.D., The University of Texas at Arlington, 1989.

Nasif, Ercan, Associate Professor, Department of Management, Marketing and International Business;
Management; Ph.D., University of North Texas, 1988.
Nevárez, Miguel A., Professor, Department of Educational Leadership; Executive Director, Coastal Studies Lab; Retired President, The University of TexasPan American; Science Education; Ph.D., New York University, 1972.

Newman, Beatrice, Professor, Department of English; Rhetoric and Composition, 19th Century British Literature, Linguistics; Ph.D., Texas A\&M University, 1981.

Newman, Donald, Associate Professor, Department of English; 18th Century British Literature, Johnson and Boswell Studies, Biography; Ph.D., University of Southern California, 1992.

Nieto, Beatriz, Assistant Professor, Department of Nursing; Ph.D., The University of Texas Health Science Center at San Antonio, 2005.

Ng, Peter A., Professor, Department of Computer Science; Document Processing Engineering and Databases; Ph.D., The University of Texas at Austin, 1974.

Noe, Joe Markus, Assistant Professor, Department of English Rhetoric and Composition, Ph.D., Texas Christian University, 2001.

Nuccetelli, Susana, Associate Professor, Department of History and Philosophy; Ph.D., City University of New York, 1998.

Nuss, Melynda, Assistant Professor, Department of English; Ph.D., The University of Texas at Austin, 2003.

Ochoa, Salvador H., Dean, College of Education; Professor, Department of Educational Psychology; School Psychology; Ph.D., Texas A\&M University, 1989.

Oliver, Stephen, Lecturer, Department of History and Philosophy; Religion; Ph.D., Southern Baptist Theological Seminary-Kentucky, 1980.

O'Neil, Lorne William, Professor, Department of Music; Woodwinds; DMA, University of Minnesota, 1990.

Olsen, Janet, Lecturer, Department of Mathematics; MS, Utah State University, 1965.

Ostorga, Alcione, Assistant Professor, Department of Curriculum and Instruction; Ph.D., Fordham UniversityNew York, 2002.

Otto, Debra, Assistant Professor, Department of Nursing; MSN, University of Phoenix, 1995.

Overton, Terry, Professor, Department of Educational Psychology; Special Education; Ed.D., Texas Woman's University, 1985.

Owusu-Ansah, Stephen, Associate Professor, Department
of Accounting and Business Law; Accounting, Business Administration; Ph.D., Middlesex University, London, U.K., 1998.

Ozuna, Teofilo, Interim Dean, College of Business Administration; Associate Professor, Department of Economics and Finance; Economics; Ph.D., Texas A\&M University, 1989.

Pagán, José A., Professor, Department of Economics and Finance; Economics; Ph.D., The University of New Mexico, 1995.

Pankake, Anita, Professor and Director of the Doctoral Program, Department of Educational Leadership; Ed.D., Loyola University of Chicago, 1985.

Parchman-Gonzalez, Keri, Lecturer and Interim Coordinator, Department of Communication Sciences and Disorders; MA, The University of Texas-Pan American, 1989.

Paredes, Miguel, Professor, Department of Mathematics; Mathematical Economics, Mathematical Modeling; Ph.D., University of Utah, 1985.

Pazdera, Donna M., Lecturer, Department of Communication; Journalism, Mass Communications; MA, University of Florida, 2003.

Pearson, Thomas, Associate Professor, Department of History and Philosophy, Ph.D, Southern Illinois University-Carbondale, 1994.

Pecina, Julia, Lecturer, Department of Educational Psychology; Educational Diagnostician; MEd., The University of Texas-Pan American, 1996.

Peña, Carmen M., Assistant Professor, Secondary Program, Department of Curriculum and Instruction; Ph.D., University of Iowa, 1995.

Peng, Jun, Assistant Professor, Department of Electrical Engineering; Electrical and Computer Engineering.

Penzerro, Rose Marie, Associate Professor, Department of Social Work; MSSA, Case Western Reserve University, 1971; Ph.D., The University of Texas at Austin, 1992.

Pereya, Nicolás, Lecturer, Department of Physics and Geology.

Perez, Laura E., Assistant Professor, Department of English.

Perez, Maria Alma, Assistant Professor, Department of Curriculum and Instruction; Ph.D., Texas A\&M University Kingsville, 1998.

Persans, Michael, Assistant Professor, Department of Biology; Plant Biology; Ph.D., University of Illinois, 1998.

Phillips, Richard, Assistant Professor, Department of Art; Art History; Ph.D., The University of Texas at Austin, 1993.

Pittman, Sharon, Professor, Department of Social Work.
Poelzer, Herold, Associate Professor, Department of Educational Psychology; Educational Psychology, Gifted Education; Ph.D., Purdue University, 1994.

Poletaeva, Elena, Assistant Professor, Department of Mathematics.

Polinard, J.L., Professor and Chair, Department of Political Science; Public Law, Minority Politics; Ph.D., The University of Arizona, 1970.

Pontius, Paul, Assistant Professor, Department of Mathematics; Mathematics Education; MA, University of Illinois, 1964.

Pozorski, Shelia, Professor, Department of Psychology and Anthropology; Anthropology, New World Archaeology, Archaeological Method and Theory, Ethnobiology, Museum Studies; Ph.D., The University of Texas at Austin, 1976.

Pozorski, Thomas, Anthropology Coordinator and Professor, Department of Psychology and Anthropology; Anthropology, New World Archaeology, South American Culture, Complex Societies; Ph.D., The University of Texas at Austin, 1976.

Qiao, Zhijun, Assistant Professor, Department of Mathematics; Ph.D., Fudan University-People's Republic of China, 1997.

Qubbaj, Ala R., Associate Professor, Department of Mechanical Engineering; Ph.D., The University of Oklahoma, 1999.

Raajpoot, Uzzer A., Associate Professor, Department of Sociology; Statistics, Methods, Demography; Ph.D., University of Oregon, 1991.

Raimo, John, Professor, Department of Music; Piano, Music Literature; DMA, Eastman School of Music, University of Rochester, 1960.

Ramirez, Ernesto F., Lecturer, Department of Undergraduate Studies.

Ramirez, Isidro, Instructor, Cooperative Pharmacy Program.
Ramirez, Maria G., Lecturer, Department of Undergraduate Studies.

Ramirez, Noe, Associate Professor, Department of Social Work; MSW, Our Lady of the Lake University, 1989; Ph.D., University of Houston, 1998.

Ramirez, Olga M., Professor, Department of Mathematics; Mathematics Education; Ph.D., Texas A\&M University, 1985.

Ramirez, Sylvia, Associate Professor, Department of Educational Psychology; Ph.D., Universityof WisconsinMadison, 1988.

Ramos, José, Master Sgt., Department of Military
Science; ROTC 1201, 1202, 3201, 3202.
Rampersad-Ammons, Joanna N., Assistant Professor, Department of Chemistry; Biochemistry.

Rao, Mohan, Associate Professor, Department of Computer Information Systems and Quantitative Methods; Computer and Management Information Systems; Ph.D., University of Alabama, 1988.

Rea, Ramiro R., Associate Professor, Department of Modern Languages and Literature; Spanish; MA, Sam Houston State University, 1970.

Reed, Bruce J., Dean, College of Health Sciences and Human Services; Professor, Department of Rehabilitation Services, Certified Rehabilitation Counselor, Certified Vocational Evaluator; Ph.D., University of Northern Colorado, 1993.

Reed, Joan Mueller, Lecturer, Department of Undergraduate Studies; Learning Framework; Ph.D, University of Nebraska-Lincoln, 2005.

Reed, Michael D., Professor, Department of English; Colonial and 19th Century American Literature, Psychoanalytic Criticism, Logic; Ph.D., University of Oregon, 1974.

Reid, Charlles R., Associate Professor, Department of Rehabilitation Services; Certified Rehabilitation Counselor; Ph.D., University of Arizona, 1997.

Reidhead, Van A., Dean, College of Social and Behavioral

Sciences; Professor, Department of Psychology and Anthropology.

Resendiz, Rosalva, Assistant Professor, Department of Criminal Justice; Criminology and Deviance, Critical Race Theory, Corrections, Women's Studies; Ph.D., Texas Woman's University, 2001.

Reyes, Maria E., Associate Professor and Interim Chair, Department of Curriculum and Instruction.

Reyna, Maria E., Lecturer, Clinical Laboratory Science Program; Clinical Psychology; MA, The University of Texas-Pan American, 2004.

Riahi, Daniel N., Professor, Department of Mathematics.
Richardson, D. Chad, Professor, Department of Sociology; Borderlands Studies, Sociology of Education, Complex Organizations; Ph.D., The University of Texas at Austin, 1975.

Rieke, R. Neal, Assistant Professor, Department of Communication; Communication Studies; MS, MPA, North Texas State University, 1976.

Rivas, Belinda, Clinical Specialist, Department of Rehabilitation Services.

Rivera, Gustavo, Lecturer, Department of Mathematics; Mathematics and Computer Networks; MS, The University of Texas-Pan American, 1996.

Rivers, Christopher, Col., Assistant Professor, Military Science; Liberal Studies; BA, University of New York, 1990.

Rodríguez, Ana Maria, Senior Vice Provost for Undergraduate Studies; Associate Professor, Department of Educational Psychology; Guidance and Counseling; Ed.D., University of Houston, 1976.

Rogé, Joseph, Associate Professor, Department of Computer Information Systems and Quantitative Methods; Computer Information Systems; Ph.D., Louisiana Tech University, 1995.

Rogers, Darrin L., Assistant Professor, Department of Psychology and Anthropology.

Rombough, Shirley, Associate Professor, Department of Social Work; BA, Long Beach State University.

Romero, Hector R., Professor, Department of Modern Languages and Literature; Spanish Literature; Ph.D., University of Illinois at Urbana-Champaign, 1970.

Romero, Zasha, Lecturer, Department of Health and Kinesiology; Kinesiology.

Romero, Zoila, Lecturer, Department of Modern Languages and Literature; Spanish, Language.

Ruiz-Escalante, Jose, Professor, Department of Curriculum and Instruction; Ed.D., University of Washington, 1987.

Ruiz, Arturo, Maj., Assistant Professor, Department of Military Science; BS, The University of Texas-Pan American, 1996.

Rydl, Lester M., Associate Professor and Chair, Department of Computer Information Systems and Quantitative Methods; Quantitative Methods; CDP, Ph.D., Texas A\&M University, 1978.

Ryman, Jeannean, Lecturer, Department of Health and Kinesiology; Physical Education; MEd, Pan American University, 1980.

Saavedra, Dora E., Associate Professor, Department of Communication; Communication Studies; Ph.D., University of Kansas, 1994.

Saenz, Laura M., Assistant Professor, Department of Educational Psychology; Ph.D., Vanderbilt University, 2002.

Saladin, Shawn P., Assistant Professor, Department of Rehabilitation Services; Special Education; Ph.D., The University of Texas at Austin, 2004.

Saldivar, José R., Lecturer, Department of Undergraduate Studies; Education; MA, Stanford University, 2002.

Salinas, Sonya, Lecturer, Department of Communication Sciences and Disorders; MA, The University of Texas-Pan American, 1991.

Sánchez, M. Sandra (Sandy), Associate Professor, Department of Nursing; Ph.D., The University of Texas at Austin, 1997; CNM, State University of New YorkDownstate, 1977.

Santiago, Reynaldo, Associate Professor, Department of Art; MFA, Rochester Institute of Technology, 1983.

Sargent, John, Associate Professor, Department of Management, Marketing and International Business; Management; Ph.D., University of Washington, 1994.

Sarmiento-Arribalzaga, Matilde. O., Assistant Professor, Department of Curriculum and Instruction; Bilingual

Education; Ed.D., Texas A\&M University-Kingsville, 2005.
Sauceda, Noe, Assistant Professor, Educational Leadership; Ph.D., The University of Texas at Austin, 1995.

Schall, Janine M., Assistant Professor, Department of Curriculum and Instruction; Language, Reading and Cultural; Ph.D., University of Arizona, 2004.

Schmidt, Marcelo, Lecturer, Department of Health and Kinesiology; Kinesiology; MEd, The University of TexasPan American, 1998.

Schneider, Gary, Assistant Professor, Department of English; British Renaissance; Ph.D., Wayne State University, 2001.

Schneider, Steven, Professor, Department of English; 2oth Century American Literature, Modern and Contemporary Poetry, Multicultural/Literature; Ph.D., University of Iowa, 1986.

Schwartz, Amy H., Assistant Dean, College of Health Sciences and Human Services, Director, Cooperative Pharmacy Program.

Seay, Gary, Assistant Professor, Department of History and Philosophy.

Selber, Gregory, Assistant Professor, Department of Communication; Journalism; Ph.D., The University of Texas at Austin, 2001.

Selber, Kimberly, Assistant Professor, Department of Communication; Advertising; Ph.D., The University of Texas at Austin, 2001.

Semper, Louis T., Associate Professor and Kinesiology Program Coordinator, Department of Health and Kinesiology; Physiology of Exercise and Secondary School Methods; Ph.D., Texas A\&M University, 1971.

Shackelford, Dana, Assistant Professor, Department of Health and Kinesiology; Dance; MFA, Arizona State University, 2001.

Sharp, Ethan P., Assistant Professor, Department of Modern Languages and Literature; Latin American Studies.

Shefcik, Thomas E., Associate Professor and Interim Chair, Department of Rehabilitation Services; Certified Insurance Rehabilitation Specialist, Certified Rehabilitation Counselor; MS, Oklahoma State University, 1983.

Sibley, Keith, Lecturer, Department of Communication Sciences and Disorders; American Sign Language, Deaf Studies/Habilitation; MS, Lamar University, 1996.

Silva, Santiago, Assistant Professor, Department of Educational Psychology; Counseling and Psychology; Ph.D., University of Wisconsin-Madison, 1991.

Simonsson, Marie V., Associate Professor, Department of Educational Leadership; Administraton and Supervision; Ed.D., University of Houston, 1998.

Simpson, Claude, Associate Professor, Department of Computer Information Systems and Quantitative Methods; Ph.D., Georgia State University, 1973.

Simpson, Geok H., Assistant Professor, Department of Economics and Finance; Ph.D., Mississippi State University, 2005.

Simpson, Mark W., Associate Professor, Department of Economics and Finance; Ph.D., Fordham University-New York, 1999.

Simpson, Penny, Associate Dean, College of Business Administration, Associate Professor, Department of Management, Marketing and International Business; Marketing; Ph.D., Louisiana Tech University, 1992.

Skinner, José, Assistant Professor, Department of English; Creative Writing; MFA, University of Iowa, 2002.

Skow, Donald P., Senior Lecturer, Department of Mathematics; Mathematics; MS, East Texas State University, 1971.

Solís, Raúl H., Program Director and Assistant Professor, Department of Social Work; Mexican-American Experience, Generalist Social Work, Occupational Social Work, International Social Work, Field Education; MSW, Our Lady of the Lake University, 1974.

Son, Jaesok, Associate Professor, Department of Electrical Engineering; Computer Engineering, Synthetic Aperture Radar, Radar Signal Processing and Target Recognition, Speech and Image Compression, Digital and Voice Communication; Ph.D., The University of Texas at El Paso, 1998.

Soydemir, Gokce, Associate Professor, Department of Economics and Finance; Finance and International Economics; Ph.D., Claremont Graduate School, 1997.

Sparrow, Gregory S., Assistant Professor, Department of Educational Psychology; Counseling; Ph.D., College of William and Mary, 1983.

Stanley, Jack R., Professor, Department of Communication; Journalism, Theatre/TV/Film; Ph.D., Texas Christian University, 1973.

Stevens, Michael J., Associate Professor, Department of Management, Marketing and International Business; Organizational Behavior and Human Resource Management; Ph.D., Purdue University, 1993.

Sturges, David L., Associate Professor, Department of Management, Marketing and International Business; Management, Management Communications; Ph.D., University of North Texas, 1988.

Su, DeJun, Assistant Professor, Department of Sociology; Ph.D., University of Chicago, 2006.

Sullivan, Pamela, Assistant Professor, Department of Nursing; MSN, The University of Texas Health Science Center at Houston, 1991.

Summy, Kenneth R., Associate Professor, Department of Biology; Remote Sensing Technology; Texas A \& M University, 1983.

Sun, Jun, Assistant Professor, Department of Computer Information Systems and Quantitative Methods.

Sutter, Daniel, S., Associate Professor, Department of Economics and Finance; Ph.D., George Mason University, 1993.

Sutter, Natalie, Assistant Professor, Department of Economics and Finance.

Tanguma, Jesus, Assistant Professor, Department of Computer Information Systems and Quantitative Methods; Ph.D., Texas A\&M University, 2000.

Tarawneh, Constantine, Assistant Professor, Department of Mechanical Engineering; Ph.D., University of Nebraska-Lincoln, 2003.

Tasnif, Yasar, Assistant Professor, Cooperative Pharmacy Program.

Tavarez, Hiram, Medical Director, Physician Assistant Studies Program; Internal Medicine; M.D., University of Nuevo Leon, Monterrey, México, 1958.

Taylor, Karen, Lecturer, Department of English; American Literature, English Literature; MA, Pan American University, 1980.

Taylor, Monty B., Professor, Department of Mathematics; Commutative Algebra, Multiplicative Lattices; Ph.D., University of Houston, 1988.

Terry, Matthew D., Assistant Professor, Department of Biology.

Tevis, Martha, Professor, Department of Curriculum and Instruction; History and Philosophy of Education, Cultural Foundations of Education, Latin; Ph.D., The University of Texas at Austin, 1967.

Thompson, Frieda, Lecturer, Department of English; American Literature, English Literature; MA, Pan American University, 1989.

Thompson, Shawn C., Assistant Professor, Department of English.

Thompson, William W., Professor, Department of Management Marketing and International Business; Marketing; Ph.D., University of Arkansas (Fayetteville), 1974.

Tidrow, Steven C., Chair, Department of Physics and Geology; Ph.D.

Tijerina, Sandra L., Associate Professor, Clinical Laboratory Sciences Program; MT (ASCP) SBB, CLSpH (NCA); MS, Texas A\&M University-Corpus Christi, 1992.

Timmer, Douglas H., Associate Professor and Chair, Manufacturing Engineering Department; Applied Statistics, Statistical Process Control, Design of Experiments, Reliability, Total Quality Management, Statistical Computing and Industrial Engineering; Ph.D., Texas A\&M University, 1994.

Torres, J. Rene, Lecturer, Department of Mathematics; Mathematics Education; MS, Texas A\&I University, 1971.

Tsai, Ping-Sing, Assistant Professor, Department of Computer Science and Computer Engineering; Image and Multimedia Computing; Ph.D., University of Central Florida, 1995.

Tsay, Jenq-Jong, Assistant Professor, Department of Mathematics.

Turk, William, Assistant Professor, Department of Political Science; Public and Urban Administration; Ph.D., The University of Texas at Arlington, 1997.

Varlamov, Vladimir, Associate Professor, Department of Mathematics; Applied Mathematics; Ph.D., Moscow State University, 1983; Mathematics; Ph.D., University of Breslau, Poland, 1999.

Vasquez, Horacio, Assistant Professor, Department of Mechanical Engineering; Ph.D., University of AlabamaTuscaloosa.

Vasquez-Parraga, Arturo, Professor, Department of Management, Marketing and International Business; Marketing; Ph.D., Texas Tech University, 1990.

Vielma, Barbara, Lecturer, Department of English; English Literature, World Literature; MA, Pan American University, 1987.

Villalobos, Maria Cristina, Assistant Professor, Department of Mathematics; Optimization Theory, Computational and Applied Mathematics; Ph.D., Rice University, 2000.

Villarreal Jr., Elias, Clinical Assistant Professor, Physician Assistant Studies Program; General Surgery, Orthopedics, Hematology and Oncology; Yale University School of Medicine Physician Associate Program, 1997.

Villarreal, John R., Assistant Dean, College of Science and Engineering; Professor, Department of Chemistry; Physical Chemistry; Ph.D., Texas A\&M University, 1976.

Villas, Paul, Professor, Department of Health and Kinesiology; Health Education, Public Health; Ed.D., University of Tennessee, 1988.

Vincentnathan, Lynn, Assistant Professor, Department of Psychology and Anthropology; Ph.D., University of Wisconsin-Madison, 1987.

Vincentnathan, S. George, Professor and Chair, Department of Criminal Justice; Criminology, Corrections International Crime and Justice; D.Crim., University of California, Berkley, 1973.

Voisei, Mircea Dan, Assistant Professor, Department of Mathematics.

Von Ende, Frederick, Professor, Department of English; English Literature; Ph.D., Texas Christian University, 1972.

Voss, Judy, Lecturer, Department of Nursing; MSN, The University of Texas Health Science Center at Houston, 1991.

Waite, Charles V., Assistant Professor, Department of History and Philosophy; Ph.D., Texas Tech University, 1999.

Wallace, Edward F., Lecturer, Department of History and Philosophy; MA, Rollins College, 1999.

Wang, Bailey, Associate Professor, Department of Communication Sciences and Disorders; Audiology; Ph.D., University of Kansas, 1997.

Wang, Bin, Assistant Professor, Department of Computer Information Systems and Quantitative Methods; Ph.D., University of Minnesota, 2004.

Wang, Guang-zhen, Professor and Chair, Department of Sociology; Ph.D., University of North Texas, 1996.

Wang, Lei, Assistant Professor, Department of Management, Marketing and International Business; Management; Ph.D., New Mexico State University, 2005.

Wang, Xiaohui (Sophie), Assistant Professor,
Department of Mathematics; Statistics; Texas A\&M University, 2006.

Wang, Xusheng, Assistant Professor, Department of Computer Science; Virtual Reality and Web-based Applications; Ph.D., George Mason University, 2003.

Warren, Brian, Lecturer, Department of Communication; Theatre/TV/Film; MA, The University of Texas-Pan American, 2001.

Watkins, William, Professor, Department of Mathematics; Topology, Semigroups, Microcomputers; Ph.D., University of Wyoming, 1980.

Watt, Karen, Associate Professor, Department of School Administration and Supervision, Educational Leadership; Ph.D., The University of Texas at Austin, 1999.

Weaver, Michael K., Associate Dean, College of Arts and Humanities; Associate Professor, Department of History and Philosophy and Department of Modern Languages and Literature; British Modern European History; Ph.D., University of North Carolina at Chapel Hill, 1989.

Wedig, Cindy M., Lecturer, Department of Biology; Dairy Science, Nutritional Biochemistry; Ph.D., University of Illinois, 1987.

Weger, Lewis C., Assistant Clinical Professor, Physician Assistant Studies Program; MS, University of Nebraska Medical Center, 1998.

Weimer, Amy A., Assistant Professor, Department of Psychology and Anthropology.

Wenzel, James P., Associate Professor, Department of Political Science; Public Law, Methods; Ph.D., University of Houston, 1993.

West, Thomas M., Lecturer, Department of English; 18th Century British Literature; Ph.D., The University of Texas at Austin, 1982.

Whelan, Thomas, Associate Professor, Department of Chemistry; Chemistry; Ph.D., Texas A\&M University, 1971.

White, Thomas G., Assistant Professor, Department of Criminal Justice.

Wiener, Bella, Senior Lecturer, Department of Mathematics; Mathematics Education, European Methods; MS, Vitebsk State University, USSR, 1968.

Wiley, Eric, Associate Professor, Department of Communication; Theatre/TV/Film; Ph.D., Louisiana State University, 1999.

Williams, Jacquelyn, Clinical Specialist, Department of Nursing; MS, University of Southern California, 1998; MSN, The University of Texas-Pan American, 2003.

Williamson, Eric M., Associate Professor, Department of English; English and American Literature, Creative Writing; Ph.D., New York University, 1998.

Wilson, Bruce K., Professor, Department of Nursing; Ph.D., North Texas State University, 1987.

Wimberly, Cory M., Assistant Professor, Department of History and Philosophy.

Winkel, Mark H., Associate Professor, Department of Psychology and Anthropology; Psychology, Cognitive Social Psychology, Law and Psychology; Ph.D., Oklahoma State University, 1982.

Wirts, Kristine, Assistant Professor, Department of History and Philosophy; Ph.D., Auburn University, 2003.

Wisener, Robert H., III, Assistant Professor, Department of Psychology and Anthropology; Psychology, School, Clinical; Ed.D., University of Northern Colorado, 1975.

Wittman, John V., Assistant Professor, Department of English; Ph.D., Southern Illinois University-Carbondale, 2004.

Wrinkle, Robert, Professor, Department of Political Science; Public Policy, Urban Politics, Methodology; Ph.D., University of Arizona, 1967.

Wu, Sibin, Assistant Professor, Department of Management, Marketing and International Business; Strategic Management and Organizational Theory; ABD, Ph.D., University of Wisconsin-Madison, 2004.

Yagdjian, Karen, Assistant Professor, Department of Mathematics; Ph.D., Moscow State University, 1990.

Yañez, Martha, Assistant Professor, Secondary Program, Department of Curriculum and Instruction; Ed.D., Nova Southeastern University, 2001.

Yong, Jimin, Assistant Professor, Coordinated Program in Dietetics.

Zaidan, Frederic, Assistant Professor, Department of Biology; Biological Sciences; Ph.D., University of Arkansas, 2001.

Zarate, Arnoldo, Lecturer, Department of History and Philosophy.

Zarnani, Hamid, Assistant Professor, Department of Electrical Engineering.

Zeng, Liang, Associate Professor, Department of Physics and Geology.

Zents, Jeffrey W., Lecturer, Department of History and Philosophy.

Zhou, Haiyan, Assistant Professor, Department of Accounting and Business Law; Ph.D., Temple University, 2003.

Zolfagharian, Mohammedli, Assistant Professor, Department of Management, Marketing and International Business; Marketing.


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## 3 emeritus FACULTY

Anzaldua, Hermila, Department of Social Work

Baca, Ernest J., Department of Biology
Clark, Theodore, Department of History and Philosophy
Dominguez, Sylvia, Department of Modern Languages and Literature

Evans, James L., Department of English
Garcia, Lino, Department of Modern Languages and Literature

Grantz, Carl, Department of English
Gratz, Elizabeth, Department of Curriculum and Instruction

Judd, Frank W., Department of Biology
Levine, Bert, Department of Psychology and Anthropology

Lonard, Robert I., Department of Biology

Miller, Hubert, Department of History and Philosophy
Monta, Marian, Department of Communication
Noyes, Lillian, Department of Political Science
Parkinson, Charles, Department of Health and Kinesiology

Phillips, Phyllis, Department of Curriculum and Instruction

Schaefer, Geralda, Department of Mathematics
Stratton, Porter, Department of History and Philosophy
Vassberg, Lilliane, Department of Modern Languages and Literature

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> NOTES

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[^0]:    D Division of Academic Affairs <br> Dr. Paul Sale, Ph.D., Provost and Vice President for Academic Affairs <br> Ana Maria Rodriguez, Ed.D., Senior Vice Provost for Undergraduate Studies, Academic Assessment and Retention Cynthia Brown, Ph.D., Interim Vice Provost for Graduate Programs <br> Wendy A. Lawrence-Fowler, Ph.D., Vice Provost for Research <br> Dahlia Guerra, Ph.D., Dean, <br> College of Arts and Humanities <br> Teofilo Ozuna, Ph.D., Interim Dean, <br> College of Business Administration <br> Salvador Hector Ochoa, Ph.D., Dean, College of Education <br> Bruce Reed, Ph.D., Dean, <br> College of Health Sciences and Human Services Karen Chandler, Assistant Dean, <br> College of Health Sciences and Human Services Amy Schwartz, Ph.D., Assistant Dean, <br> College of Health Sciences and Human Services <br> Edwin LeMaster, Ph.D., Dean,

[^1]:    iz SURVIVING Spouse and Minor Children of Certain Police,

[^2]:    MEXICAN NATIONALS: Citizens of Mexico may apply for a Nonresident Tuition Waiver. To be eligible, a student must have or obtain an F-1 student status, enroll full time and must apply before the required deadline dates. Students who have filed for permanent residency are not eligible. For information about this program, contact the Office of International Admissions and Services at the University Center, Room 113, 956/381-2922.

[^3]:    - Finance Major (BBA degree)

[^4]:    COMM 4332 Media Publishing (JO)
    [3-O] as scheduled
    Computer production of a variety of print media publishing, including layout, design and writing.

    COMM 4334 Communication Campaigns (JO) [3-0] as scheduled
    This course will cover the development of communication campaigns from the initiation of a

[^5]:    KIN 2305 Technical Skills for Team Sports as scheduled
    Motor skill acquisition, knowledge, and safety issues

