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University of Texas Pan American

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## The Univessity of Texas-Pan Amesican



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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, Georgia, telephone 404/679-4501) to award associate's, bachelor's and master's degrees. Certain of its programs are separately accredited or approved by the:

Texas Education Agency
American Assembly of Collegiate Schools of Business (AACSB)-
The International Association for Management Education
The Council on Social Work Education
American Dietetic Association
Board of Nurse Examiners for the State of Texas
The National League for Nursing
National Accrediting Agency for Clinical Laboratory Sciences
American Speech-Language-Hearing Association Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology

The University of Texas-Pan American is a member of the American Association of State Colleges and Universities American Council on Education American Association of Colleges for Teacher Education Council for Advancement and Support of Education Council of Graduate Schools Conference of Southern Graduate Schools Hispanic Association of Colleges and Universities Association for Continuing Higher Education

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.

This document is an electronic form of the 1998-2000 Undergraduate Catalog published by The University of Texas-Pan American. Questions regarding this catalog should be directed to the Office of University Relations at 956/381-2741 or e-mail at info@www.panam.edu.
Individuals with disabilities wishing to acquire this publication in an alternative format should contact the Office of Admissions and Records at 956/381-2206 or Voice/TDD 956/381-2215.

## 1998-2000 Unciercraciucite Gcitciloc

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 only. 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.

## Nom-Discrimination Policy statememt

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 335, Administration Building, telephone 956/381-2127; the chair of the department; or the Dean of Students in Room 104 of the University Center, telephone 956/381-2260. Inquiries concerning ADA should be directed to the Coordinator of Services for Persons with Disabilities, Emilia Schunior Ramirez Hall, Room 100, telephone 956/ 316-7005.

Individuals who believe they have been discriminated against in violation of any of the non-discrimination 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 "Non-Academic Grievance and Appeals 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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Dates and deadlines for applications for student loans, scholarships or other financial aid are set in the Financial Aid Office and are listed in the Financial Assistance section of this catalog.

For ACT, TASP, GRE, GMAT and other test information, contact the Office of Placement, Testing and Cooperative Education at 956/381-2247.

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.

## * Fall Semester 1998

## February 2, 1998, Monday

Admission application and document deadline for ASSIST registration by telephone, web or terminal. All students applying after this deadline will register late.

## February 28, 1998, Saturday

Recommended date to mail Free Application for Federal Student Aid (FAFSA) for processing.
March 30-July 10, 1998 (tentative)
ASSIST registration (telephone, web or terminal) by appointment.
April 15, 1998, Wednesday
Priority deadline for submission of financial aid application for Fall 1998 awards.
July 13, 1998, Monday
Admission application and document deadline for late registration. Applications received after deadline will be processed for the next semester.
August 26-27, 1998, inclusive
Late registration by appointment.
August 27, 1998, Thursday
Residence halls open for students who have not preregistered.
August 28, 1998, Friday
Cafeteria opens for breakfast.
August 29, 1998, Saturday
Residence halls open for students who have preregistered.
August 31, 1998, Monday
First day of classes; schedule changes through Sept. 3.
September 7, 1998, Monday Labor Day holiday.
September 14, 1998, Monday
Deadline to file Application for Degree form with the

Office of Admissions and Records for May 1999 graduation.
September 16, 1998, Wednesday
Twelfth class day.
September 30, 1998, 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.
October 5, 1998, Monday Deadline to file completed signed thesis with dean of major college for students expecting to receive a master's degree in December 1998.
October 19-November 27, 1998 (tentative) ASSIST registration (telephone, web or terminal) by appointment for Spring 2000.
November 25, 1998, Wednesday Last day to drop or withdraw through the Office of Admissions and Records. Residence halls close for Thanksgiving holidays at 6:30 p.m.
November 26-27, 1998, inclusive Thanksgiving holidays.
November 29, 1998, Sunday Residence halls re-open at 9 a.m.
December 10-11, 1998, inclusive Limited departmental final examinations; Dead Days.
December 12-17, 1998, inclusive
Fall semester final examinations.
December 17, 1998, Thursday
Residence halls and cafeteria close at $6: 30$ p.m.
December 18, 1998, Friday
Final grade reports due in the Office of Admissions and Records by 10 a.m.
December 19, 1998, Saturday
Commencement exercises.

## Spring Semester 1999

July 16, 1998, Thursday
Recommended date to mail Free Application for Federal Student Aid (FAFSA) for processing.
September 4, 1998, Friday
Admission application and document deadline for ASSIST registration by telephone, web or terminal. All students applying after this deadline will register late.
September 14, 1998, Monday
Deadline to file Application for Degree form with the Office of Admissions and Records for May 1999 graduation.
September 16, 1998, Wednesday
Priority deadline for submission of financial aid application for Spring 1999 awards.
October 19-November 27, 1998 (tentative) ASSIST registration (telephone, web or terminal) by appointment.

## November 9, 1998, Monday

Admission application and document deadline for late registration. Applications received after deadline will be processed for the next semester.
January 11, 1999, Monday
Deadline to file Application for Degree form with the Office of Admissions and Records for August 1999 graduation.
January 13-14, 1999, inclusive
Late registration by appointment.
January 14, 1999, Thursday
Scholarship application deadline for academic year 1999-2000.
Residence halls open for students who have not preregistered.
January 15, 1999, Friday
Cafeteria opens for breakfast.
January 17, 1999, Sunday
Residence halls open for students who have preregistered.
January 18, 1999, Monday
Martin Luther King Jr. Day holiday; no classes.
January 19, 1999, Tuesday
Classes begin; schedule changes through January 22.
February 3, 1999, Wednesday
Twelfth class day.
February 17, 1999, 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.

## March 8, 1999, Monday

Deadline to file completed signed thesis with dean of major college for students expecting to receive a master's degree in May 1999.

## March 12, 1999, Friday

Residence halls close for Spring Break holidays at 6:30 p.m.
March 15-20, 1999, inclusive Spring Break.
March 21, 1999, Sunday
Residence halls re-open at 9 a.m.
March 29-July 9, 1999 (tentative)
ASSIST registration (telephone, web or terminal) for Summer I, Summer II and Fall 1999 by appointment.
April 2-3, 1999, inclusive
Easter holidays.
April 5, 1999, Monday
Deadline to file Application for Degree form with the Office of Admissions and Records for December 1999 graduation.
April 23, 1999, Friday
Last day to drop or withdraw through the Office of Admissions and Records.

May 6-7, 1999, inclusive
Limited departmental final examinations; Dead Days.
May 8-13, 1999, inclusive
Spring semester final examinations.
May 13, 1999, Thursday
Residence halls and cafeteria close at 6:30 p.m.
May 14, 1999, Friday
Final grade reports due in the Office of Admissions and
Records by 10 a.m.
May 15, 1999, Saturday
Commencement exercises.

## * First Summer Session 1999

## December 15, 1998, Tuesday

Recommended date to mail Free Application for Federal Student Aid (FAFSA) for processing.
January 11, 1999, Monday
Deadline to file Application for Degree form with the Office of Admissions and Records for August 1999 graduation.
February 1, 1999, Monday
Admission application and document deadline for ASSIST registration by telephone, web or terminal. All students applying after this deadline will register late.
February 15, 1999, Monday
Deadline to submit financial aid application for Summer 1999 awards.
March 29-April 30, 1999 (tentative)
ASSIST registration (telephone, web or terminal) by appointment.
April 12, 1999, Monday
Admission application and document deadline for final (late) registration. Applications received after deadline will be processed for the next semester.
May 27, 1999, Thursday
Residence halls open for first summer session at noon.
May 28, 1999, Friday
Late registration and schedule changes by appointment. Cafeteria opens for breakfast.
May 31, 1999, Monday Memorial Day holiday.
June 1, 1999, Tuesday
Classes begin; schedule changes through June 2.
June 4, 1999, Friday
Fourth class day.
June 7, 1999, Monday
Deadline to file completed signed thesis with dean of major college for students expecting to receive a master's degree in August 1999.
June 10, 1999, Thursday
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 24, 1999, Thursday
Last day to drop or withdraw through the Office of Admissions and Records.

## July 6, 1999, Tuesday

First summer session final examinations.
Residence halls close for the first summer session.

## July 8, 1999, Thursday

Final grade reports due in the Office of Admissions and Records by 10 a.m.

## Second Summer Session 1999

## December 15, 1998, Tuesday

Recommended date to mail Free Application for Federal Student Aid (FAFSA) for processing.

## January 11, 1999, Monday

Deadline to file Application for Degree form with the Office of Admissions and Records for August 1999 graduation.

## February 1, 1999, Monday

Admission application and document deadline for ASSIST registration by telephone, web or terminal. All students applying after this deadline will register late.
February 15, 1999, Monday
Deadline to submit financial aid application for Summer 1999 awards.
March 29-June 11, 1999 (tentative)
ASSIST registration (telephone, web or terminal) by appointment.
May 7, 1999, Friday
Admission application and document deadline for late registration. Applications received after deadline will be processed for the next semester.

## July 6, 1999, Tuesday

Residence halls open for second summer at noon.
July 7, 1999, Wednesday
Late registration by appointment.
July 9, 1999, Friday
Classes begin; schedule changes through July 12.
July 14, 1999, Wednesday
Fourth class day.
July 19, 1999, 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 2, 1999, Monday
Last day to drop or withdraw through the Office of Admissions and Records.
August 13, 1999, Friday
Second summer session final examinations.
Residence halls close at 6:30 p.m.
August 16, 1999, Monday
Final grade reports due in the Office of Admissions and Records by 10 a.m.

## GALENDAR 1999•2000

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

For ACT, TASP, GRE, GMAT and other test information, contact the Office of Placement, Testing and Cooperative Education at 956/381-2247.

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.

## Fall Semester 1999

## February 1, 1999, Monday

Admission application and document deadline for ASSIST registration by telephone, web or terminal. All students applying after this deadline will register late.
February 28, 1999, Sunday
Recommended date to mail Free Application for Federal Student Aid (FAFSA) for processing.
March 29-July 9, 1999 (tentative) ASSIST registration (telephone, web or terminal) by appointment.
April 5, 1999, Monday
Deadline to file Application for Degree form with the Office of Admissions and Records for December 1999 graduation.
April 15, 1999, Thursday
Priority deadline for submission of financial aid application for Fall 1999 awards.
July 12, 1999, Monday
Admission application and document deadline for final (late) registration. Applications received after deadline will be processed for the next semester.
August 26, 1999, Thursday
Residence halls open for students who have not preregistered.
August 27, 1999, Friday
Cafeteria opens for breakfast.
August 28, 1999, Saturday
Residence halls open for students who have preregistered.
August 25-26, 1999, inclusive
Late registration by appointment.

August 30, 1999, Monday
First day of classes; schedule changes through Sept. 2.
September 6, 1999, Monday
Labor Day holiday.
September 13, 1999, Monday
Deadline for filing Application for Degree form with the Office of Admissions and Records for May 2000 graduation.
September 15, 1999, Wednesday
Twelfth class day.
September 29, 1999, 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.
October 4, 1999, Monday
Deadline to file completed signed thesis with dean of major college for students expecting to receive a master's degree in December 1999.
October 18-November 26, 1999 (tentative) ASSIST registration (telephone, web or terminal) by appointment for Spring 2000.
November 24, 1999, Wednesday Last day to drop or withdraw through the Office of Admissions and Records.
November 25-27, 1999, inclusive Thanksgiving holiday.
November 28, 1999, Sunday Residence halls re-open at 9 a.m.
December 9-10, 1999, inclusive Limited departmental final examinations; Dead Days.
December 11-16, 1999, inclusive Fall semester final examinations.

## December 16, 1999, Thursday

 Residence halls and cafeteria close at 6:30 p.m.December 17, 1999, Friday Final grade reports due in the Office of Admissions and Records by 10 a.m.
December 18, 1999, Saturday Commencement exercises.

## * Spring Semester 2000

July 16, 1999, Friday
Recommended date to mail Free Application for Federal Student Aid (FAFSA) for processing.

## September 3, 1999, Friday

Admission application and document deadline for ASSIST registration by telephone, web or terminal. All students applying after this deadline will register late.
September 13, 1999, Monday
Deadline for filing Application for Degree form with the Office of Admissions and Records for May 2000 graduation.

September 16, 1999, Thursday
Priority deadline for submission of financial aid application for Spring 2000 awards.
October 18-November 26, 1999 (tentative) ASSIST registration (telephone, web or terminal) by appointment.
November 8, 1999, Monday
Admission application and document deadline for late registration. Applications received after deadline will be processed for the next semester.
January 10, 2000, Monday
Deadline for filing Application for Degree form with the Office of Admissions and Records for August 2000 graduation.
January 12-13, 2000, inclusive Final (late) registration by appointment.
January 13, 2000, Thursday
Residence halls open for students who have not preregistered.
January 14, 2000, Friday Scholarship application deadline for academic year 2000-2001.
Cafeteria opens for breakfast.
January 15, 2000, Saturday
Residence halls open for students who have preregistered.
January 17, 2000, Monday Martin Luther King Jr. Day holiday; no classes.
January 18, 2000, Tuesday Classes begin; schedule changes through January 21.
February 2, 2000, Wednesday Twelfth class day.
February 16, 2000, 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.
March 6, 2000, Monday Deadline to file completed signed thesis with dean of major college for students expecting to receive a master's degree in May 2000.
March 10, 2000, Friday Residence halls close for Spring Break at 6:30 p.m.
March 13-18, 2000, inclusive Spring Break.
March 19, 2000, Sunday
Residence halls re-open at 9 a.m
March 29-July 9, 2000 (tentative) ASSIST registration (telephone, web or terminal) for Summer I, Summer II and Fall 2000 by appointment.
April 3, 2000, Monday
Deadline for filing Application for Degree form with the Office of Admissions and Records for December 2000 graduation.
April 21, 2000, Friday Last day to drop or withdraw through the Office of Admissions and Records.

April 21-22, 2000, inclusive
Easter holidays.
May 4-5, 2000, inclusive
Limited departmental final examinations; Dead Days.
May 6-11, 2000, inclusive
Spring semester final examinations.
May 11, 2000, Thursday
Residence halls close at 6:30 p.m.
May 12, 2000, Friday
Final grade reports due in the Office of Admissions and Records by 10 a.m.
May 13, 2000, Saturday
Commencement exercises.

## * First Summer Session 2000

## December 15, 1999, Wednesday

Recommended date to mail Free Application for
Federal Student Aid (FAFSA) for processing.
January 10, 2000, Monday
Deadline for filing Application for Degree form with the Office of Admissions and Records for August 2000 graduation.
February 1, 2000, Tuesday
Admission application and document deadline for ASSIST registration by telephone, web or terminal. All students applying after this deadline will register late.
February 15, 2000, Tuesday
Deadline for submitting financial aid application for Summer 2000 awards.
March 27-May 5, 2000, inclusive
ASSIST registration (telephone, web or terminal) by appointment.
April 10, 2000, Monday
Admission application and document deadline for final (late) registration. Applications received after deadline will be processed for the next semester.
June 1, 2000, Thursday
Residence halls open for first summer session.
June 2, 2000, Friday
Late registration by appointment.
June 5, 2000, Monday
Classes begin; schedule changes through June 6.
Deadline to file completed signed thesis with dean of major college for students expecting to receive a master's degree in August 2000.
June 8, 2000, Thursday
Fourth class day.
June 14, 2000, 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 29, 2000, Thursday
Last day to officially drop or withdraw through the Office of Admissions and Records.

July 4, 2000, Tuesday
Independence Day holiday.
July 11, 2000, Tuesday
First summer session final examinations
Residence halls close for first summer session.
July 13, 2000, Thursday
Final grade reports due in the Office of Admissions and Records by 10 a.m.

## * Second Summer Session 2000

December 15, 1999, Wednesday
Recommended date to mail Free Application for Federal Student Aid (FAFSA) for processing.
January 10, 2000, Monday
Deadline for filing Application for Degree form with the Office of Admissions and Records for August 2000 graduation.
February 1, 2000, Tuesday
Admission application and document deadline for ASSIST registration by telephone, web or terminal. All students applying after this deadline will register late.
February 15, 2000, Tuesday Deadline for submitting financial aid application for Summer 2000 awards.
March 27-June 16, 1999 (tentative) ASSIST registration (telephone, web or terminal) by appointment.
May 5, 2000, Friday
Admission application and document deadline for final (late) registration. Applications received after deadline will be processed for the next semester.
July 11, 2000, Tuesday
Residence halls open for second summer session.
July 12, 2000, Wednesday
Late registration by appointment.
July 14, 2000, Friday
Classes begin; schedule changes through July 17.
July 19, 2000, Wednesday
Fourth class day.
July 24, 2000, 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 4, 2000, Friday
Last day to drop or withdraw through the Office of Admissions and Records.
August 18, 2000, Friday
Second summer session final examinations.
Residence halls close at 6:30 p.m. for the second summer session.
August 21, 2000, Monday
Final grade reports due in the Office of Admissions and Records by 10 a.m.


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

## Mission Statement

The University of Texas-Pan American is a comprehensive general academic component of The University of Texas System established to serve the higher education needs of South Texas. The University is committed to excellence in instruction, student performance, research, scholarly accomplishment and professional service, and to expansion of international emphasis in all major areas of institutional endeavor.

The University of Texas-Pan American is committed to providing an environment of academic freedom in which faculty engage in teaching, research, and service. Students learn from faculty scholars who engage in research and creative activity to promote excellence in teaching, to develop and maintain scholarship, and to extend human knowledge. The results of that research and creativity are shared with the general public through performance, presentation, publication, and public service activities.

The University of Texas-Pan American strives to fulfill its responsibilities by providing a variety of quality academic programs in social and behavioral sciences, science and engineering, arts and humanities, health sciences and human services, education, and business administration leading to degrees at the undergraduate and graduate level and to certification in selected professions. These programs are grounded in the liberal arts and emphasize competency, multicultural understanding and high ethical standards.

The University of Texas-Pan American is committed to maintaining an admissions policy that recognizes the complex educational needs of its students and that provides access to qualified applicants. The University pledges itself to the fullest development of its students by seeking financial assistance, providing appropriate developmental and support services, and offering enriched programs. In addition, the University is committed to providing appropriate and current library, information technology, computer, laboratory and physical resources to support its academic programs and to evaluating consistently and responsibly the effectiveness of its instructional programs.

The University of Texas-Pan American seeks to
complement the instructional programs of the institution by:

- reflecting and responding to the international, multicultural, multilingual character of the Pan American community;
- providing a wide range of extracurricular activities and experiences which enhance the region's intellectual, cultural, civic, social, economic and physical environment;
- maintaining services that accommodate and fulfill personal needs and that enrich the academic and social development of students;
- involving the institution in the community by providing services, programs, continuing education, cultural experiences, educational leadership and expertise to the community-at-large;
- encouraging the community-at-large to contribute to the effectiveness of their University; and
- cooperating with other institutions, schools, communities and agencies to maximize educational opportunity and effectiveness through resource sharing and collaborative efforts.


## - 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 December 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 upper-level 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,

## 10 - General Information

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 September 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 September 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. The Coordinating Board also approved a cooperative doctoral program in educational administration between UT Pan American and 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.

## ■ 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.

Enrollment in Fall 1997 was 12,500. The Texas Higher Education Coordinating Board predicts the university will have 16,900 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.

The university offers the associate's,* bachelor's, master's and doctoral degrees listed on the pages that follow.

Undergraduate degrees are awarded in the following fields:

## - Associate's Degree*

## College of Health Sciences and Human Services <br> Nursing Education (AAS)


#### Abstract

* The Associate Degree in Nursing program at UT Pan American is scheduled for closure. The last class will be admitted for the fall semester 1998, and the program will close as of 2000. Students should contact their departmental advisor for further information on program status or academic standing.


## - Bachelor's Degrees

## College of Arts and Humanities

Art (BA, BFA)
Communication
Journalism (BA)
Speech Communication (BA)
Theatre (BA)
English (BA)
History (BA)
Inter-American Studies (Latin-American Studies) (BA)
Mexican-American Studies (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
Health (BS)
Kinesiology (BS)

College of Health Sciences and Human Services
Clinical Laboratory Sciences (BS)
Communication Disorders (BA)
Dietetics (BS)
Nursing (BSN)
Rehabilitative Services (BS)
Social Work (BSW)
College of Science and Engineering
Biology (BS)
Chemistry (BS)
Computer Science (BS)
Electrical Engineering (BSEE)
Manufacturing Engineering (BSMfgE)
Mathematics (BS)
Mechanical Engineering (BSME)
Physics (BS)
College of Social and Behavioral Sciences
Anthropology (BA)
Corrections (BSCJ)
Police Administration (BSCJ)
Political Science (BA)
Psychology (BA, BS)
Sociology (BA)
Interdisciplinary Bachelor's Degrees
Applied Arts and Sciences*
Business Technology (BAAS) General (BAAS)
General Studies (BGS)*
Interdisciplinary Studies (BIS)**

* See the College of Social and Behavioral Sciences for information and advising.
** See the College of Education for information and advising.


## Cooperative Bachelor's Degrees

Physician Assistant Studies (BS) (with The University of Texas Medical Branch at Galveston)
Occupational Therapy (BS) (with The University of Texas Health Science Center at San Antonio)

The following graduate degrees also are available:

## - Master's Degrees

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College of Arts and Humanities
Art (MFA)
English (MA)
English as a Second Language (MA)
History (MA)
Spanish (MA)
Speech Communication (MA)
Theatre (MA)
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## College of Business Administration

Business Administration (MBA)

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) (MEd)
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 Disorders
Communication Disorders - Bilingual/Bicultural (MA)
Communication Disorders - General (MA)
Family Nurse Practitioner (MSN)
Rehabilitation Counseling (MS)
Social Work (MSSW)
College of Science and Engineering
Biology (MS)
Computer Science (MS)
Mathematics
Mathematical Science (MS)
Mathematics Teaching (MS)
College of Social and Behavioral Sciences
Criminal Justice (MS)
Psychology
Clinical (MA)
Experimental (MA)
Public Administration (MPA)
Sociology (MS)
Interdisciplinary Master's Degrees:
Interdisciplinary Studies (MAIS, MSIS)

## - Doctoral Degrees

## College of Business Administration

Business Administration with an emphasis in International Business (PhD)

## Cooperative Doctoral Degree

Educational Administration (EdD) (with The University of Texas at Austin)

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

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## ADMIGSION

## 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 Texas-Pan American through the Office of Admissions and Records, 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:

Office of Admissions and Records
Student Services Building, Room 108
The University of Texas-Pan American
1201 W. University Drive
Edinburg, TX 78539-2999
956/381-3040 or 956/381-2201
Voice/Telecommunications Device for the Deaf: 956/381-2215

Required high school and/or college transcripts must be requested from each individual institution attended. These official transcripts must be sent by the institution directly to the Office of Admissions and Records at the above address. Information regarding how test scores may be requested may be obtained from the Office of Placement, Testing and Cooperative Education, Student Services Building, Room 147, telephone 956/381-2247.

Failure to submit a complete and correct application, including all transcripts, is grounds for rejection of application, withdrawal of offer of acceptance or, after enrollment, 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 record and apply for admission to UT Pan American on the basis of a partial record of his or her college work, but is subject
without exception to the regulations for admission.
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.

## - Texas Common Application

In accordance with Sections 51.762 and 51.763 of the Texas Education Code, students will have the opportunity, beginning for admission for Fall 1999, to apply to any public institution in the State of Texas through a common application process. Please check with the Office of Admissions and Records at the address above for full details.

## - Automated Student Information Services

Telephone Voice Response: Students may check the progress of their applications or access other information by calling the Advanced Service 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://www.panam.edu/assist.

## - Application Deadlines

There are two admission application deadlines for each semester and summer session at the university. The earliest deadline, the first work day in February for both summer sessions and the fall semester or the first work day in September for the spring semester, allows students to participate in telephone/terminal/Web registration via the computerized ASSIST registration system. Registration is conducted in the spring for the summer and fall sessions and in fall for the spring semester.

The second application deadline, usually about 60 days before the beginning of the semester, is for arena or late registration. Late registration is held in the University Fieldhouse a few days before classes begin.

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

## 14 - General Information

pursuant to the "academic fresh start" statute, Texas Education Code, Paragraph 51.931. If the applicant informs the Office of Admissions and Records 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.

## - Procedure after Admission

Successful applicants will receive a letter of acceptance from the Office of Admissions and Records. Entering freshmen and transfer students who have not yet fulfilled Texas Academic Skills Program (TASP) compliance requirements should contact the Learning Assistance Center's Counseling and Advisement Center for academic advisement. Other transfer students and graduate students should contact the office of their major department, who will appoint an advisor to counsel them on registration, degree programs and other required procedures. Students should have their schedules approved each semester by their advisors (or an approved substitute) before registering for courses. Advisement is mandatory at all levels. Entering freshmen, first-year freshmen, provisional (PEP) students, students who have not passed the Texas Academic Skills Program (TASP) test, and students who have not yet declared a major will report for advisement in the LAC Counseling and Advisement Center, Student Services Building Room 513. All other students are advised in their intended major departments.

## - Undergraduate Admission

Applicants may gain undergraduate admission to the university as entering freshmen, transfer students and through concurrent enrollment as high school juniors and seniors.

## - Entering Freshman Admission

Entering freshmen are students who have not attended any accredited college or university. To be admitted as an entering freshman, an applicant must meet the following requirements and submit required documents to the Office of Admissions and Records by the published deadline date for the semester for which he or she is applying.
Applicants must submit the following required documents:

1. Entering Freshman Application for Admission.
2. High School Transcript showing rank in class, official date of graduation and that the student has earned at least 21 accredited high school units, or GED scores that qualify for issuance of a Texas high school certificate based
on GED test results. (For more information on high school accreditation, see the Glossary on page 264.)
NOTE: Students graduating from a nontraditional high school setting, such as home schooling, must submit a document of completion and have a minimum ACT composite score of 23 .
3. American College Testing Program (ACT) scores or Scholastic Aptitude Test (SAT) scores. ACT or SAT scores posted on an official high school transcript will be accepted. Entering Freshmen will not be permitted to register without ACT or SAT scores. "Pre" test scores such as the PSAT and scores from a residual ACT test scores taken at an institution other than UT Pan American may not be used for admission purposes.
4. Test of English as a Foreign Language (TOEFL) is required of students graduating from a high school in a country where English is not the native language.
NOTE: International students must also complete requirements listed under International Student Admission.
5. Texas Academic Skills Program (TASP) exam (or alternate exam that was to be determined after publication date of this catalog) sent directly from the testing agency. Entering freshmen will not be permitted to register without TASP scores unless exempt from TASP. See page 44 for more information.

There are two types of admission for entering freshmen Regular Admission and Provisional Enrollment.

## Regular Admission

Applicants who have graduated from accredited United States high schools, or their equivalents, are eligible for Regular Admission if they meet one of the following criteria:

1. completion of a high school curriculum certified as "Recommended" or "Advanced" or "with Honors"; or
2. completion of a regular high school program with a class rank in the top quartile of the graduating class; or
3. an ACT Composite of 20 or above (SAT 930 or above).

Students must attend university orientation and be advised by the Counseling and Advisement Center in the Learning Assistance Center for their first year.

The following recommended high school curriculum will be phased-in* as a requirement for Regular Admission:

| English Language Arts | 4 credits | English I, <br> II, III, IV** |
| :--- | :--- | :--- |
| Mathematics | 3 credits | Algebra I, <br> Algebra II <br> and Geometry** |
| Science | 3 credits <br> Physical Science, Biology I and |  |
|  | II, Chemistry I and II, Physics I |  |

and II, Science III and IV** (No more than two credits can be taken from any combination of Physical Science, Science III and IV and Biology I.)

| Social Studies | $31 / 2$ credits | World History Studies (1 credit), World Geography Studies (1 credit), U.S. History (1 credit), U.S. Government (1/2 credit)** |
| :---: | :---: | :---: |
| Economics | 1/2 credit |  |
| Language other than English | 2 credits | (same language) |
| Physical Education | $11 / 2$ credits | to include $1 / 2$ credit in Foundations of Personal Fitness |
| Health Education | 1/2 credit |  |
| Technology Application | 1 credit <br> Computer S <br> Business Com <br> I or II, Busin <br> Programmin <br> Applications <br> Applications, <br> Information <br> Computer M <br> Industrial Te <br> Applications | Selected from: <br> ience I or II, mputer Applications ess Computer g I or II, Computer Microcomputer Business Processing, athematics or chnology Computer |
| Fine Arts | 1 credit | (Speech may not substitute)** |
| Speech | 1/2 credit <br> Introduction Communicatio Speaking, D Interpretatio | selected from: <br> to Speech ion, Public ebate or Oral n |
| Electives | $31 / 2$ credits | (choose from Option I, Option II or Option III, below) |
| TOTAL | 24 credits |  |

Option I: One additional math credit that requires Algebra II as a prerequisite; one additional science credit from the following: Biology I and II, Chemistry I and II, Physics I and II; and Electives.

Option II: A coherent sequence of courses for career and technology preparation (including Tech-Prep).

Option III: A specialization consisting of state-approved, college-preparatory courses in fine arts, continuation of the first or second language other than English, technology applications, language arts (including speech and journalism), mathematics, science or social studies.

* By fall semester 2000, no deviation in English, no more than 1 credit deviation in any other subject area, and no more than a total variance of 4 credits from the list of high school courses above will be allowed for Regular Admission. By fall semester 2002, no deviation in English, no more than 1 credit deviation in any other subject area, and no more than a total variance of 2 credits will be allowed. By fall semester 2004, no deviation in any subject area will be allowed.
** Advanced Placement (AP), International Baccalaureate (IB) or college courses may substitute.


## Provisional Enrollment Program (PEP)

Entering freshman applicants who have graduated from accredited U.S. high schools or their equivalents but who do not meet the criteria for regular admission may enroll through the Provisional Enrollment Program (PEP).

PEP students must attend university orientation, must be advised by the LAC Counseling and Advisement Center, must select classes from those prescribed by the University College/General Education requirements, must attend academic assessment sessions with university advisors each semester, and must participate in non-credit programs identified to develop study and academic skills.

During the semester in which a PEP student has a minimum cumulative total of nine (9) or more attempted hours,* the student may fulfill criteria for regular admission by meeting two requirements:

1. a grade point average (GPA) of 2.0 or higher in courses completed from at least two of the following areas: English, mathematics, natural sciences, social sciences, foreign language or humanities; and
2. successful completion (with grade of A, B, C, D, CR or Pass) of attempted hours:

Enrolled:
first 9 hours
10 to 12 hours
above 12 hours

Must Complete:
6 hours
9 hours
10 hours

* Texas Academic Skills Program (TASP) criteria apply to all students. See requirements on page 44.


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PEP students who do not have a 2.0 GPA (based upon 9 or more attempted hours) will be permitted an additional semester of enrollment if they have at least a 1.5 GPA and if they meet the "successful completion" criteria outlined above. During this additional PEP semester, students must earn at least the minimum GPA required by probation policies for Regular Admission students (see requirements on page 42). PEP students may satisfy the requirements for Regular Admission when they complete 21 earned hours with the GPA required to avoid academic probation.

PEP students who do not satisfy these conditions for continued enrollment have two options for readmission to UT Pan American:

1. apply for "provisional" readmission after two calendar years from the date of last attendance, or
2. transfer 9 college-level hours from another accredited college or university with a 2.0 or higher GPA.

Refer to the section on scholastic probation and suspension on page 42 of this catalog for additional information.

## Honors Studies Program

The purpose of Honors Studies 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 an independent study program in their majors or a related field of study at the junior and senior level.

There are three ways beginning freshmen win admission to the Honors Studies Program:

1. have a composite ACT score of 22 or higher (or SAT equivalent of 1030), or
2. have graduated in the top 10 percent of their class, or
3. have graduated with a 90 percent or higher grade average in academic courses.

Admission to the Honors Studies Program is not granted as a result of admission to the university. Students must apply directly to the Honors Studies Program. For an application or information, contact:

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Director, Honors Studies Program
Social and Behavioral Sciences Building, Room 104
The University of Texas-Pan American
1201 W. University Drive
Edinburg, TX 78539-2999
956/381-3461
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Students who already have college credit may also apply for admission to the Honors Studies Program. College grades and recommendations from professors determine a college student's admission to the program. Any student who has earned 12 semester hours or more of college credit with at least a 3.0 GPA is eligible for admission to the Honors Studies Program. A list of courses and other information about Honors Studies are on pages

224-225 and page 74 of this catalog. Contact the Honors Studies Program office for additional information.

## Concurrent Enrollment Program for High School Students

UT Pan American sponsors two types of Concurrent Enrollment Programs - the High School to University Program by Distance Learning or Campus Attendance and the Independent Student (On-Campus) Program. Both types give outstanding juniors and seniors from accredited Texas high schools an opportunity to attend a universitysupervised program and earn college credit. Concurrent Enrollment students are graded in the same manner as are other college students and will be awarded college credit upon graduation from high school. Students who wish to receive dual credit (high school and college credit) must obtain approval from their school district for high school credit to be awarded.

NOTE: Students who receive concurrent enrollment credit at UT Pan American may be eligible for four-year University Scholars Distinguished Achievement Scholarships upon regular admission to the university. For more information, check with the Scholarship Office at 956/381-2501.)

Students in the Concurrent Enrollment Program must earn a grade of "C" or higher in each university course taken in order to continue to participate in the program and must meet all TASP requirements as mandated by the State of Texas (see requirements on page 44). The regular student fees will be assessed in accordance with current rates set for all other students. (Although financial aid is not available for students in the Concurrent Enrollment Program, tuition incentives are usually available through the "High School to University" program.)

To be admitted to the Concurrent Enrollment Program, students must submit the following to the director of the Counseling and Advisement Center by the published deadline date for the semester applying:

1. Application for Admission. (This application must be completed every semester in which the student intends to enroll in this program and must include authorization from the applicant's high school counselor and principal.)
2. High School Transcript sent directly from the high school showing completion of the sophomore year at an accredited high school.
3. American College Testing Program (ACT) scores with a minimum composite of 22 [or equivalent Scholastic Assessment Test (SAT) score of 1030].
4. Scores of Texas Academic Skills Program (TASP) exam (or alternate exam that was to be determined after publication date of this catalog) sent directly from the testing agency. Students will not be permitted to register without TASP scores unless exempt from TASP. See page 44 for more information.

## The High School to University Program by Distance Learning or Campus Attendance

Qualified students are encouraged to apply for this program by their high school or school district, which arranges for UT Pan American to provide access to specific courses. Typically, the school district and the university plan these courses one semester in advance of the fall or spring term when they are offered.

## Admission Criteria for the High School to University Program:

- ACT composite of 22 (SAT 1030) or top 10 percent class rank or 90 percent academic average.*
- Recommendations of high school counselor and principal.
- Deadlines for admission are arranged for group processing.


## The Independent Student (On-Campus) Program

Outstanding high school students who want to take college classes in the evenings or on weekends may apply on an individual basis. Usually, high school counselors can assist individual students in preparing their applications. A Concurrent Enrollment Application for Admission must be completed each semester the student intends to enroll.

## Admission Criteria for the Independent Student Program:

- ACT composite of 22 (SAT 1030) and top 10 percent class rank and 90 percent academic average.*
- Recommendations of high school counselor and principal every semester of participation.
- Other admission criteria (including deadlines) for regular freshmen apply.
* Academic average is to be based on a student's grades in academic courses such as English, mathematics, natural sciences and social sciences. Non-academic courses such as physical education, music and vocational courses will not be considered.

All admission documents for the Concurrent Enrollment Program must be submitted to:

Director, Counseling and Advisement Center
Student Services Building, Room 513
The University of Texas-Pan American
1201 W. University Drive
Edinburg, TX 78539-2999
956/381-2529
It is recommended that all documents be submitted at one time. All documents submitted become the property of The University of Texas-Pan American.

Upon graduation from high school, Concurrent Enrollment students must submit a final high school transcript showing that the student is a graduate, the student's class rank and that the student has earned at least

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

## - Returning Student Admission

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, and submit the following to the Office of Admissions and Records by the published deadline date for the semester applying.

1. Returning Student Application for Admission.
2. Clear Record of Academic or Financial "Holds." Returning students must clear any previous admission or financial obligations to the university prior to readmission.
3. Texas Academic Skills Program (TASP) exam (or alternate exam that was to be determined by the Texas Higher Education Coordinating Board after publication of this catalog) sent directly from the testing agency. Students will not be permitted to register without TASP scores unless exempt from TASP. See page 44 for more information.

Students not in attendance for the previous regular semester should apply for readmission for the semester in which they plan to resume studies. For application deadlines, see the printed Schedule of Classes or the University Calendar in this catalog.

It is recommended that students who are returning after an extended absence seek advising, either from an academic advisor or the LAC Counseling and Advisement 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 classified as "TASP affected" must seek counseling at the LAC Counseling and Advisement Center.

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 13 for more information.

## - Transfer Admission

Students admitted as Transfer Students have attended an accredited college or university other than, or in addition to, UT Pan American. To be admitted as a Transfer Student, an applicant must submit the following information to the Office of Admissions and Records:

1. Transfer Student Application for Admission.
2. Official College Transcript(s) sent directly from each institution attended. A student's previous college work will be evaluated in terms of UT Pan American standards. Only coursework or degrees earned at an institution accredited by a regional accrediting association will be recognized. (For more information on accreditation, see the

## 18 - General Information

Glossary on page 264.) All college transcripts must be sent directly from the institution attended to the Office of Admissions and Records. Transcripts that are hand-carried, faxed or issued to students will not be accepted.
3. For transfer students with less than 60 hours of transferable college-level work, High School Transcript (or GED scores) and American College Testing Program (ACT) scores or Scholastic Aptitude Test (SAT) scores. Scores from a residual ACT test taken at an institution other than UT Pan American may not be used for admission purposes.
4. TASP (Texas Academic Skills Program) (or alternate exam to be determined by the Texas Higher Education Coordinating Board after publication of this catalog) scores sent directly from the testing agency for TASP students. Students will not be permitted to register without TASP scores unless exempt from TASP. (For more information on TASP requirements, see page 44. )
5. For international students only: Documents and other requirements listed under International Student Admission on page 22.

All documents submitted become the property of UT Pan American.

Transfer students applying from an out-of-state, private institution or who are classified as "TASP affected" are required to attend a mandatory orientation session.

Students who are on academic suspension based on UT Pan American standards will not be granted admission during the regular (fall or spring) semesters of the suspension period. Students on suspension are encouraged to enroll for summer sessions to repeat courses in which they have low or failing grades. (For information on scholastic suspension, see page 42.)

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, 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 record 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 13 for more information.

## 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, and
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.

UT Pan American will not award credit or recognize degrees from institutions that do not follow a traditional educational structure, i.e., the institution does not require inresidence coursework; does not have teaching faculty, a traditional campus or support facilities; and/or does not have a limit to non-traditional courses accepted for credit through exams, life experience, military service, etc. Any course credit and degrees earned through distance learning will be evaluated based on the above criteria.

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. The Country Index, published by the International Education Research Foundation Inc., and the student's performance in his or her first year of coursework shall be used as the guide for evaluating post-secondary work from foreign institutions.

## 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 - No credit will be awarded for "life experience." (There will be limited exceptions to this rule in the case of students pursuing a Bachelor of Applied Arts and Sciences degree when this credit has been validated and placed on the transcript by a junior college or technical institution.)
4. Nursing Coursework - Nursing work taken at junior colleges or from hospitals is normally considered to be terminal and does not transfer.
5. Remedial Courses - Sub-college courses such as remedial reading, developmental reading, speed reading, remedial science and orientation are not transferable for credit.
6. 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 166.)
7. 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.
8. 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 the Office of Admissions and Records.

## 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 in the Office of Admissions and Records.
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.

## 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, and the credit will be treated as if the courses had actually been taken on the receiving institution's campus.

The table on pages 20-21 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 the Office of Admissions and Records prior to taking the course.

The UT Pan American Office of Admissions and

Texas Common Course Numbering System 1998.200

# Texas Common Course Number Sequence 

The following is an alphabetical listing of Texas Common Course Numbers and their UT Pan American course equivalents:

| Texas Common Course Number | UT Pan American Course Number | Texas Common Course Number | UT Pan American Course Number | Texas Common Course Number | UT Pan American Course Number | Texas Common Course Number | UT Pan American Course Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCT 2301 | ACC 2329 | CRIJ 1301 | CRIJ 1301 | GERM 1312 | GERM 1332 | PHED 1306 | HLTH 1354 |
| ACCT 2401 | ACC 2421 | CRIJ 1306 | CRIJ 1306 | GERM 2311 | GERM 2331 | PHED 1346 | HLTH 2371 |
| ANTH 2346 | ANTH 1323 | CRIJ 1307 | CRIJ 1307 | GERM 2312 | GERM 2332 | PHED 2255 | KIN 2281 |
| ANTH 2302 | ANTH 1342 | CRIJ 1310 | CRIJ 1310 | GOVT 2301 | POLS 2313 | PHIL 1301 | PHIL 1310 |
| ARTS 1301 | ART 1301 | CRIJ 1313 | CRIJ 1313 | GOVT 2302 | POLS 2314 | PHIL 2303 | PHIL 1320 |
| ARTS 1303 | ART 2351 | CRIJ 2313 | CRIJ 2313 | GOVT 2304 | POLS 1333 | PHIL 2306 | PHIL 2330 |
| ARTS 1304 | ART 2352 | CRIJ 2314 | CRIJ 2314 | HIST 1301 | HIST 2313 | PHIL 2307 | PHIL 2350 |
| ARTS 1311 | ART 1331 | CRIJ 2323 | CRIJ 2323 | HIST 1302 | HIST 2314 | PHYS 1101 | PHYS 2101 |
| ARTS 1312 | ART 2332 | CRIJ 2326 | CRIJ 2326 | HIST 2311 | HIST 2331 | PHYS 1102 | PHYS 2102 |
| ARTS 1316 | ART 1311 | CRIJ 2328 | CRIJ 2328 | HIST 2312 | HIST 2332 | PHYS 1301 | PHYS 2301 |
| ARTS 2316 | ART 2321 | DANC 1210 | KIN 2227 | HIST 2380 | HIST 2363 | PHYS 1302 | PHYS 2302 |
| ARTS 2317 | ART 2322 | DANC 1241 | KIN 2236 | JAPN 1300 | JAPN 1351 | PHYS 1401 | PHYS 1401 |
| ARTS 2326 | ART 2341 | DANC 1242 | KIN 2237 | JAPN 1310 | JAPN 1352 | PHYS 1402 | PHYS 1402 |
| ARTS 2333 | ART 2361 | DANC 1245 | KIN 2226 | JAPN 1311 | JAPN 1351 | PHYS 1411 | ASTR 1401 |
| ARTS 2341 | ART 2303 | DANC 1246 | KIN 2228 | JAPN 1312 | JAPN 1352 | PHYS 1412 | ASTR 1402 |
| ARTS 2346 | ART 2371 | DRAM 1310 | COMM 2312 | JAPN 2311 | JAPN 2351 | PHYS 1415 | PSCI 1421 |
| ARTS 2347 | ART 2373 | DRAM 1351 | COMM 1305 | JAPN 2312 | JAPN 2352 | PHYS 1417 | PSCI 1422 |
| BCIS 1332 | CIS 2310 | DRAM 1352 | COMM 2306 | MATH 1314 | MATH 1340 | PSYC 2301 | PSY 1310 |
| BIOL 1322 | HLTH 2372 | ECON 1301 | ECO 1301 | MATH 1316 | MATH 1356 | PSYC 2307 | PSY 2336 |
| BIOL 1411 | BIOL 1401 | ECON 2301 | ECO 2301 | MATH 1324 | MATH 1321 |  |  |
| BIOL 1413 | BIOL 1402 | ECON 2302 | ECO 2302 | MATH 1325 | MATH 1322 |  |  |
| BIOL 2401 | BIOL 2403 | ENGL 1301 | ENG 1301 | MATH 1335 | MATH 2306 |  |  |
| BIOL 2402 | BIOL 2404 | ENGL 1302 | ENG 1302 | MATH 1336 | MATH 2307 | SGNL 1301 | COMD 1310 |
| BIOL 2428 | BIOL 2401 | ENGL 2311 | ENG 2309 | MATH 1342 | MATH 2330 | SGNL 2301 | COMD 1320 |
| BUSI 1301 | MANA 1331 | ENGL 2321 | ENG 2305 | MATH 2312 | MATH 1357 | SOCI 1301 | SOC 1313 |
| BUSI 1307 | FINA 1381 | ENGL 2326 | ENG 2303 | MATH 2318 | MATH 2345 | SOCI 1306 | SOC 1323 |
| CHEM 1305 | CHEM 1300 | ENGL 2331 | ENG 2307 | MATH 2413 | MATH 1401 | SOCI 2301 | SOC 2333 |
| CHEM 1411 | CHEM 1301 | ENGR 1101 | ENGR 1101 | MATH 2414 | MATH 1402 | SOCI 2326 | SOC 2324 |
| CHEM 1412 | CHEM 1302 | ENGR 1204 | ENGR 1221 | MATH 2415 | MATH 2401 | SOCW 2361 | SOCW 1313 |
| CHEM 2123 | CHEM 2102 | ENGR 2301 | ENGR 2303 | MUSI 1163 | MUS 1111 | SPAN 1311 | SPAN 1301 |
| CHEM 2125 | CHEM 2103 | ENGR 2302 | ENGR 2304 | MUSI 1188 | MUS 2122 | SPAN 1312 | SPAN 1302 |
| CHEM 2323 | CHEM 2302 | FREN 1311 | FREN 1321 | MUSI 1306 | MUS 1307 | SPAN 2311 | SPAN 2307 |
| CHEM 2325 | CHEM 2303 | FREN 1312 | FREN 1322 | MUSI 1308 | MUS 2301 | SPAN 2312 | SPAN 2308 |
| COMM 1335 | COMM 1315 | FREN 2311 | FREN 2321 | MUSI 1309 | MUS 2302 | SPAN 2313 | SPAN 1303 |
| COSC 1300 | CSCI 1300 | FREN 2312 | FREN 2322 | MUSI 2166 | MUS 2124 | SPAN 2315 | SPAN 1304 |
| COSC 1317 | CSCI 2325 | GEOG 1300 | GEOG 2313 | MUSI 2168 | MUS 2123 | SPCH 1315 | COMM 1313 |
| COSC 1332 | CIS 2310 | GEOL 1403 | GEOL 1401 | OFAD 1301 | AIS 1305 | SPCH 1318 | COMM 2315 |
| COSC 2315 | CSCI 2333 | GEOL 1404 | GEOL 1402 | OFAD 1311 | AIS 1301 | SPCH 1342 | COMD 2320 |
| COSC 2318 | CSCI 2380 | GERM 1311 | GERM 1331 | PHED 1301 | KIN 1351 | SPCH 2341 | COMM 1310 |

## Texces Eomimon Eourse Numbering System $1998 \cdot 2000$

## Texas Common Course Number Sequence

The following is an alphabetical listing of UT Pan American Course Numbers and their Texas Common Course Number equivalents:

| UT Pan American Course Number | Texas Common Course Number | UT Pan American Course Number | Texas Common Course Number | UT Pan American Course Number | Texas Common Course Number | UT Pan American Course Number | Texas Common Course Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACC 2329 | ACCT 2301 | COMM 1310 | SPCH 2341 | GEOL 1401 | GEOL 1403 | MATH 2401 | MATH 2415 |
| ACC 2421 | ACCT 2401 | COMM 1313 | SPCH 1315 | GEOL 1402 | GEOL 1404 | MUS 1111 | MUSI 1163 |
| AIS 1301 | OFAD 1311 | COMM 1315 | COMM 1335 | GERM 1331 | GERM 1311 | MUS 1307 | MUSI 1306 |
| AIS 1305 | OFAD 1301 | COMM 2306 | DRAM 1352 | GERM 1332 | GERM 1312 | MUS 2122 | MUSI 1188 |
| ANTH 1323 | ANTH 2346 | COMM 2312 | DRAM 1310 | GERM 2331 | GERM 2311 | MUS 2123 | MUSI 2168 |
| ANTH 1342 | ANTH 2302 | COMM 2315 | SPCH 1318 | GERM 2332 | GERM 2312 | MUS 2124 | MUSI 2166 |
| ART 1301 | ARTS 1301 | CRIJ 1301 | CRIJ 1301 | HIST 2313 | HIST 1301 | MUS 2301 | MUSI 1308 |
| ART 1311 | ARTS 1316 | CRIJ 1306 | CRIJ 1306 | HIST 2314 | HIST 1302 | MUS 2302 | MUSI 1309 |
| ART 1331 | ARTS 1311 | CRIJ 1307 | CRIJ 1307 | HIST 2331 | HIST 2311 | PHIL 1310 | PHIL 1301 |
| ART 2303 | ARTS 2341 | CRIJ 1310 | CRIJ 1310 | HIST 2332 | HIST 2312 | PHIL 1320 | PHIL 2303 |
| ART 2321 | ARTS 2316 | CRIJ 1313 | CRIJ 1313 | HIST 2363 | HIST 2380 | PHIL 2330 | PHIL 2306 |
| ART 2322 | ARTS 2317 | CRIJ 2313 | CRIJ 2313 | HLTH 1354 | PHED 1306 | PHIL 2350 | PHIL 2307 |
| ART 2332 | ARTS 1312 | CRIJ 2314 | CRIJ 2314 | HLTH 2371 | PHED 1346 | PHYS 1401 | PHYS 1401 |
| ART 2341 | ARTS 2326 | CRIJ 2323 | CRIJ 2323 | HLTH 2372 | BIOL 1322 | PHYS 1402 | PHYS 1402 |
| ART 2351 | ARTS 1303 | CRIJ 2326 | CRIJ 2326 | JAPN 1351 | JAPN 1300 | PHYS 2101 | PHYS 1101 |
| ART 2352 | ARTS 1304 | CRIJ 2328 | CRIJ 2328 | JAPN 1351 | JAPN 1311 | PHYS 2102 | PHYS 1102 |
| ART 2361 | ARTS 2333 | CSCI 1300 | COSC 1300 | JAPN 1352 | JAPN 1310 | PHYS 2301 | PHYS 1301 |
| ART 2371 | ARTS 2346 | CSCI 2325 | COSC 1317 | JAPN 1352 | JAPN 1312 | PHYS 2302 | PHYS 1302 |
| ART 2373 | ARTS 2347 | CSCI 2333 | COSC 2315 | JAPN 2351 | JAPN 2311 | POLS 1333 | GOVT 2304 |
| ASTR 1401 | PHYS 1411 | CSCI 2380 | COSC 2318 | JAPN 2352 | JAPN 2312 | POLS 2313 | GOVT 2301 |
| ASTR 1402 | PHYS 1412 | ECO 1301 | ECON 1301 | KIN 1351 | PHED 1301 | POLS 2314 | GOVT 2302 |
| BIOL 1401 | BIOL 1411 | ECO 2301 | ECON 2301 | KIN 2226 | DANC 1245 | PSCI 1421 | PHYS 1415 |
| BIOL 1402 | BIOL 1413 | ECO 2302 | ECON 2302 | KIN 2227 | DANC 1210 | PSCI 1422 | PHYS 1417 |
| BIOL 2402 | BIOL 2428 | ENG 1301 | ENGL 1301 | KIN 2228 | DANC 1246 | PSY 1310 | PSYC 2301 |
| BIOL 2403 | BIOL 2401 | ENG 1302 | ENGL 1302 | KIN 2236 | DANC 1241 | PSY 2324 | PSYC 2319 |
| BIOL 2404 | BIOL 2402 | ENG 2303 | ENGL 2326 | KIN 2237 | DANC 1242 | PSY 2336 | PSYC 2307 |
| CHEM 1300 | CHEM 1305 | ENG 2305 | ENGL 2321 | KIN 2281 | PHED 2255 | SY 2337 | PSYC 2314 |
| CHEM 1301 | CHEM 1411 | ENG 2307 | ENGL 2331 | MANA 1331 | BUSI 1301 | RUSS 1342 | RUSS 1312 |
| CHEM 1302 | CHEM 1412 | ENG 2309 | ENGL 2311 | MATH 1321 | MATH 1324 | SOC 1313 | SOCI 1301 |
| CHEM 2102 | CHEM 2123 | ENGR 1101 | ENGR 1101 | MATH 1322 | MATH 1325 | SOC 1323 | SOCI 1306 |
| CHEM 2103 | CHEM 2125 | ENGR 1221 | ENGR 1204 | MATH 1340 | MATH 1314 | SOC 2324 | SOCI 2326 |
| CHEM 2302 | CHEM 2323 | ENGR 2303 | ENGR 2301 | MATH 1356 | MATH 1316 | SOC 2333 | SOCI 2301 |
| CHEM 2303 | CHEM 2325 | ENGR 2304 | ENGR 2302 | MATH 1357 | MATH 2312 | SOCW 1313 | SOCW 2361 |
| CIS 2310 | BCIS 1332 | FINA 1381 | BUSI 1307 | MATH 1401 | MATH 2413 | SPAN 1301 | SPAN 1311 |
| CIS 2310 | COSC 1332 | FREN 1321 | FREN 1311 | MATH 1402 | MATH 2414 | SPAN 1302 | SPAN 1312 |
| COMD 1310 | SGNL 1301 | FREN 1322 | FREN 1312 | MATH 2306 | MATH 1335 | SPAN 1303 | SPAN 2313 |
| COMD 1320 | SGNL 2301 | FREN 2321 | FREN 2311 | MATH 2307 | MATH 1336 | SPAN 1304 | SPAN 2315 |
| COMD 2320 | SPCH 1342 | FREN 2322 | FREN 2312 | MATH 2330 | MATH 1342 | SPAN 2307 | SPAN 2311 |
| COMM 1305 | DRAM 1351 | GEOG 2313 | GEOG 1300 | MATH 2345 | MATH 2318 | SPAN 2308 | SPAN 2312 |

Records 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 18 for complete transfer of course credit regulations.)

## - International Student Admission

An applicant is considered an International Student if the applicant is not a citizen of the United States and not a permanent resident alien. Applicants who have permanent resident alien status do not apply as International Students. All required documents must be on file in the Office of Admissions and Records 60 days prior to the beginning of the semester for late (arena) registration or by the published application deadline for ASSIST telephone/terminal/web registration.

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

1. International Student Application for Admission. This application requires official certification of sources of funds from the student.
2. Test of English as a Foreign Language (TOEFL) 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 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. Financial Deposit, equal to the cost of room and board in a UT Pan American residence hall for one semester. This pre-payment must be in the form of a money order or cashier's check. The student must submit a request in writing indicating how the deposit should be applied (i.e., toward tuition, residence hall or returned to the student if required for off-campus living expenses). Any refunds for students who do not attend must also be requested in writing. Submit written requests to:

Office of Payments and Collections Student Services Building, Room 115
The University of Texas-Pan American
1201 W. University Drive
Edinburg, TX 78539-2999
956/381-2715

NOTE: Graduate students employed by UT Pan American as Graduate Assistants or Teaching Assistants are excluded from this financial deposit.
4. English Translation of Educational Records. In addition to the official transcripts required for admission as
a graduate or undergraduate student, an English translation must be included to allow for accurate interpretations. Educational documents may be returned to the Educational Ministry of the student's country for assistance in the evaluation of credits.
5. Proof of Mandatory Medical Insurance. Medical insurance is required each semester of attendance with minimum coverage as follows: Major Medical \$50,000; Medical Evacuation \$10,000; Repatriation of Remains $\$ 7,500$. Medical Insurance may be purchased at the Office of Payments and Collections, Student Services Building, Room 115, telephone 956/381-2715.
6. Texas Academic Skills Program (TASP) Exam: Undergraduate students will be required to take the TASP (or QUICK TASP) exam at least one week prior to registration. The TASP and QUICK TASP exams are offered locally. Registration for coursework will not be permitted until TASP or QUICK TASP scores are on file with the Office of Admissions and Records. A minimum score is not required for admission; however, passing standards must be achieved prior to enrollment in upper division coursework. NOTE: Early admission to the residence halls may be requested through the Housing Office at a cost of $\$ 7$ per day (students will be responsible for their own meals). Refer to page 62 for further information.

## Procedure After Admission - Issuance of I-20

Upon completion of the application process, successful applicants will be issued an I-20 by the International Student Advisor, who is the university's designated official to report the status of international students to the Immigration and Naturalization Service. Students then present the I-20 to the American Consulate or embassy in their home country to obtain a visa.

International students are required to report any change in status immediately to the International Student Advisor, located in the Student Services Building, Room 601, 956/ 381-3673.

Duration: A non-immigrant student may be admitted for "duration of status." This means that 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 visaissuing 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 4 of the Form I-20 A-B (the I-20 ID Copy) properly endorsed for re-entry if the information on the I-20 form is current.

Transfer: A non-immigrant student is permitted to transfer to a different school provided the transfer procedure is followed. To transfer to a different school, the student should first notify the school being attended of the intent to transfer, then obtain a Form I-20 A-B from the new school. Transfer will be effected only if the student returns the Form I-20 A-B to the designated school official within 15 days of beginning attendance at the new school. The designated school official will then report the transfer to the Immigration and Naturalization Service.

Extension of Stay: If the student cannot complete the educational program after having been in student status for the anticipated length of the program plus a grace period in a single educational level, or for more than eight consecutive years, the student must apply for extension of stay. An application for extension of stay on a Form I-538 should be filed with the International Student Advisor at least 15 days but no more than 60 days before the expiration of the student's stay.

## - 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 the Office of Admissions and Records for students seeking additional bachelor's degrees. For more information, see page 48.)

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.

## - 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 Office of Admissions and Records 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.

## - 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.


## General Information

The cost of attending The University of Texas-Pan American is relatively low - approximately $\$ 838.13$ per semester for 12 hours of required tuition and fees for an undergraduate resident of Texas. A large student financial aid program offering part-time employment, scholarships, grants and loans helps most students at UT Pan American meet the costs of attending college. (For more information on financial aid, see the Financial Assistance section on page 30 of this catalog.)

## - 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 25.) 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 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 and MasterCard 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 Admissions and Records 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, a student or prospective student is classified as a resident of Texas, a non-resident or a foreign student.

A resident is an individual who is either a U.S. citizen, national or Permanent Resident Alien or an alien who has been permitted by Congress to adopt the U.S. as his or her domicile while in the United States and who has otherwise met the state requirements for establishing residency for tuition purposes.

A non-resident is a citizen, national or permanent resident of the U.S. or an alien who has been permitted by Congress to adopt the U.S. as his or her domicile while in this country and who has not met the state requirements for establishing residency for tuition purposes. 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 residence in Texas prior to enrollment.

Pursuant to Section 61.0595 of the Texas Education Code, resident undergraduate students who have attempted* 170 or more semester credit hours at any institution of higher education will be classified as non-residents for tuition purposes with the exception of: (1) students enrolled in a double major degree program that requires 130 or more semester credits for completion or (2) students enrolled in a health professional baccalaureate degree program that prepares students for health professions that involve licensure or accreditation by a health-related agency or entity.
*Attempted hours refer to the number of hours for which the student was enrolled as of the official census date of each term, including courses that are dropped after the official census date, optional internship and repeated courses, with the following exceptions:

1. semester credit hours attempted prior to the date in which a student begins a new degree program under Section 51.931 of the Texas Education Code (Academic Fresh Start)
2. semester credit hours earned for a baccalaureate degree that has previously been awarded to the student
3. semester credit hours earned by examination or under any other procedure by which credit is earned without registering for a course for which tuition is charged
4. semester hours earned by the student at a private or out-ofstate institution
5. remedial education courses that do not count toward a degree program

A foreign student is an alien who is not a permanent resident of the U.S. or has not been permitted by Congress to adopt the U.S. as his or her domicile. An individual classified as a non-resident or foreign student may qualify, under certain exceptions specified in these rules, for resident

[^1]tuition rates and other charges while continuing to be classified as a non-resident or a foreign student.

Information on Residency, Reclassification, Tuition Exceptions and Waivers is available at the Office of Admissions and Records, Room 108 of the Student Services Building, telephone 956/381-2209.

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.

## - Tuition and Mandatory Fees

Shown in the Fee Tables on page 26 are the required tuition and fees charged each semester:*

- Tuition/Tuition Designated charges in 1998-99 are $\$ 54$ per semester credit hour for resident undergraduate students and $\$ 267$ per semester credit hour for all nonresident students. In 1999-2000, tuition/Tuition Designated charges will be $\$ 56$ per semester credit hour for resident undergraduate students and $\$ 267$ for all non-resident students.
- Student Service Fee is a mandatory fee that supports student activities such as intramural and intercollegiate athletics, the campus newspaper, Student Health Services, 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 $\$ 11$ per semester credit hour up to a maximum of $\$ 131.73$ per regular semester or $\$ 65.86$ per summer session.
- Computer Access Fee is a mandatory fee used to fund costs incurred in providing access to and supervision of computer laboratories. The fee is $\$ 3.60$ per semester credit hour up to a $\$ 32.40$ maximum per regular semester and summer session.
- International Education Fee is a mandatory fee of \$1 per semester charged to assist students participating in international student exchanges or study programs.
- Registration Fee, a fee of $\$ 8$ per semester, is charged to defray the cost of providing ASSIST services for registration.
- Library Technology Fee, a fee of $\$ 1$ per semester credit hour, is charged to enhance student access to library information via technology.
- Medical Service Fee, a fee of $\$ 5$ per regular semester or $\$ 2.50$ per summer session, is charged to fund Student Health Services.

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

## - Other Required Fees

General Property Deposit: Students must pay a onetime general property deposit of $\$ 10$ to ensure against losses, damages or breakage in laboratories and libraries.

Individual Instruction Fees: For courses in art, communication and music that provide individual coaching or instruction, a fee of $\$ 35$ for a 1- or 2-hour course or $\$ 60$ for a 4 -hour course may be charged. Class Piano and Class Voice courses each have a $\$ 10$ fee.

Kinesiology Activity Course Fees: A $\$ 3$ to $\$ 6$ fee is charged for all 2-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, which is paid directly to the provider of these facilities; the additional fees are subject to change at the provider's discretion.

Laboratory Fees: For each laboratory course, a fee of $\$ 3$ to $\$ 30$, depending upon cost of material used, may be charged.

## - 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 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 6th 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 still will 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

## 1998-1999 <br> TuFtion \& Fee Table

| Semester |  |  |  |
| :--- | :---: | :---: | :---: |
| Credit Hours |  |  |  |
| Students |  |  |  |
| Enrolled for: | Resident of Texas <br> Undergrad | Grad | Non-Resident <br> Undergrad/Grad |

Fall \& Spring Semesters

| 1 | 167.60 | 167.60 | 296.60 |
| :--- | :--- | :--- | :--- |
| 2 | 201.20 | 201.20 | 579.20 |
| 3 | 234.80 | 282.80 | 861.80 |
| 4 | 292.40 | 372.40 | $1,144.40$ |
| 5 | 362.00 | 462.00 | $1,427.00$ |
| 6 | 431.60 | 551.60 | $1,709.60$ |
| 7 | 501.20 | 641.20 | $1,992.20$ |
| 8 | 570.80 | 730.80 | $2,274.80$ |
| 9 | 640.40 | 820.40 | $2,557.40$ |
| 10 | 706.40 | 906.40 | $2,836.40$ |
| 11 | 772.40 | 992.40 | $3,115.40$ |
| 12 | 838.13 | $1,078.13$ | $3,394.13$ |
| 13 | 893.13 | $1,153.13$ | $3,662.13$ |
| 14 | 948.13 | $1,228.13$ | $3,930.13$ |
| 15 | $1,003.13$ | $1,303.03$ | $4,198.13$ |
| 16 | $1,058.13$ | $1,378.13$ | $4,466.13$ |
| 17 | $1,113.13$ | $1,453.13$ | $4,734.13$ |
| 18 | $1,168.13$ | $1,528.13$ | $5,002.13$ |
| 19 | $1,223.13$ | $1,603.13$ | $5,270.13$ |
| 20 | $1,278.13$ | $1,678.13$ | $5,538.13$ |

Each Additional
$\begin{array}{llll}\text { Hour, add: } & 55.00 & 75.00 & 268.00\end{array}$

Summer Sessions

| 1 | 105.10 | 105.10 | 294.10 |
| :--- | :--- | :--- | :--- |
| 2 | 150.70 | 190.70 | 576.70 |
| 3 | 220.30 | 280.30 | 859.30 |
| 4 | 289.90 | 369.90 | $1,141.90$ |
| 5 | 359.50 | 459.50 | $1,424.50$ |
| 6 | 428.96 | 548.96 | $1,706.96$ |
| 7 | 487.56 | 627.56 | $1,978.56$ |
| 8 | 546.16 | 706.16 | $2,250.16$ |
| 9 | 604.76 | 784.76 | $2,521.76$ |

Each Additional
$\begin{array}{llll}\text { Hour, add: } & 55.00 & 75.00 & 268.00\end{array}$

## 1909-2000 <br> TUTHON \& Fee Tche

| Semester |  |  |  |
| :--- | :---: | :---: | :---: |
| Credit Hours |  |  |  |
| Students | Resident of Texas | Non-Resident |  |
| Enrolled for: | Undergrad | Grad | Undergrad/Grad |

Fall \& Spring Semesters

| 167.60 | 167.60 | 296.60 |
| :--- | :--- | :--- |
| 201.20 | 201.20 | 579.20 |
| 234.80 | 282.80 | 861.80 |
| 300.40 | 372.40 | $1,144.40$ |
| 372.00 | 446.50 | $1,427.00$ |
| 443.60 | 551.60 | $1,709.60$ |
| 515.20 | 641.20 | $1,992.20$ |
| 586.80 | 730.80 | $2,274.80$ |
| 658.40 | 820.40 | $2,557.40$ |
| 726.40 | 906.40 | $2,836.40$ |
| 794.40 | 992.40 | $3,115.40$ |
| 862.13 | $1,078.13$ | $3,394.13$ |
| 919.13 | $1,153.13$ | $3,662.13$ |
| 976.13 | $1,228.13$ | $3,930.13$ |
| $1,033.13$ | $1,303.13$ | $4,198.13$ |
| $1,090.13$ | $1,378.13$ | $4,466.13$ |
| $1,147.13$ | $1,453.13$ | $4,734.13$ |
| $1,204.13$ | $1,528.13$ | $5,002.13$ |
| $1,261.13$ | $1,603.13$ | $5,270.13$ |
| $1,318.13$ | $1,678.13$ | $5,538.13$ |

Each Additional
Hour, add:
57.00
75.00

Summer Sessions

| 1 | 105.10 | 105.10 | 294.10 |
| :--- | :--- | :--- | :--- |
| 2 | 154.70 | 190.70 | 576.70 |
| 3 | 226.30 | 280.30 | 859.30 |
| 4 | 297.90 | 369.90 | $1,141.90$ |
| 5 | 369.50 | 459.50 | $1,424.50$ |
| 6 | 440.96 | 548.96 | $1,706.96$ |
| 7 | 501.56 | 627.56 | $1,978.56$ |
| 8 | 562.16 | 706.16 | $2,250.16$ |
| 9 | 622.76 | 784.76 | $2,521.76$ |

Each Additional

| Hour, add: | 57.00 | 75.00 | 268.00 |
| :--- | :--- | :--- | :--- |

#  For Texas Residents • FY 1999 \& FY 2000 

Undergraduate Graduate

## FY 1999

| *Resident Tuition | 648.00 | 810.00 | 666.00 | \$54/SCH-UG, \$74/SCH-Grad. |
| :---: | :---: | :---: | :---: | :---: |
| Plus: Registration/Matriculation Fee | 8.00 | 8.00 | 8.00 | \$8 per semester |
| Student Services Fee | 131.73 | 131.73 | 99.00 | \$11/SCH, \$131.73 max |
| International Education Fee | 1.00 | 1.00 | 1.00 | \$1 per semester |
| Information/Technology Fee | 32.40 | 32.40 | 32.40 | \$3.60/SCH, \$32.40 max |
| Library Technology Fee | 12.00 | 15.00 | 9.00 | \$1/SCH |
| Medical Service Fee | 5.00 | 5.00 | 5.00 | \$5 per semester |
| Subtotal - Required Fees | 190.13 | 193.13 | 154.40 |  |
| Average Incidental Fees | ** | ** | ** |  |
| TOTAL TUITION \& FEES*** | 838.13 | 1,003.13 | 820.40 |  |
| FY2000 |  |  |  |  |
| *Resident Tuition | 672.00 | 840.00 | 666.00 | \$56/SCH-UG, \$74/SCH-Grad. |
| Plus: Registration/Matriculation Fee | 8.00 | 8.00 | 8.00 | \$8 per semester |
| Student Services Fee | 131.73 | 131.73 | 99.00 | \$11/SCH, \$131.73 max |
| International Education Fee | 1.00 | 1.00 | 1.00 | \$1 per semester |
| Information/Technology Fee | 32.40 | 32.40 | 32.40 | \$3.60/SCH, \$32.40 max |
| Library Technology Fee | 12.00 | 15.00 | 9.00 | \$1/SCH |
| Medical Service Fee | 5.00 | 5.00 | 5.00 | \$5 per semester |
| Subtotal - Required Fees | 190.13 | 193.13 | 154.40 |  |
| Average Incidental Fees | ** | ** | ** |  |
| TOTAL TUITION \& FEES*** | 862.13 | 1,033.13 | 820.40 |  |

* Due to the signing of Senate Bill 1907, the General Use Fee has been combined with Tuition effective Sept. 1, 1997.
** Averages are not given for college and course-related fee charges (laboratory, incidental, supplemental/individual instruction fees) since charges vary according to academic program and course; actual fees are published in the institutional catalog and/or other publications. A summary description of these fees and the optional student services fees is provided in this catalog.
*** Texas Resident Tuition and Fee totals in this table are for Fall and Spring Semesters only. Refer to the Tuition and Fee Table on page 26 for Summer Session totals.


## 28 - General Information

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.

## - Concurrent Enrollment Fees

Fees for students registering concurrently at two Texas public institutions of higher education are called Concurrent Enrollment Fees.

A student shall pay the full tuition charge to the first institution at which he or she is registered.

Generally, only the hourly rate is paid at the second institution. However, if the minimum amount is less at the first institution, then the student must pay the difference in the two minimums to the second institution, but in no case shall the student pay to the institution less than the hourly rates. Tuition Designated, Student Service Fees, and optional fees are billed by each institution at its regularly authorized rates.

## - Other Fees and Deposits

ACT Residual Test Fee: A $\$ 35$ fee is charged for ACT exams administered at a time other than a regularly scheduled test date.

Advanced Standing Examination Fee: A fee of \$20 is charged for each Advanced Standing Examination.

Auditing Fees: If auditing a course is permitted by the instructor, a non-refundable fee of $\$ 20$ will be charged.

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 62.

Catalog: The first University Catalog is provided free to each undergraduate and graduate student; subsequent catalogs will cost $\$ 2$ each.

Course Drop Fee: On the first day of classes, students will be assessed a $\$ 5$ charge per course dropped. This fee is non-refundable.

Emergency Loan Processing Fee: Students must pay a non-refundable fee of $\$ 15$ to defray administrative costs incurred in processing and collecting emergency loan payments. (See page 33 for more on Emergency Loans.)

Graduation Fee: A non-refundable fee of $\$ 25$ is charged for undergraduate and graduate degrees. This fee is payable at the time the candidate presents the application for graduation to the Office of Admissions and Records. 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 60.

ID Card Replacement Fee: Entering students are provided a free University Photo Identification Card. A non-refundable fee of $\$ 7$ is charged for a replacement of this card. The fee is subject to change. Students may pay the fee at the Office of Student Activities, University Center Room 205, when they request a replacement ID Card.

International Business Doctorate Application Fee: Applicants must pay a non-refundable fee of $\$ 35$ to defray costs of processing applications for admission to the doctoral program in international business.

Late Payment Charge: See Installment Payments on page 25. For information on Residence Hall installment late payments, see Student Housing on page 63.

Late Registration Charge: Students who do not register by telephone/web/terminal for classes must pay a special non-refundable charge of $\$ 25$ to defray the costs of late (arena) registration and extra services required to effect his or her late registration.

Library Fees: The fees are, for late book, 10 cents per workday per book; lost book, $\$ 47$ per book plus $\$ 10$ reordering charge and $\$ 5$ processing charge; damage fee, $\$ 5$ if repairable in-house, $\$ 12$ if rebinding needed by commercial binder; late reserve material, 50 cents per hour; late special collections book, $\$ 1$ per day; late vertical file/ Annual Report item, \$1 per day; graduate carrel locker, \$5 per year; and public patron registration, $\$ 25$ per year. All Library Fees are paid at the Circulation Desk of the University Library.

Orientation Fee: This $\$ 25$ fee is charged to defray costs associated with new student advising and preregistration.

Parking Permit: See Vehicle Registration and Operation Permit below.

Professional MBA Program Fees: This fee is charged to cover the program-related costs, including textbooks, supplies and guest lecturers. The amount varies based on actual costs.

Reinstatement Fee: See Installment Payments on page 25.

Residence Hall Installment Charge: See Student Housing on page 63.

Returned Check Charge: A non-refundable service charge of $\$ 15$ 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.).

Short-Term Loan Fees: Students must pay a $\$ 5$ processing fee. There is also a $\$ 5$ late payment fee. (For more information on short-term loans, see page 33.

Special Tests and Examinations: Fees may be charged for tests such as entrance tests and credit by examination tests and for other test services. Please inquire at the Office of Placement, Testing and Cooperative Education.

Student Liability Insurance: All students enrolled in programs in the College of Health Sciences and Human Services must carry liability insurance. This is necessary in order for students to participate in clinical practicum activities associated with coursework. Approximate cost is \$15 per year.

Teacher Alternative Certification Program Application Fee: Students are charged $\$ 50$ for the processing of applications to the Alternative Certification Program in the College of Education.

Teacher Certification Deficiency Plan Preparation Fee: The College of Education charges $\$ 25$ for enrolled students, $\$ 40$ for non-enrolled students to prepare a Teacher Certification Deficiency Plan.

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 1040 hours is $\$ 108$ per year or $\$ 42$ per fall or spring semester and $\$ 36$ for both summer terms. Internet access for more than 1040 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: An original and two copies of a master's thesis must be bound and presented to the university. Although the cost will vary depending on the size of the thesis, it will be approximately $\$ 15$ per copy.

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.

Tuition Installment Incidental Charge: See Installment Payments on page 25.

University Center Recreation 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.

Vehicle Registration and Operation Permit (Parking Permit): All students, whether full- or part-time, who operate a motor vehicle in the campus area must register the vehicle with the University Police Department. A 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 September 1 and ending August 31 is $\$ 16$ if paid during the fall semester, $\$ 12$ if paid during the spring semester, $\$ 8$ during the first summer session and $\$ 4$ during the second summer session. There are no refunds after the 12th class day (fourth class day in the summer). Vehicle operation regulations are available at the Office of Student Activities, the University Police Department, the University Library Lobby, the Office of Payments and Collections and on the VAX (university mainframe computer) at campusinfo.

NOTE: Unpaid fees that become overdue may result in a "hold" being placed on students' records. Students may pay some fees during late (arena) registration or during scheduled course drop/ add periods if they are registering. Otherwise, the fees listed above must be paid at the 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.

## - Refund of Registration Fees

To officially withdraw from the university or drop a course, a student must go to the Office of Admissions and Records. 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 during a fall or spring semester or

## 30 - General Information

the fourth class 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.

Refund checks will be mailed within 45 days to the student's billing address on file at the Office of Admissions and Records (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 Admissions and Records will be responsible for tuition, fees and any circumstances arising from failure to withdraw.

## Refunding for Students in Title IV Programs

As an institution participating in programs under Title IV of the Higher Education Act of 1965 as amended ("Act"), UT Pan American is required to refund unearned tuition, fees, room and board, and other charges to certain students attending the institution for the first time who have received a grant, loan or work assistance under Title IV of the Act or whose parents have received a loan on their behalf under 20 U.S.C. Section 1087-2. The refund is required if the student does not register for, withdraws from or otherwise fails to complete the period of enrollment for which the financial assistance was intended. No refund is required if the student withdraws after a point in time that is 60 percent of the period of enrollment for which the charges were assessed. A student who withdraws prior to that time is entitled to a refund of tuition, fees, room and board, and other charges that is the larger of the amount provided for in Section 54.006, Texas Education Code, or a pro rata refund calculated pursuant to Section 484B of the Act, reduced by the amount of any unpaid charges and a reasonable administrative fee not to exceed the lesser of five percent of the tuition, fees, room and board, and other charges that were addressed for the enrollment period, or $\$ 100$. If the student charges were paid by Title IV funds, a portion or all of the refund will be returned to these programs.

## FIMATALIL

## AGSHTANGE

## - 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 - employment at the university, placement in part-time jobs off campus, scholarships, federal and state grants and federal loan funds.

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

Financial Aid Office
Student Services Building, Room 186
1201 W. University Drive
Edinburg, Texas 78539-2999
Telephone: 956/381-2501
E-mail: finaid@panam.edu
On the Web: http://www.panam.edu/finaid/
For other financial aid information, the following services are available:

Financial Aid Voice Response System 956/381-3060 TDD/Telecommunication Device for the Deaf 956/381-3654 Hours: 8 a.m. to 5 p.m., Monday-Friday

Federal Student Aid Information Center
1/800/4-FED-AID (1/800/433-3243)
Hours: 9 a.m. to 8 p.m. (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 319/3375665.

## - Application Process

The University of Texas-Pan American is an equal employment 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;
i. has been admitted to the university.

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.

When the student applies and receives a Student Aid Report (SAR), he or she should contact the Financial Aid Office, Student Services Building, Room 186, to receive instructions on what steps to follow to continue the process. The steps will vary depending on the status of the student's application.

## - Application Deadlines

To ensure processing before registration, the deadlines for submission of applications are as follows:

Fall awards: April 15
Spring awards: September 16
Summer awards: February 15
All applications received after these deadlines are considered only if money is available. Eligible students filing late applications will receive any available award during the semester. With few exceptions, one application can and should be used by all students seeking federal assistance. It is highly recommended that the application process begin in early spring for the upcoming fall semester.

## Satisfactory Academic Progress Policy

Federal regulations state that 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 degree. Campus-based financial assistance may be provided for a maximum of 12 semesters to undergraduate students. (A separate policy for graduate programs may be obtained at the Financial Aid Office.)

Three factors are taken into consideration in determining satisfactory progress - grade point average, increments and maximum time frame.

## 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., halftime 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.

## Maximum Time Frame

Maximum time frame will be measured at the end of the fall and spring semesters.

The following table illustrates the increment requirements that a student must satisfactorily complete and the maximum time frame requirements:

## - Undergraduate Student

Academic Total Cumulative Incremental Hours
Progress Period Hours Earned to be Completed
$1^{\text {st }}$ yr-2 semesters $2^{\text {nd }} \mathrm{yr}$-4 semesters 20 20
$3^{\text {rd }}$ yr-6 semesters
40
20
$4^{\text {th }}$ yr- 8 semesters
60
20
84 $\quad 24$
$5^{\text {th }} \mathrm{yr}-10$ semesters $\quad 108 \quad 24$
$6^{\text {th }} \mathrm{yr}-12$ semesters $\quad 132 \quad 24$
Maximum Time Frame (years)*
Full-time: 6
Half-time: 12

- Special Student
$\begin{array}{lll}\text { Academic } & \begin{array}{l}\text { Total Cumulative }\end{array} & \begin{array}{l}\text { Incremental Hours } \\ \text { Progress Period }\end{array} \\ \frac{\text { Hours Earned }}{\text { to be Completed }}\end{array}$

| Total Cumulative |
| :--- |
| Hours Earned | | Incremental Hours |
| :--- |
| to be Completed |

Maximum Time Frame (years)*
Full-time: $1 \quad$ Half-time: 2

* 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 already received a baccalaureate degree but are not in a graduate program will be treated as undergraduate students for financial aid purposes.

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 Opportunity Grant to continue their education.

## Enrollment Status

Enrollment status will be determined as of the 12th class day 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. Courses repeated in the summer for which a passing grade has previously been earned will not clear an increment deficiency. Remedial Courses not completed at UT Pan American do 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 Community 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 STCC included in the satisfactory academic progress calculations for increments and maximum time frame. To receive this benefit, a concurrently enrolled student must file for concurrent status with the financial aid offices in the term in which they are concurrent. The exception will be for remedial classes that do not transfer
for a grade. Repeat classes for which a passing grade has been received is also an exception. Classes that come under this exception rule do not clear deficiencies or count in the maximum time frame.

Students who opt for the Academic Fresh Start policy (see page 13) or qualify under the exclusion of " $F$ " grades seven or more years old may have a recalculation of financial aid increments and maximum time frame. The recalculation will be based on university policy governing these two methods of excluding academic failures.

## - Financial Aid Probation

Students who are under academic probation will be automatically on Financial Aid Probation. A student on Financial Aid Probation is eligible to receive financial aid. However, awards for future semesters will not be offered until grades for the current semester are posted.

If, after the spring semester, the student is deficient in the number of increment hours required, he or she will be on a probationary status during the summer. Students may receive financial aid during the probationary period.

The probationary period will not be extended after the student has exhausted his or her 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. Exhausting the maximum time frame allowed will 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. A written appeal must be submitted to the Financial Aid Office prior to the intended period of enrollment. The Financial Aid Office will request academic transcripts.

The appeal will be reviewed by the Financial Aid Committee consisting of faculty and staff. All decisions made by the committee are final.

## - Types of Financial Assistance

## - Grants

Pell Grant: This grant is available to qualifying students who complete a Free Application for Federal Student Aid (FAFSA), which is mailed by the student to the processing center in Illinois or may be transmitted electronically via computer to the central processor if the student attends a Financial Aid Express workshop. The Financial Aid Office determines the amount of the grant after the U.S.

Department of Education has calculated family contribution. Applications are available at the Financial Aid Office. Pell Grants are not available to students who have already received a bachelor's degree.

Federal Supplemental Educational Opportunity Grant (FSEOG): The Federal Government established this program for students with great 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.

Texas Public Educational Grant (TPEG): A Texas Public Educational Grant (TPEG) is a campus-based grant for undergraduate and graduate students with financial need and does not have to be repaid. 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.

## - Federal Work-Study Program (FWS)

The Federal Work-Study (FWS) 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, but it may be higher, depending on work responsibilities, the work skills needed and the funding level at UT Pan American. 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 WorkStudy cannot exceed the total Federal Work-Study amount awarded. The employer will consider the student's class schedule when preparing the work schedule.

## - Loans

## Federal Perkins Loan/Direct Loan (formerly National

 Direct Student Loan): Recognizing that loans are an increasingly important aspect of financing an education, UT Pan American, by participating in the Federal Perkins Loan program, has funds 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, interest begins accruing and repayment must begin on a schedule as follows:- Six months later for previous borrowers.
- Nine months later for new borrowers with no outstanding balance as of July 1, 1987.
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 the Financial Aid Office.


## Federal Family Educational Loan Program (FFELP):

The FFEL Program offers subsidized and unsubsidized Stafford Loans. The first step in the application process is the completion of the Free Application for Federal Student Aid (FAFSA) or Renewal FAFSA. After the student's FAFSA is processed, the Financial Aid Office will review the results and advise the student as to his or her loan eligibility. The student also must complete the Federal Stafford Loan Application and Promissory Note, available from the Financial Aid Office or a lender. After the student completes the student section of the application, the Financial Aid Office will complete its portion, certifying that the student is or has been accepted for enrollment during the period the application covers and recommending the amount of loan the student would need to meet his or her educational costs. A student may be eligible to borrow $\$ 2,625$ during the first year of study, $\$ 3,500$ 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 check, made payable to the student or both the student and the university. No single payment may exceed one half of the loan amount.

Hinson-Hazlewood Student Loan Program: This loan program has the same terms as the Federal Family Educational Loan Program. It is offered through the Texas Higher Education Coordinating Board.
College Short-Term Loans: Made possible through donations from a number of individuals and organizations, these funds are administered by the Financial Aid Office 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 the Financial Aid Office.

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 required to pay a $\$ 15$ processing fee per semester. Students may borrow up to the amount of tuition and 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.

## 34 - General Information

## - Scholarships

The Financial Aid Office awards a large number of scholarships, some of which do not require proof of financial need. The deadline to apply for most academic scholarships is January 14. For a complete list of scholarships and application requirements, request a Scholarship Guide from the Financial Aid Office.

University Scholars: Beginning fall semester 1998, entering freshmen from Cameron, Hidalgo, Starr and Willacy counties of Texas who have earned Advanced Placement credit through AP examinations and/or Concurrent Enrollment credit at The University of TexasPan American may qualify for four-year tuition and fee scholarships at the university through the University Scholars Distinguished Achievement Scholarship program. For more information, contact the Scholarship Office in the UT Pan American Financial Aid Office or a high school counselor.

## - 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.

At the undergraduate level, the Department of Chemistry awards Robert A. Welch Foundation Fellowships to deserving junior and senior students. The awards, both full and half fellowships, are based upon departmental research programs and the student's background in chemical science. The student must be majoring in Chemistry or Biology with a Chemistry minor.

## - Tuition Waivers

Mexican Nationals: Citizens of Mexico may apply for a Non-Resident Tuition Waiver. To be eligible, a student must be enrolled full-time and must apply before the required deadline dates. For information about this program, contact the International Student Office in Room 601 of the Student Services Building, 956/381-3673.

Good Neighbor Scholarship: A limited number of Good Neighbor Scholarships, which provide exemption of tuition, are available to native-born citizens and residents from nations of the Western Hemisphere other than the U.S. and Cuba. Information is available from the International Student Office in Room 601 of the Student Services Building, 956/381-3673.

Hazlewood Act for Veterans: Texas Veterans of World War I, World War II, the Korean War or Vietnam who have no remaining Veterans Administration educational benefits may be exempt from payment of tuition fees, laboratory fees and individual instruction fees. For more information regarding exemptions under this act, contact the Financial Aid Office.

Veterans applying under this act will be required to submit a Free Application for Federal Student Aid (FAFSA). The FAFSA and the Hazlewood Act application are available at the Financial Aid Office.

Tuition and Fee Exemption for Foster Care Students: A student who was in foster care or other residential care under the conservatorship of the Texas Department of Protective and Regulatory Services on or after the day preceding his or her 18th birthday, the day of his or her 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 may apply for a tuition and fee exemption. The student must enroll not later than the third anniversary of the date of discharge from that care or the 21st birthday. Information is available at the Financial Aid Office.

## Tuition and Fee Exemption for Children of Veterans of the

Armed Forces: Children of members of the armed forces who are or were killed in action, who die or died while in service, who are missing in action or whose death is documented to be directly caused by illness or injury connected with service in the armed forces of the United States, are entitled to an exemption from payment of all dues, fees, and charges (excluding only student property deposits, student service fees, and lodging, board or clothing) that would otherwise be paid to attend UT Pan American.

## Tuition and Fee Exemption for Children of Disabled

Firemen and Peace Officers: Children of firefighters or peace officers who were disabled or killed in the line of duty may be eligible for an exemption from tuition. Information is available in the Financial Aid Office.

## Tuition and Fee Exemption for Blind and Deaf Students:

Blind or deaf individuals may be eligible for exemption from payment of tuition if appropriately certified by a state vocational rehabilitation agency. Contact the Texas Commission for the Blind for more information.

## Certified Educational Aides Exemption Program:

Students who have been employed for at least two years in a public school as a certified teacher's aide in a position requiring classroom interaction with students may be eligible for a waiver of tuition and mandatory fees or a portion thereof based on need. Information is available in the Financial Aid Office.

Tuition Waiver for Senior Citizens: A tuition waiver for senior citizens is available at UT Pan American. For more information, contact the Financial Aid Office, Student Services Building, Room 186, telephone 956/381-2501.

## 

## 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 <br> Special Students |
| Graduate students | Undergraduate students who hold <br> a bachelor's degree from an <br> accredited institution. |
|  | Students who have earned a <br> bachelor's degree and have been <br> accepted to UT Pan American for <br> graduate study. |
| Special Graduates | Students who have earned a <br> graduate degree and are <br> continuing in another graduate <br> program. <br> Those who have been accepted to <br> a doctoral program. |
| Doctoral students | der |

## - Course Information

The information concerning the courses offered by each department (or college for interdisciplinary courses) will be found in the Course Descriptions section of this catalog. The listing for each course includes the following information:

## Course Number, Title and Contact Hours

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 264 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 19 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 3 hours of credit per semester. All lower-division undergraduate courses ending in the numbers 87 and 88 are honors courses.

1000 numbered courses Freshman level
2000 numbered courses Sophomore level
3000 numbered courses Junior level
4000 numbered courses Senior level
All 5000-9000 numbered courses are graduate-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 | (4 grade points per hour) |
| :--- | :--- | :--- |
| B | Good | (3 grade points per hour) |
| C | Satisfactory | (2 grade points per hour) |
| D | Below Average | (1 grade point per hour - may <br> not be assigned in graduate <br> classes) |
| F | Failure | (0 grade points per hour) <br> (not considered in calculating |
| P | Passing | grade points or attempted hours) <br> (not considered in calculating |
| NP | No Pass | grade points or attempted hours) <br> (not considered in calculating <br> grade points or attempted hours; <br> for remedial courses only) |
| IP | In Progress |  |

## 36 <br> General Information

I Incomplete
CR Credit

NC No Credit

DR Course Dropped
DP Drop Passing
DF Drop Failing

W Withdrawal from School
WP Withdrawal Passing
WF Withdrawal Failing
(not considered in calculating grade points or attempted hours) (not considered in calculating grade points or attempted hours; however, hours are counted in total earned hours) (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)
(considered as an "F" for calculating the grade point average)
(not considered in calculating grade points or attempted hours) (not considered in calculating grade points or attempted hours) (considered as an "F" for calculating the grade point average)

## Calculation of Undergraduate Grade Point Average (GPA)

The grade point average (GPA) is computed by dividing the total grade points earned by the total hours attempted. The Cumulative Grade Point Average 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 37.)

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 (CR) 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 4 grade points. If the course was offered for 3 credit hours, the grade points would be calculated as follows:

4 (for grade of A) X 3 (hours) $=12$ grade points

Grade points are assigned as follows:

| Grade | Grade Points |
| :---: | :---: |
|  | 4 pts. |
| B | 3 pts. |
| C | 2 pts. |
| D | 1 pt. |
| F | 0 pts. |

Following is an illustration of the method of calculation of the grade point average:

| Course No. | Grade | Credit <br> Hours |  | Points <br> Per Hour | Points Earned |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENG 1301 | C | 3 hours | X | 2 pts. per hr | 6 |
| MATH 1327 | D | 3 hours | X | 1 pt . per hr | - 3 |
| HIST 2313 | B | 3 hours | X | 3 pts. per hr | - 9 |
| CHEM 1401 | F | 4 hours | X | 0 pts. per hr | 0 |
| KIN 1201 | A | $\underline{2}$ hours | X | 4 pts. per hr | $\underline{8}$ |
| TOTAL |  | 15 |  |  | 26 |

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 divided by $15=1.73$

## 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 "I" Grade: A student must not be given an "I" grade to permit the student time to prepare 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.

## Credit by Examination

Students may receive credit by examination for some course requirements. For more information, see page 48.

## 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 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, CR, D, DF, F, P or WF), 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.

## Grade Change

If an error in computation, evaluation or recording warrants a grade change, only the instructor may process a grade change 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

Students will be mailed a grade report approximately one week after completion of the semester. A student may also access his or her grades using ASSIST telephone/ terminal/web programs, described below.

## - 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 closed.

## ASSIST Registration (telephone/terminal/web)

Registration over a touch-tone telephone, by computer terminal 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 registration by ASSIST. Students with admission, disciplinary, financial or TASP holds will not be permitted to register until such time as the hold has been cleared. A schedule change period by telephone is scheduled prior to the beginning of each semester. Students may not be permitted to add classes after this scheduled drop/add period.

Computers are available in the Academic Services Building for student use for terminal or web registration.

## Late (Arena) Registration

Students who are accepted for admission and who did not participate in ASSIST registration may "late register" at arena registration in the University Fieldhouse. Students must obtain a valid Registration Packet from the Office of Admissions and Records and report on or after the scheduled appointment time. Students will not be permitted to enter the registration area prior to this appointment time. Students will be charged an additional $\$ 25$ Late Registration Fee at that time.

## 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 Admissions and Records. (See the sections on Withdrawal from the University and on Dropping a Course on page 38.) Students who decide not to attend and do not officially notify the Office of Admissions and Records 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.

## - Selection of Courses

During the freshman and sophomore years, the student should plan to satisfy not only the General Education Requirements for a bachelor's degree (see page 70) but also any introductory or prerequisite courses in the major and minor field, as specified by the departments. Also, he or she should, unless excused by waiver, 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.

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General Information

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 page 46.

Many courses listed in the catalog are not offered every semester. This is particularly the case with upper-level 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 about which the student may be uncertain.

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 Academic Skills Program (TASP) test, students who are enrolled under the Provisional Enrollment Program (PEP) and students who have not yet declared a major are advised at the Counseling and Advisement Center, Student Services Building, Room 513. All other students are advised by faculty members in their major area.

At advisement, each student receives a Registration Access Code (RAC) that provides access to the ASSIST telephone/terminal/web registration system.

## ■ Registration Policies

## - Dropping a Course

A student is "dropping" a course or courses if he or she remains enrolled in a minimum of 1 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 Admissions and Records, (2) obtain the signature of the instructor of record on the form, and (3) return the completed form to the Office of Admissions and Records, Student Services Building, Room 108.

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 Admissions and Records. Students who decide not to attend and do not officially notify Admissions and Records 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 Admissions and Records of his or her intention not to attend.) Refer to the published Schedule of Classes for refund schedules.

## - Withdrawal from the University

To withdraw from the university, a student must complete a formal withdrawal procedure through the Office of Admissions and Records 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 Admissions and Records, Student Services Building, Room 108, 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 published Schedule of Classes 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 College and General Education requirements before graduation. Transfer students who lack 6 hours of freshman English or the equivalent and 3 hours of mathematics with a grade of at least "C" in each course must complete these requirements within their first two semesters at UT Pan American.

## - 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 Admissions and Records, Student Services Building, Room 108, no later than 30 calendar days in a regular semester or 10 calendar days in a summer session from the date 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 Admissions and Records, (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.

## - 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 24 of the Fiscal Policies section of this catalog.

## $\square$ Other Procedures

## - Identification Cards

Every student enrolled at The University of Texas-Pan American must possess an official identification card, issued through the supervision of the Dean of Students. This card must be validated each semester for the duration of the student's enrollment at this institution. 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 University Center Recreation Room,
- identification for receipt of transcripts at the Office of Admissions and Records,
- identification for receipt of awards from the Financial Aid Office,
- use of the university food service meal plans,
- use of physical education facilities during recreation hours,
- use of the Student Health Services,
- purchase of campus parking permit,
- campus library privileges,
- voting in campus elections and referendums, and
- identifying oneself to a university official when requested to do so.

This card is non-transferable. Beginning freshmen and first-time entering transfer students will receive their original ID cards at no charge during orientation or upon registering. 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 Activities, 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 Activities at 956/381-3676.

## 40 - General Information



The University of Texas-Pan American

- 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 Admissions and Records, Student Services Building, Room 108:

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 the former name, or another name, must present a divorce decree or signed court order showing court restoration of the former, or other, name.

## - 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 Admissions and Records 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 Admissions and Records. 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 for a given semester cannot be certified until after the official census date for the semester, which is the 12th class day of a fall or spring semester and the fourth class day in a summer session. After this date, students may be classified as full-time, half-time, less than half-time, not enrolled or withdrawn.

Enrollment verification for lending agencies is requested at the Financial Aid Office, Student Services Building, Room 168. Verification of enrollment for personal use (i.e., insurance companies, employment) is requested at the Office of Admissions and Records.

## - Transcripts

A student may secure an official transcript of his or her UT Pan American record by presenting picture identification at the Office of Admissions and Records or by requesting the transcript in writing from the Office of Admissions and Records. Transcripts will be issued at no charge.

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 scholarship. No partial or incomplete classroom records (for example, with grades of "F" omitted) will be given. Students who owe debts to the university may have their official transcripts withheld until the debts are paid.

## - Attendance Policies

## - Attendance

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 Admissions and Records 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 Admissions and Records 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 Schedule of Classes for refund periods for drops and withdrawals.)

## - Absences on Religious Holy Days

A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. A student who is excused for observance of a religious holy day may not be penalized for the absence if proper prior notice of the planned absence is given.

A student may be penalized by the instructor if he or she fails to satisfactorily complete the assignment or examination originally scheduled for the day(s) absent within a reasonable time after the absences. Additional information on this policy is provided in the Student Guide, available in the Office of Student Affairs, Administration Building, Room 140, telephone 956/381-2147, and the Office of the Dean of Students, University Center, Room 104, telephone 381-2260.

## - Special Populations

## - 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 103, voice/Telecommunications Device for the Deaf (TDD) 956/ 316-7005. Non-students should contact the Equal Opportunity Office in the Administration Building, Room 335, 956/381-2127.

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

For more information, see page 60.

## - 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 "satisfactory progress towards graduation" 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. Subsequent to the student athlete's first academic year in residence and prior to each term in which a season of competition begins, 24 hours of additional credit required for a bachelor's degree in a designated program of studies must be accumulated since the beginning of the student athlete's last season of competition.

## Veterans

The Office of Veterans' Affairs 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 Admissions and Records and the Learning Assistance Center, Student Services Building, Room 629, 956/381-2280.

Students receiving V.A. educational benefits must make progress toward a degree as specified in this catalog under Satisfactory Progress and Scholastic Probation and Suspension (see page 31 and page 42).

## - Reserve Officers' Training Corps

The Army maintains a senior division of the Reserve Officers' Training Corps (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, Kentucky, 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, Southwick Hall, Room 207, 956/381-3600.

## Continuing Enrollment

## - Academic Standards for Regularly 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 2.00.
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 2.00 or above ( 1.70 in case of freshmen or 1.80 in case of sophomores)

Cumulative GPA has dropped below 2.00 ( 1.70 in case of freshmen or 1.80 in case of sophomores)

Previously on Academic Probation and Cumulative GPA is below 2.00 ( 1.70 in case of freshmen or 1.80 in case of sophomores), but current semester GPA is 2.25 or above.

Previously on Academic Probation, Cumulative GPA is below 2.00 ( 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 Admissions and Records.
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 Admissions and Records, 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.

## - Provisional Enrollment Program (PEP)

Students admitted under the Provisional Enrollment Program may continue enrollment at the university under one of two plans -

- Regular Admission
- Continued PEP Enrollment


## Eligibility for Regular Admission

PEP students will be evaluated for Regular Admission at the following times only, using the criteria shown:

1. At the end of the semester in which the total number of hours the student has attempted at the university first reaches at least 9 , and the number of hours completed is at least 6.* The student must have a cumulative GPA of 2.0 or higher and completion of college-level courses from at least two of the eligible areas shown below with at least a 2.0 GPA.

Eligible Areas: English, mathematics, natural sciences, social sciences, foreign language, and humanities.
2. At the end of the semester in which the student first achieves a total of 21 earned hours. At this point, the student must meet the GPA standard for regularly admitted students,

## 44 - General Information

which is 1.7 for students with fewer than 30 earned hours and 1.8 for students with $30-59$ hours. Students who do not meet the GPA requirement will be ineligible to return to the university for a period of two years. (See "Discontinuation and Requalification" below.)

## Eligibility for Continued PEP Enrollment

1. PEP students who have attempted fewer than 9 college-level hours are eligible to continue in the program without meeting further criteria.
2. PEP students who have attempted 9 or more collegelevel hours and do not qualify for Regular Admission may continue in PEP if they meet both the minimum hours completion criteria and GPA requirement as outlined below:

Minimum Hours Completion Criteria: A minimum number of hours must be successfully completed with a grade of either A, B, C, D, CR or, in developmental English, P , or in developmental math, C . The minimum number, which depends upon the hours attempted, is as follows:


Minimum GPA Requirement: The student's cumulative GPA must be at least 1.7; however, PEP students who have just completed the semester in which the hours attempted reaches a total of 9 , and have earned a GPA of at least 1.5, are allowed one additional semester in which to achieve the minimum GPA of 1.7.
*When at least 9 college-level hours have been completed, the student is required to have official TASP scores on file with the Office of Admissions and Records.

## Discontinuation and Requalification

Students who do not qualify for either Continued PEP Enrollment or Regular Admission will be ineligible to return to the university for a period of two years. However, if a student attends another institution during that time and successfully completes at least 9 college-level hours from the eligible areas (as previously noted) with a GPA of 2.0 or better, an exception will be made to the two-year waiting period.

In extenuating circumstances, students who are ineligible to continue under provisional policies may petition the Admission Committee for reinstatement.

## Texas Academic Skills Program (TASP)

## The Texas Academic Skills Program (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.TASP, in part, requires the following:

1. Mandatory Testing and Assessment -All students must take the TASP test within the first 9 hours of entering a Texas public post-secondary institution. Effective Fall 1998, all students entering a Texas public institution are required to take the TASP or an alternate test before enrolling.
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; (TASP information is disseminated at these orientation sessions.)
3. Mandatory Academic Advisement - All students who have not passed all sections of the TASP test must be advised prior to registration each semester; and
4. Mandatory Developmental Education (if indicated by assessment) - The TASP test concentrates 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 TASP. Students who have been diagnosed as having dyslexia or a related disorder or a specific learning disability in mathematics and who complete the developmental program prescribed by the institution may be required to retake the test once but may not be referred to any additional developmental course by other developmental programs or precluded from enrolling in an upper division course because of the student's performance on the test. Contact the Learning Assistance Center in the Student Services Building, Room 618, telephone 956/3812585 , for further information.

## - The TASP Test

The TASP test is 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 51.306, all students in the following categories who enter public institutions of higher education and have not earned at least 3 college-level semester credit hours before Fall 1989 must take the TASP test: (1) all full-time and parttime freshmen enrolled in a certificate program or degree program and (2) any other student, including transfers from private or out-of-state institutions, prior to the accumulation of 9 or more college-level semester credit hours or the equivalent in a Texas public institution of higher education.

The law exempts the following categories of students:

- those who have earned at least 3 college-level semester credit hours before Fall 1989.
- those who have a composite score on the TAAS, ACT
or SAT at or above the level set by the Texas Higher Education Coordinating Board [TAAS 1770 writing and Texas Learning Index (TLI) 86 math and (TLI) 89 reading; SAT taken April 1995 and thereafter 1070 composite and 500 math and 500 verbal, SAT taken prior to April 1995 970 composite and 470 math and 420 verbal; ACT 23 composite and 19 math and 19 English]. For exemption purposes, a TAAS score is valid for three years and an SAT or ACT score is valid for five years. The TAAS minimum scores must be obtained on the first attempt of the TAAS test.
- blind and deaf students who earned 3 credit hours prior to Sept. 1, 1995. Beginning Sept. 1, 1995, blind and deaf students must take the TASP test. Blind students will be required to take the TASP test with proper accommodations. Deaf students will take the Stanford Achievement Test, which has been normed on the hearing-impaired population by Gallaudet University.
- those in certificate programs of less than one year (level one certificates - 42 or fewer semester credit hours).
- those who enroll on a temporary basis (maximum of one semester) and are also enrolled in a private or independent institution of higher education or an out-ofstate institution of higher education or have graduated from an institution of higher education when the appropriate documentation is submitted by the 12th class day for a fall or spring semester and by the fourth class day for the first or second summer session.

Students with 3 or more semester credit hours or the equivalent awarded prior to the fall semester 1989 are exempt from the Texas Academic Skills Program regardless of any election pursuant to the "Academic Fresh Start" statute, Section 51.931, Texas Education Code. An institution may also exempt a person 55 years of age or over and an international student who is not seeking a degree or certificate.

A student whose performance on the TASP is below the standard set by the Texas Higher Education Coordinating Board for a tested skill area must participate in an advising and developmental education program(s) and, unless excepted pursuant to law or regulation, may not enroll in upper division courses, completion of which would give the student 60 or more college credit hours, until the student meets or exceeds the minimum standards set in all test sections.

All sections of the TASP must be passed prior to completion and award of a certificate or degree.

For complete and current TASP information, contact the LAC Counseling and Advisement Center.

## - Transfer Student Requirements

1. After students have earned 9 or more hours of college credit from all Texas public colleges ever attended, they must have TASP scores sent to UT Pan American
before they can register for college-level courses.
2. Students coming to UT Pan American with less than 9 college hours from a Texas public college or university must take the TASP test before they earn 9 college-level hours.
3. Students who have earned between 9 and 59 college hours from a private or out-of-state college or university must take the TASP exam within the first 9 hours of enrolling at a Texas public institution. If they have more than 59 hours, they must take and pass TASP within the first 9 hours of enrolling. Students who are enrolling on a temporary basis only may be exempt from these requirements when appropriate documentation is submitted.

## - Other TASP rules

1. Students who fail one or more parts of the TASP test must register for developmental courses or enroll in developmental programs in a deficient area every semester until they meet standards set by the State of Texas for each part of the TASP 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 TASP 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. The TASP test must be repeated by students who fail one or more parts of the test. Only the section(s) failed must be repeated.
4. Concurrent enrollment students and international students seeking a degree are subject to the same TASP requirements as all other students.
5. TASP 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 TASP 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 Admissions and Records at UT Pan American. Students needing more information on TASP rules or their TASP status can call 956/381-2529 or 956/ 381-2735. The TASP Registration Bulletin is available from the Office of Placement, Testing and Cooperative Education, Student Services Building, Room 153, or from a high school counselor's office.

## UNDERGRADUATE DECREF TNFORMATHON

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 Criminal Justice (BSCJ)
- Bachelor of Science in Electrical Engineering (BSEE)
- Bachelor of Science in Mechanical Engineering (BSME)
- Bachelor of Science in Manufacturing Engineering (BSMfgE)
- Bachelor of Science in Nursing (BSN)
- Bachelor of Social Work (BSW)

2. That leading to the Associate of Applied Science (AAS) in Nursing degree*
3. 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
4. Courses satisfying requirements for a minor field
5. Courses meeting requirements for certification as a teacher.

* The Associate Degree in Nursing program at UT Pan American is scheduled for closure. The last class will be admitted for the fall semester 1998, and the program will close as of 2000. Students should check with their departmental advisor for further information on program status or academic standing.

A complete list of degrees UT Pan American offers is located on pages 10-11.

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, Mexican-American studies and reading (for students seeking certification only).

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

Students also may choose to graduate within the framework of Honors Studies. Requirements are listed on page 16 and on page 74 .

## Degree Requirement Policies

## - Requirements for the Associate of Applied Science Degree in Nursing*

1. Students must request an official degree plan from the Department of Nursing during their first semester of enrollment at UT Pan American.
2. Students must satisfactorily complete the prescribed curriculum as specified in the catalog.
3. Students must have a minimum grade of "C" in each required course in the appropriate curriculum with a minimum of one-third of the coursework completed in residence.
4. Only academic courses completed in programs approved by the appropriate state or accrediting agency will be considered for transfer credit. Contact the Department of Nursing for information and procedures regarding the transfer of nursing-related coursework.
5. Students must submit an "Application for Degree" to the Office of Admissions and Records on or before the date specified in the calendar on page 4 (approximately nine months prior to the intended date of graduation).

Associate's degrees are exempt from the requirements for a bachelor's degree to the extent approved by the College of Health Sciences and Human Services.

* The Associate Degree in Nursing program at UT Pan American is scheduled for closure. The last class will be admitted for the fall semester 1998, and the program will close as of 2000. Students should check with their departmental advisor for further information on program status or academic standing.


## - 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. Minimum Hours and GPA: A minimum of 124 hours of work is required with an overall minimum grade point average (GPA) of 2.0. Some major requirements exceed the minimum hours and/or require a higher minimum grade point average.
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 GPA of 2.25 cumulative GPA, and for secondary and alllevel certification, a 2.5 cumulative GPA is required. Accounting majors are required to have a 2.5 in their accounting courses.
3. University College/General Education Hours and GPA: 60 hours of UC/GE requirements must be satisfactorily completed with a minimum GPA of 2.0. (See page 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 Overall: Must include a minimum of 36 hours of advanced-level (3000/4000) work. Some degrees require additional advanced hours. Degrees within the College of Arts and Humanities, College of Science and Engineering and College of Social and Behavioral Sciences require that a minimum of 45 of the 124 hours be in upperlevel (3000/4000) courses.
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 ( 6 of which must be advanced). A minimum of 48 hours of work in a broadly integrated area (such as Business Administration, Corrections, 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. Residency: The student must complete and receive credit in residence for: (a) a total of at least 31 semester hours of coursework counted toward the degree; and (b) 24 of the last 30 semester hours; and (c) 6 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 8 hours of Biology or Chemistry, and a minimum of 6 advanced hours.)
9. "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.
10. Teacher Certification: All applications for teacher certification are processed through the UT Pan American Certification Office (Education Building, Room 138). 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 Admissions and Records.
11. Course Distribution: The major-minor or broadfield 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.
12. Degree Plan: The degree plan must be approved by the student's Department Chair and Dean and must be on file in the Office of the Dean 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."
13. Application for Degree: The Application for Degree must be filed by the student with the Office of Admissions and Records on or before the date specified in the University Calendar, which is approximately nine months prior to the intended date of graduation.
14. 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 2007.
15. Substitutions/Waivers: A "Substitution Form," initiated at the departmental level, is required for any deviation from the degree plan and university requirements.
16. Graduate Courses: Graduate courses may not be used to satisfy any undergraduate graduation requirements for a bachelor's degree.
17. 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.

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## - 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 6 of these must be in the major field; in the case of a double major, a minimum of 6 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, General Education requirements, elective courses and advanced courses, as set forth in the catalog.
4. Comply with all other regulations as stated under General Requirements on page 46.

## - Graduate Programs

A list of graduate degrees offered by UT Pan American is on page 11. For more information on graduate programs, consult the Graduate Catalog.

## ■ General Information

## - Graduation Under a Specific Catalog

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 2007.

## - Credit by Examination

UT Pan American offers college credit to qualified students by examination for the approved courses and examinations listed here. Credit will not be posted on the student's permanent record (transcript) until the student has earned a minimum of 6 hours at UT Pan American.

A student may receive up to 45 hours of undergraduate credit by examination through the following programs:

- ACT Advanced Placement Program
- College Entrance Examination Board Achievement Tests and Advanced Placement (AP) Tests
- College Level Examination Program (CLEP)
- UT Pan American Local Advanced Standing Examinations - For Credit

Credit by exam will be accepted as "credit only" (CR) and will not affect the student's cumulative grade point average (GPA) and is granted only for courses in which the student has neither a passing nor failing grade at any institution.

Credit earned by examination may not be used to reduce the minimum number of hours to be completed in "residence" for a degree. Students may not receive credit by exam for courses in which they are currently enrolled.

Policies on credit earned by examination will be reviewed every two years in conjunction with the initiation of a new catalog.

Unsuccessful attempts to earn credit by examination will not be recorded on the student's official transcript.

Test scores must be sent directly from the testing agency; student or hand-carried copies will not be accepted.

For further information regarding credit by examination, contact the UT Pan American Testing Center, Student Services Building, Room 153, telephone 956/3812247.

Credit by examination is available as follows:

## - ACT - Credit by examination based on American College Testing Program

|  | Minimum ACT | UTPA |
| :---: | :---: | :---: |
| Subject | English Score | Course |
| English Language | 30 (SAT 680) | ENG 1301 |
| English Lang./Comp. | 31 (SAT 700) | ENG 1301, |
|  |  | ENG 1302 |

## - CEEB - College Entrance Examination Board

High School seniors anticipating advanced placement through CEEB Advanced Placement and CEEB Achievement Tests should make arrangements with their counselors to take the proper examination. This should be far enough in advance of their first college semester for their scores to be received by the university and to be evaluated before the first registration period begins.

- CEEB Achievement Tests

|  | Min. | UTPA | Hrs. |
| :--- | :--- | :--- | :---: |
| Subject | Score | Course | Credit |
| Chemistry | 600 | CHEM 1301/1101* | 0 |
| American History | 550 | HIST 2313 | 3 |

[^2]- CEEB Advanced Placement Tests

Min. UTPA
Subject Score Course
Biology
3 BIOL 1401, 1402
Environ. Science
Chemistry
$\begin{array}{ll}3 & \text { BIOL 2305 } \\ 3 & \text { CHEM 1301, 1101/ }\end{array}$

Computer Sci.(A)
Computer Sci. (AB)
Economics (Macro)
Economics (Micro)
Eng. Lang./Comp.
Eng. Lit./Comp.
Eng. Lit./Comp.
French
French
French
German
German
German
American History
European History
Math (AB Cal.)
Math (BC Cal.)
Physics (B)
Physics (C)

Political Science
Spanish Lang./Lit.
Spanish Lang./Lit.
Spanish Lang./Lit.

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1302,1102
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3 \quad \text { CSCI } 1380
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3 \text { CSCI 1380, } 2380
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3 \quad \text { ECO } 2301
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ENG 1301, 1302
ENG 1301
ENG 1301, 2300
FREN 1321
4 FREN 1321, 1322
4* FREN 2321, 2322
3 GERM 1331
4 GERM 1331, 1332

3 MATH 1401
or PHYS 2301, 2302

$$
\text { ECO } 2302
$$

* GERM 2331, 2332

3 HIST 2313, 2314
3 HIST 2331, 2332
3 MATH 1401, 1402
3 PHYS 1401, 1402
3 PHYS 1401, 1402

3 POLS 2313 or 23143
3 SPAN 13033

4 SPAN 1303, 13046
4* SPAN 2307, 2308

Hrs. Credit

* Eligible to receive additional credit in listed sophomore-level courses through departmental exams.


## - CLEP - College Level Examination Program

CLEP Subject Examinations are standardized, 90minute, multiple choice tests designed for course creditgranting purposes in different specific UT Pan American subject areas.

The exams are given once a month during the academic year, and one or two tests can be taken in one day of testing. For a list of test dates, see The University of Texas-Pan American Test Calendar, which is available in the Office of Placement, Testing and Cooperative Education, Student Services Building, Room 153, telephone 956/381-2247.

In preparing for the test, an examinee may purchase a publication titled The Official Student Guide for the CLEP Examinations, available in the University Bookstore, or order one from the College Board using the order form attached to the CLEP Registration-Admission Form.

Required scores for credit are listed below. The minimum score generally represents successful completion of 35 to 50 percent of the questions on an examination.

An examinee does not have to be enrolled at UT Pan

American to take a CLEP test on campus; however, no UT Pan American credit will be posted to a transcript until the student officially enrolls at the university and earns 6 hours of academic credit. An individual who does not plan to enroll at UT Pan American, but wishes to take CLEP exams for another institution, may take the exams at this center. In this case, the individual needs to check with the institution at which he or she is planning to enroll in order to verify which CLEP tests are accepted for credit.

The steps to follow in registering for CLEP are outlined in College Credit by Examination, a brochure available in the Office of Placement, Testing and Cooperative
Education.
Subject
Accounting
Biology
Biology
Business Law
Chemistry

| Min. | UTPA | Hrs. |
| :--- | :--- | :---: |
| Score | Course | Credit |
| 53 | ACC 2421, 2329 | 7 |
| 46 | BIOL 1401 | 4 |
| 49 | BIOL 1401, 1402 | 8 |
| 54 | BLAW 3337 | 3 |
| 48 | CHEM 1301, 1101/ |  |
|  | 1302, 1102 |  |

Info. Systems \&

Comp. Applic. 51
Educational
Psychology
Economics/Micro.
47

Economics/Macro.
Eng. Lang./Comp.
53
55
48*
60*
Eng. Lit. (Int.)
American Lit.
English Lit.
American History
Western Civ.
Western Civ.
Management
Marketing
College Algebra
Trigonometry
Calculus
Political Science
Psychology
Sociology

CIS 1301

EDCI 4302
ECO 2302
ECO 2301
ENG 1301
ENG 1302
ENG 2300
ENG 2303
ENG 23053
HIST 2313, 23146
HIST 23313
HIST 2331, 23326
MANA $3361 \quad 3$
MARK 33713
MATH 13403
MATH 13563
MATH 1401, 14028
POLS 23133
PSY 1313 3
SOC 13133
3

* 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.

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Contact the UT Pan American Department of Modern Languages and Literature for the following:

|  | Min. <br> Score | UTPA <br> Course | Hrs. <br> Credit |
| :--- | :--- | :--- | :---: |
| Subject | 80 | FREN 1321, 1322 | 6 |
| French (Beg.) | 80 | FREN 2321, 2322 | 6 |
| French (Int.) | 80 | GERM 1331, 1332 | 6 |
| German (Beg.) <br> German (Int.) | 80 | GERM 2331, 2332 | 6 |
| Spanish (Beg.) <br> non-speaking <br> or native speaker | 80 | SPAN 1301, 1302 | 6 |
| Spanish (Int.) <br> non-speaking <br> or native speaker | 80 | SPAN 1303, 1304 | 6 |
|  | 80 | SPAN 2301, 2302 | 6 |
|  |  |  | 6 |

## - 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 110 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 an associate's degree are expected to file an official degree plan with their major department during their first semester of enrollment. 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.

## 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 Admissions and Records 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.

## - Graduation Fee

A non-refundable graduation fee of $\$ 25$ is charged for undergraduate and graduate degrees. This fee is payable at the Office of Payments and Collections, Student Services Building, Room 115, at the time the candidate presents the Application for Graduation to the Office of Admissions and Records. 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.

## - Commencement Exercises

The University of Texas-Pan American confers degrees three times each year - in December, May and August. Commencement exercises are scheduled for December and May only. August graduates may attend the December commencement exercises.

## - 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.)

## - 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 Admissions and Records. 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:
$\begin{array}{ll}\text { Summa Cum Laude } & \text { Grade point average of } 3.9 \text { to } 4.0 \\ \text { Magna Cum Laude } & \text { Grade point average of } 3.7 \text { to } 3.89 \\ \text { Cum Laude } & \text { Grade point average of } 3.5 \text { to } 3.69\end{array}$
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.

## ACADEUIG GUPPOFT SERUCES

## ■ University Library

The University Library is the campus center for resources that support the curricular offerings of The University of Texas-Pan American. The four-story brick and glass structure contains 77,577 square feet. The cornerstone of the building was dedicated on April 10, 1978. An addition to the Library scheduled for completion in January 1999 will contain 45,000 square feet.

The Library houses a collection of approximately 437,000 catalogued volumes, including more than 300,000 government documents; 2,000 periodical subscriptions; one million units of microform; and 5,000 audiovisual items. Library collections are catalogued via OCLC and made available to patrons by the DRA circulation and public access automated library systems.

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 on the LAN, the

Internet or stand-alone CD systems are 66 different subject area citation and abstract databases, some including 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.

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, which can be reached by telephone at 956/381-3306 or voice/TDD 956/381-2763.

## 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 as noted below. 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 - Special Student Support Program. Call 956/381-2585 or 381-2529 for connections to any of the services listed below. All LAC services are located in the Student Services Building.

Academic Advisement: Designed to assist students with educational planning with regard to general education course requirements and to inform them about course placement as it relates to legislation governing the Texas Academic Skills Program (TASP) and institutional policy. Mandatory advisement is provided for UT Pan American freshmen in their first year, students in the Provisional Enrollment Program (PEP), students enrolled in the independent student program (concurrent enrollment), students on scholastic probation or returning from academic suspension, and students recently transferred from other colleges and universities, or who are planning to transfer from UT Pan American. Also, this service unit advises students who have not successfully completed their TASP requirements, i.e., those who have not met TASP passing standards.

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

## 52 - General Information

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 note-taking, 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 Academic Skills Program (TASP) test.

TASP Labs: Designed to meet the state-mandated noncourse based developmental education requirements in the TASP 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 TASP preparation.

Personal Counseling: Designed to assist students who are having problems 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 to clarify their goals and encourage them to assume 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 is 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.


## Advanced Services for Student Information Supported by Technology (ASSIST)

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

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) is required to access ASSIST registration services, and is issued to students by an academic advisor each semester.

ASSIST services include the following:

- Kiosk Information Stations: Currently five 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, Communication Arts and Sciences Building, University Library and University 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

- Terminal Registration System: The Terminal Registration System provides registration services via the Internet.
Terminal Registration services include:
Registration (RAC required): Register/Add/Drop,
Display Student Schedule, Display Student Grades
Telnet Instructions:
Step 1: At the C:/> prompt, type telnet panam1.panam.edu, press enter.
Step 2: At the Username prompt, type IA_PRREG, press enter.

Step 3: Follow the instructions that appear on the screen.
(For modems, dial atdt 3813591, select item 1, 2 or 3 , then proceed with Step 2 above.)

- Voice Response (Telephone) System: Information on admissions, grades, registration and payments can be accessed through the voice response system with a touchtone phone. (These are not toll-free numbers.) Courtesy telephones are available in the Office of Admissions and Records. Voice Response services include:

Admissions and Records - 956/381-3040
Application Status
Deadline Dates/How to Apply
Requirements for Admission
TASP Information
Grades (PIN required)
Registration Information
Class Schedule (PIN required)
Dates and Procedures
Registration Holds (PIN required)
Transcript Information
Dates Available/How to Request
Registration - 956/381-3000 (RAC required)
Term code and course numbers are printed in the current class schedule.
To Add a class, press $2 *$ call number \#
To Drop a class, press $3^{*}$ call number 3 , or to conditionally drop only if another class is available, press 6* call number for drop* call number for add \# (i.e., 6*01436*02658\#) or press *6 for help
To List courses, press 5\#.

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)

To end a call, press 9\# and listen to closing messages.

- Web for Students: Admission, grade, registration and financial information can be accessed on the web at http:// www.panam.edu/assist. Web services include:

University Catalog
Class Schedules
Admission Information
Apply for Admission
View Admission Status
Registration (RAC required)
Add/Drop Classes

Look Up Classes
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
Financial Aid Awards (PIN required)

## Student Rights and Responsibilities

## - Student Guide

The University of Texas-Pan American Student Guide provides detailed information on numerous aspects of campus life and university policies governing students. Copies of the Student Guide are distributed at orientation and are available through the Office of the Dean of Students, University Center, Room 104.

## - 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 graduation rates and certain 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 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. Campus lighting is checked on a weekly basis by the Police Department to ensure proper functioning.

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 956/381-2737. 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: |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Crime | 1994 | 1995 | 1996 | 1997 |
| Homicide | 0 | 0 | 0 | 0 |
| Rape | 1 | $1^{*}$ | 0 | 1 |
| Robbery | 0 | 0 | 0 | 0 |
| Assaults | 13 | 9 | 1 | 0 |
| Burglary | 51 | $0^{* *}$ | 4 | 5 |
| Auto Theft | 12 | 8 | 10 | 5 |

## Number of arrests for:

| Weapons Violations | 0 | 3 | 0 | 0 |
| :--- | :--- | :--- | :---: | :--- |
| Controlled Substances | 4 | 4 | 1 | 1 |
| DWI | 0 | 2 | - | 0 |
| Liquor Law Violations | 0 | 1 | 0 | 0 |
| Public Intoxication | 4 | 3 | - | 0 |

* Attempted.
** Different standards used to compute; numbers from previous years not comparable.

NOTE: For purposes of reporting the data, the term "on campus" includes the adjacent areas off campus owned or controlled by registered student organizations. The university has no responsibility for security policies, procedures or safety at these locations.

University policies and Texas law prohibit the disruption of university operation 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 distributed to all students at Student Orientation and 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, in the university's Handbook of Operating Procedures, and in a leaflet mailed to all students. All are available from the Office of the Dean of Students and the Office of University Relations.

The following university offices are available to assist you:

| University Police | $381-2737$ or |
| :--- | :---: |
|  | H-E-L-P (4357) |
| Counseling Center | $381-2529$ |
| Dean of Students | $381-2260$ |
| Student Health Services | $381-2511$ |
| Alcohol and Drug <br> $\quad$ Abuse Program | $381-3676$ |

## - Family Educational Rights and Privacy Act (FERPA)

## The Family Educational Rights and Privacy Act

 (FERPA), 20 U.S.C. $\S 1232 \mathrm{~g}$, and the Texas Public Information Act, Texas Government Code $\S 552.001$ et seq., are respectively a federal and a state law 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) and this catalog. The catalog is made available for inspection through the Office of Admissions and Records and copies of the Handbook of Operating Procedures are available in the University Library and most administrative offices and on the Internet at http:// www.panam.edu/hop.The university will not permit access to, or the release to any party, personally identifiable information contained in student education records without the written consent of the student, except as authorized by FERPA. FERPA's authorizations for release without consent include the following:

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 the student seeks or intends to enroll, upon request of these officials, and upon the condition that the student be notified and receive a copy of the record if desired;
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 that they 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, provided a reasonable effort is made to notify the student in advance;
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; or
9. to an alleged victim of any crime of violence, the results of the alleged perpetrator's disciplinary proceeding may be released.

The university will release information in student education records to appropriate university officials as indicated in 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 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 education record in order to fulfill his or her professional responsibility.

When 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 Vice President for Business Affairs for each student and will also be made available for inspection pursuant to this policy. If the institution discovers that a third party who has received student records from this institution has released or failed to destroy such records in violation of this policy, it will prohibit access to educational records for five years. 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 Admissions and Records in writing. Request for non-disclosure will be honored by the university until such time that the student grants permission, in writing, to release the information.

## - 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 Records, SS 109
College, Division, Department and Faculty Offices

## - Student Affairs/Student Services Records

Counseling Office: Director of Counseling, SS 513
Student Services: Dean of Students, UC 104
Housing Office: Director of Campus Life, Women's Residence Hall
Placement, Testing and Cooperative Education Office: Director, SS 147

- Financial Records

Business Office: Vice President for Business Affairs, AB 306
Financial Aid Office: Director, SS 186
Educational records do not include:

1. financial records of the student's parents or guardian;
2. confidential letters and recommendations which were placed in the educational records of a student prior to January 1, 1975;
3. records of instructional, administrative and educational personnel which 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; or
8. records that only contain information about an individual after the individual is no longer a student at the institution.

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General Information

## - Challenge to Record

Students may challenge the accuracy of their educational records. Students who believe that their education 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 agreement is reached with respect to the student's request, the appropriate records will be amended. If not, 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.

Student 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 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 institution.

## - 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.

## - 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.

## - 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.

## - 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.

NOTE: At the time of publication of this catalog, this policy was being revised. See the Office of the Dean of Students or the Vice President for Academic Affairs for the latest approved policy.

## Student Non-Academic Grievance 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 nondiscrimination regulations. The following will advise students of procedures to be followed in filing nonacademic grievances.

## - Procedures

In an effort to resolve misunderstandings or grievances, students must first make every effort to solve the problem with the individual against whom the complaint is lodged. If the grievance is not settled, it must then be discussed with the appropriate chair or head of the department in which the complaint originated. Grievances may then be appealed to the Academic Dean or Division Head. Subsequent appeals are presented to the appropriate Vice President or Dean of Students. Finally, unresolved complaints may be presented to the President for a final decision. Appeals beyond the department chair/head level must be in writing.

## - 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.

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, University Center 104, 956/381-2262.
2. Sexual Harassment: The University of Texas-Pan American condemns sexual harassment of the students, staff
and faculty. Any form of sexual harassment will be considered a serious matter to be dealt with accordingly.

The university's policy concerning sexual harassment may be found in the Student Guide and the Handbook of Operating Procedures. (See further information below.)
3. Section 504 of the Rehabilitation Act/Americans with Disabilities Act: All inquiries concerning Section 504 of the Rehabilitation Act or the Americans with Disabilities Act or services to persons with disabilities should be directed to the Office of Services for Persons with Disabilities, Emilia Schunior Ramirez Hall, Room 103, telephone 956/316-7005 (voice/TDD 316-7092), or the ADA compliance coordinator, Administration Building, Room 335, telephone 381-2127.
4. 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 at The University of Texas-Pan American 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, Emilia Schunior Ramirez Hall, Room 103, telephone 956/381-2511.
5. Family Educational Rights and Privacy Act (FERPA): The Family Educational Rights and Privacy Act (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 on page 54 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, Administration Building, Room 320, telephone 956/3812111.

NOTE: At the time of publication of this catalog, this policy was being revised. See the Office of the Dean of Students for the latest approved policy.

## - Sexual Harassment

The University of Texas-Pan American condemns sexual harassment of the students, staff and faculty of the university. Any form of sexual harassment will be considered a serious matter to be dealt with accordingly.

Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when:
a. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or education, or
b. Submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting that individual, or
c. Such conduct has the purpose or effect of
substantially interfering with an individual's academic or professional performance or creating an intimidating, hostile or offensive employment, educational or living environment.

It is the policy of The University of Texas-Pan American that supervisors and faculty shall not enter into any type of romantic or sexual relationship with staff under their supervision or with students enrolled in their courses.

Such relationships will be looked upon as potentially detrimental to the working and learning environment, considered inappropriate and unacceptable, and grounds for disciplinary action, including termination, for all appropriate parties involved.

Student inquiries or complaints about sexual harassment may be directed to the immediate supervisor of the alleged offender or to the Dean of Students, University Center, Room 104, telephone 956/381-2262.

## - 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 3 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 Student Affairs.

## - Hazing

Hazing is both a violation of university policy and a criminal offense (Sections 37.151 et seq. and 51.936, Texas Education Code) 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's Handbook 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 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 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 and include fines from $\$ 500$ 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 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.


## - 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.

## - 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 or 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 are 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.)

## Student Services

## - Placement, Testing and Cooperative Education

In a time when heavy academic emphasis is being placed on career-oriented programs, UT Pan American's Office of Placement, Testing and Cooperative Education 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.

In addition, the office sponsors a Testing Service, whereby students may take state, national and special examinations.

The UT Pan American Office of Placement, Testing and Cooperative Education places students in jobs in two ways. During the students' college years, the office will assist them in locating part-time employment. 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, including an online resumé option, 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 Fair, Health Professions Career Day, Graduate and Professional School Fair, Engineering and Computer Science Career Day and Job Interview Skills Seminars, as well as other activities.

Career Information Center: The Career Information Center houses 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.

Student Employment Service: A number of local businesses and agencies contact the office seeking students for part-time or full-time employment. The Student

Employment Service operates a referral system to match these employers with UT Pan American students. International students are required to apply through the International Students' Advisor in the Student Services Building, Room 601, telephone 956/381-3439.

Institutional Testing Service: The University of TexasPan American is a test center for numerous national and specialized examinations such as the American College Test (ACT), Graduate Record Examination (GRE), Scholastic Assessment Test (SAT), Graduate Management Admissions Test (GMAT), Test of English as a Foreign Language (TOEFL), Credit by Examination Testing Program (CLEP), Law School Admissions Test (LSAT), Miller Analogies Test (MAT), the Local Advanced Standing Exam (LASE), Texas Academic Skills Program test (TASP), Medical College Admission Test (MCAT) and a number of others.

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 full-time study.
- Parallel/Part-time - Students work part-time, 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 half-time (6 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.

More information may be obtained by contacting the Co-Op Office, Student Services Building, Room 125; telephone 956/381-2781.

## - Student Recruitment and Orientation

The Office of Student Recruitment and Orientation assists UT Pan American's efforts to establish, meet and maintain desired enrollment levels of students for the institution. The program acts in support of these efforts by developing and coordinating various strategies to reach prospective students.

The office also hosts orientation sessions designed to facilitate new students' adjustment to the university environment, to develop an understanding of academic expectations, to become familiar with campus services and activities and to provide academic advisement for their first term at UT Pan American. Attendance at orientation is mandatory for all entering freshmen and TASP-affected transfer students.

## - 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, and
- 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 103.

## - Student Health Services

Student Health Services is a student-funded, fully accredited ambulatory care facility staffed with physicians and mid-level providers including physician assistants and family nurse practitioners. Primary medical care, health and wellness education and support services are provided to students registered at UT Pan American.

Confidential, unlimited, free medical consultations are available on a walk-in basis during clinic hours. Referrals
and appointments to outside providers are routinely made when necessary. Fee for service charges are assessed for ordered laboratory tests, pharmaceuticals, women's health care and certain procedures. The student must pay for services on the day they are rendered, but if extenuating circumstances prevent payment on that day, provision has been made to have charges transferred to the student's account at the Office of Payments and Collections.

Convenient pharmacy services include prescription and over-the-counter medications and patient counseling. A full-service laboratory offers same day or next day results for most tests. Immunizations, pregnancy tests, allergy injections and screening tests for tuberculosis, anemia and diabetes are also available. Confidential, anonymous HIV antibody testing is free to students, staff and faculty.

Located on the first floor of Emilia Schunior Ramirez Hall, Student Health Services is open from 8 a.m. to 4 p.m., Monday through Friday; night clinics are open until 8 p.m. on Tuesday and Wednesday evenings. Call 956/381-2511 for more information.

HIV/AIDS/HBV: An HIV/AIDS/HBV education and awareness program for UT Pan American students, faculty and staff is fully operational. Under the oversight of Student Health Services, information and programming is available on a one-to-one basis and to various campus groups. Confidential, anonymous HIV antibody testing with pre- and post-testing counseling from Valley AIDS Council is available at Student Health Services. The HBV (Hepatitis B) vaccine is also available to all students, faculty and staff. Clients may be referred to appropriate off-campus facilities for additional counseling and treatment as warranted.

AIDS-Related Issues: Institutional policy and educational procedures are detailed in Article VIII of the Student Guide, available through the Office of Student Affairs.

Student Insurance: Students are encouraged to purchase an optional, low-cost health insurance plan that provides health and accident coverage. Information regarding policy coverage and claim procedures can be obtained at Student Health Services on the first floor of Emilia Schunior Ramirez Hall or by calling 956/381-2511.

Health insurance is required for all international students (F-1 and J-1 visa holders) and may be required for dependents; therefore, purchase of this health insurance will be mandatory for such students unless a waiver has been obtained from the International Student Advisor. The issuance of a waiver requires proof that the student has insurance coverage comparable to the minimum required. Contact Student Health Services or International Student Services for further information.

Student Immunizations: In accordance with state law, the following immunizations are required for all students enrolled in health-related courses that will involve direct patient contact in medical or dental care facilities or who
come in contact with human biological fluids or tissue.
Students for whom these immunizations are not required are strongly urged to obtain these immunizations for their own protection.

Measles: Proof of two doses of measles vaccine administered on or after the first birthday and at least 30 days apart or proof of immunity;

Mumps: Proof of one dose of mumps vaccine administered on or after the first birthday or proof of immunity;

Rubella: Proof of one dose of rubella vaccine administered on or after the first birthday or proof of immunity;

Tetanus/diphtheria: Proof of one "booster" dose of tetanus/diphtheria vaccine (within 10 years);

Hepatitis $B$ virus (HBV): Proof of serologic immunity to HBV or certification of immunization with a complete series of Hepatitis B vaccine. Students will be required to present a letter or other suitable written certification.

Certain exemptions are allowed from the immunization requirement; students should contact the Student Health Services for information.

Students enrolled at UT System institutions will assume the full cost of the immunizations.

Students may obtain information from Student Health Services regarding the consequences of not being current on immunization for certain diseases, the age groups most vulnerable to these vaccine-preventable diseases and local providers of immunization services.

## - Alcohol and Drug Abuse Program (ADAP)

The Alcohol and Drug Abuse Program (ADAP) 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.

ADAP is committed to all UT Pan American students by providing an environment for education, exploration and personal growth. The ADAP staff maintains a dedication to the overall wellness of each student on campus. ADAP 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, ADAP has books, videos and literature available to faculty, staff and students.

The ADAP 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. ADAP also provides group counseling through a campus AA group. Groups are run once a week at designated times. The ADAP staff is available for referrals, consultations, group presentations and crisis intervention services.

The Alcohol and Drug Abuse Program is located in the University Center, Room 305, telephone 956/381-2659. ADAP is open from 8 a.m. to 5 p.m. Monday through Friday.

## - 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 student-run 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 956/316-7122, web page http://www.panam.edu/dept/ panamerican.

## - 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 self-development. 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 305, telephone 956/381-2659.

## - Honor Societies

Alpha Kappa Delta (Sociology)
Beta Gamma Sigma (Business)
Honors Society - Gamma Beta Phi
Lambda Alpha (Anthropology)
Psi Chi (Psychology)

## - Professional Societies, Department and Special Interest

 ClubsAccounting Society
Alpha Kappa Psi
American Advertising Federation
American Marketing Association
American Society of Mechanical Engineering
Anthropology Club
Asociacion Cultural de Teatro Universitario en Español Association for Computing Machinery
Association for Supervision and Curriculum Development Association of Information Technology Professionals Association of Persons for DisABILITIES

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Association of Texas Professional Educators
Bilingual Education Student Organization
Bronc Cadet Club
Circulo Literario
Criminal Justice Club
Elliott Chemical Society
El Sexto Sol de M.E.Ch.A.
English Graduate Student Forum
Forum on International Relations and Business Affairs
Financial Management Association
French Club
Gaming Guild
Gay, Lesbian, Bisexual Alliance
Health and Kinesiology Club
History Club
Japanese Animation Club
Julian Castillo Association of Physician Assistant Students
Juventud Hispana
Laplacian Society of Mathematicians
Latina Student Organization
Master of Business Administration Association
Music Educators National Conference
National Student Speech, Language and Hearing Association
Organization for Discussion of English Subjects
Philosophy Club
Political Science Association
Pre-Law Society
Pre-Med/Bio-Med Club
R.E.H.A.B. (Reach, Educate, Help, Advocate, Broadening Minds)
Residence Hall Association
Rugby Football Club
Social Work Student Association
Society for Human Resource Management
Society for the Promotion of Indian Classical Music and Culture Among Youth
Society of Hispanic Professional Engineers
Society of Manufacturing Engineers
Student Association of Clinical Laboratory Sciences
(Medical Technology Society)
Student Council for Exceptional Children
Student Dietetics Association
Student Nursing Association
Student Occupational Therapy Association
Student Society of Women Engineers
Students Engaged in Sociological Studies
Students in Free Enterprise
University Press Association
University Republicans
Visual Arts Society
Women's Soccer Club

## - Service Organizations

Bacchus and Gamma
Student Government Association
University Program Board

## - Religious Organizations

Baha'i Association
Chi Alpha
Episcopal Canterbury Association
Intervarsity Christian Fellowship
Latter Day Saints Students Association
United Methodist Campus Ministry
Young Adult Catholic Ministry

## - Fraternities

Phi Kappa Theta
Phi Sigma Kappa
Sigma Lambda Beta

## - Sororities

Delta Zeta

## Student Housing

The University of Texas-Pan American provides two three-story residence halls on campus for men and women. Each facility has a capacity of 192 beds and is within walking distance to all academic and service facilities at UT Pan American.

Residence halls are centrally air-conditioned and heated. Each suite contains two rooms and an adjoining restroom with vanity and shower. Rooms are equipped with two beds, two desks, two bookshelves, two lockers and two dressers.

Telephone service and cable television is available in each room and public telephones are available on each floor. There is a lobby, a kitchen/dining area on the first floor and a laundry room and recreation area on the third floor of each facility.

Staff is available to address student needs and to organize and conduct educational, recreational and social activities throughout the year.

Both facilities are within walking distance to shopping, restaurants, banks and other facilities.

For reservations and other information, contact the:

Housing Office<br>Men's Residence Hall<br>The University of Texas-Pan American<br>1201 West University Drive<br>Edinburg, Texas 78539-2999<br>Phone: 956/381-3439<br>Fax: 956/384-5055

## - Residence Hall Fees

Rates for the academic year 1998-99 are:

| Semester | Room/Double | Board |  |
| :--- | :---: | :---: | :--- |
| Fall | $\$ 770.00$ | $\$ 541.25$ | Total |
| $\$ 1,311.25$ |  |  |  |
| Spring | $\$ 770.00$ | $\$ 541.25$ | $\$ 1,311.25$ |
| Summer I | $\$ 308.00$ | $\$ 270.62$ | $\$ 578.62$ |
| Summer II | $\$ 308.00$ | $\$ 270.62$ | $\$ 578.62$ |

Early admission to the residence halls may be requested through the Housing Office at a cost of $\$ 7$ per day (students will be responsible for their own meals).

NOTE: Fees and meal plans are subject to change. For current rates, contact the Housing Office.

## - Installment Plan

An "installment plan" is available to pay fall and spring semester fees. There is an "installment plan" fee of \$20 and a $\$ 5.50$ "late charge" for payments made after the due date. Neither fee is refundable. Full payment for summer sessions must be made before moving in.

Payment schedule for academic year 1998-99 is:

## Fall Semester

| 1st payment (before moving in Aug. 27) | $\$ 332.81$ |  |
| :--- | :--- | :--- |
| 2nd payment | Sept. 25 | $\$ 332.81$ |
| 3rd payment | Oct. 23 | $\$ 332.81$ |
| 4th payment | Nov. 20 | $\$ 332.82$ |

## Spring Semester

1st payment (before moving in Jan. 14) \$332.81
2nd payment
Feb. $19 \quad \$ 332.81$
3rd payment
4th payment
March $19 \quad \$ 332.81$

Arrangements for use of the installment plan are made through the:

Office of Payments and Collections
Student Services Building, Room 115
The University of Texas-Pan American
1201 West University Drive
Edinburg, Texas 78539-2999
NO REFUND will be made after the 12th class day.

## - Reservations and Room Deposits

Reservations for the residence halls are made through the Housing Office.

Requests are made on a first-come first-served basis; students may be placed on a waiting list until space is available through cancellations and "no-shows."

A reservation/damage deposit of $\$ 55$ is required. The
deposit is refundable, less any property damage, lost keys and improper checkout, if cancellations are received by the following dates:

| Semester | Cancellation Deadline |
| :--- | :--- |
| Fall | August 1 |
| Spring | December 1 |
| First Summer | May 1 |
| Second Summer | June 1 |
|  |  |
| posit refunds will take approximately four weeks. |  |

School holidays and breaks are not included as part of the room and board plan and are not included in the fees.

## - Cafeteria Meals - Declining Balance System

Residence hall fees include a $\$ 541.25$ credit towards meals in the University Snackbar/Cafeteria. The \$541.25 credit is the minimum purchase amount required of students who live on campus. Meal costs are estimated at $\$ 900$ to $\$ 1,200$ per semester. Students living on or off campus may purchase additional meal tickets. There are restaurants within walking distance of the university.

Students who withdraw officially from the university and have made full payment may receive a refund for the remaining portion of the residence hall fee. The refund will be computed on a daily basis and will include refund of the unused portion of the meal credit purchased. Students who cancel the residence hall lease for any reason other than official withdrawal will be charged one-fourth of the remaining unexpired portion of the room and board fee as a penalty, in addition to the prorated daily charges accumulated.

## - Telephone Payments

All arrangements and payments for local and long distance telephone service in residence halls are made directly to the telephone company servicing the halls.

## ■ University Outreach Programs

Upward Bound is a federally funded program designed to assist high school students in developing their potential for success in a post-secondary institution. Emilia Schunior Ramirez Hall, Room 203, telephone 956/381-2596.

Educational Talent Search encourages and assists middle school, junior high and high school students in their pursuit of a post-secondary education through individual and group counseling, academic skill building, life management skills development and career exploration and assessment. Student Services, Room 603, telephone 956/381-3651.

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The Mother-Daughter Program recruits female 8th-12th graders and their mothers to participate in creative precollegiate strategies that prepare them for success in a postsecondary setting. Emilia Schunior Ramirez Hall, Room 206, telephone 956/381-2153.

The High School Equivalency Program offers 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. Emilia Schunior Ramirez Hall, Room 207, telephone 956/ 381-2521.

The Texas Prefreshman Engineering Program 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. Emilia Schunior Ramirez Hall, Room 207, telephone 956/3812521.

The Youth Opportunities Unlimited Program provides an eight-week residential summer intervention program for eighth and ninth grade students who are at risk of not completing their high school studies. This is accomplished through counseling, pre-employment maturity skills and academic components. Emilia Schunior Ramirez Hall, Room 207, telephone 956/381-2521.

## - Other Centers, Support Services and Activities

## * Academic Centers

## - Center for Applied Research in Education

The Center for Applied Research in Education (CARE) was founded in 1994 to serve as the research arm of the College of Education. CARE performs the following four functions for the College of Education: 1) conducts and supports educational research in South Texas and the Rio Grande Valley, 2) disseminates research to the local education community, 3) facilitates the professional development of College of Education students and faculty, and 4) procures funding for educational research. The center engages in cooperative research agreements with school districts in South Texas and the Rio Grande Valley in order to improve the quality of education for students at grades pre-K through higher education. CARE maintains a World Wide Web site on the Internet (http://www.care.panam.edu) to serve as a research and information tool for students, faculty and clients. Education Building, Room 116, telephone 956/3813437.

## - 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 Texas-Mexico 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 Journal and 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.

## - Center for Tourism Research

The Center for Tourism Research 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 U.S., spring breakers at South Padre Island, ecotourism, historic tourism, recreational tourism and local residents' attitudes and reactions toward tourism. The center's most recent publication is A Winter Texan Guide to Community Volunteerism. 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. Academic Services Building, Room 2.162, 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 marine-oriented courses are offered at the CSL, 100 Marine Lab Drive, South Padre

Island, Texas 78597; telephone: 956/761-2644; fax: 956/761-2913; e-mail: dlh33e7@panam.edu; web: http:// www.panam.edu/dept/csl/csl.html.

## - Institute for International Business Research

The Institute for International Business Research (IIBR) supports the doctoral program in business administration with an emphasis in international business in the College of Business Administration. The director of the IIBR facilitates research on international business theory and practice with particular emphasis placed on Latin America and the North America Trilateral. A central goal of the IIBR is to secure external financial support for research projects. Additionally, the IIBR establishes meaningful linkages with international universities so that a better understanding of global business theory and practice might be advanced. Business Administration Building, Room 229, telephone 956/381-2493, fax 956/381-3337, e-mail: avasquez@ panam.edu, web pages: http://www.coba.panam.edu/.

## - 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 education programs, the center coordinates a set of courses on entrepreneurship that undergraduate students in the College of Business Administration may take to obtain a minor in Entrepreneurship. The center is affiliated with the Texas Council on Economic Education. Through this partnership, programs on economic education 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 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 small business success in 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, dyphagia,
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. Communication Arts and Sciences Building, Room 125, telephone 956/3813587.

## - The University of Texas System Texas-Mexico Border Health Coordination Office

The mission of The University of Texas System TexasMexico Border Health Coordination Office (TMBHCO) is to foster collaborative health education, health services and health research leading to improved health for Texans living along the Texas-Mexico border. It was created in 1990 in response to recommendations from a task force of representatives from health-related UT System institutions and other university, state and federal agencies that continue to guide the office's activities. The TMBHCO has collaborated with community-based agencies to promote health services and education, providing technical assistance to communities and institutions, sponsoring health education efforts, including conferences and workshops, and most recently establishing a Diabetes Registry. TMBHCO, 800 Van Week Street, Edinburg, telephone 956/381-3687.

## * Outreach Centers

## - Office of Center Operations and Community Services (COSERVE)

COSERVE serves as an umbrella operation to a number of special centers that provide services and support to businesses, governmental entities and individuals in the community.

COSERVE's mission is to promote growth, expansion, innovation and increased productivity and improve management skills in economic development, job creation and economic growth in the Rio Grande Valley. COSERVE is housed in the International Trade and Technology Building. The activities and locations of individual centers are listed below.

## - Center for Continuing Education

UT Pan American's mission includes "instructional and continuing education programs designed to serve the needs of citizens throughout the service area." The Center for Continuing Education (CCE) was established in 1992 for the purpose of extending the university's educational resources beyond the traditional student body to the greater community by offering a wide range of continuing and professional education opportunities in the areas of skill development, career development, professional development and personal enrichment. These opportunities are available through seminars, short courses, workshops and customized employee training. Fees are normally

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charged for these courses because such programs must be self-supporting. Many of the courses carry continuing education units, referred to as CEUs. Most classes are conducted at the UT Pan American Annex, 2412 S. Closner Blvd., Edinburg, telephone 956/384-5900, World Wide Web: http://coserve1.panam.edu/cce.

The Center for Continuing Education is a member of the Association for Continuing Higher Education (ACHE), the American Society for Training and Development (ASTD), and the American Society for Quality (ASQ).

CCE is organized around four program areas: Community Education, Professional Development, CompuLab and the English Language Institute.

The Community Education Program offers short courses for personal and professional enrichment for individuals and public and private school district personnel. Examples of participant audiences include educational counselors, school nurses, social workers, teaching professionals, substitute teachers, teacher aides and administrators, as well as the general public.

The Professional Development Program offers opportunities for individuals in the Rio Grande Valley to earn professional continuing education units (CEUs) in the areas of health education, management and manufacturing. Certificate programs are available for travel careers, paralegals, medical assistants, management and the manufacturing industry. Customized training tailored to specific client needs is a large part of the activities in this program area. The Center for Continuing Education is designated as an Associate Supplier Training Center to the national Consortium for Supplier Training.

CompuLab is a multimedia computer lab for basic and advanced software application training. Each workstation is ergonomically designed for maximum comfort and learning. Participants can take individual courses for personal needs or work toward a Certificate of Proficiency in Workplace Applications. Short intensive courses are offered days, evenings and weekends, allowing for flexible scheduling. Customized courses tailored to specific needs are also available.

The English Language Institute was established in 1982 to prepare students to enter an academic program with academically oriented English, assist professionals and business people in career-oriented English and offer all participants the opportunity to learn functional use of the English language. The ELI encourages anyone who wishes to learn English in a serious yet friendly atmosphere to apply to any of its three programs: Intensive Day Program (192 hours), Semi-Intensive Evening Program (48 hours) and Semi-Intensive Saturday Program (48 hours).

The ELI is a member of the following professional organizations: National Association of Foreign Student Affairs (NAFSA), Association of International Educators (AIE), Teachers of English as a Second or Other Language
(TESOL), Texas Association of University and College English Language Programs (TAUCELP) and American Association of Intensive English Programs (AAIEP).

The ELI is located in Building E, Room 102, telephone 956/381-2133, World Wide Web: http://coserve1.panam. edu/coserve.eli1.html.

- Small Business Development Center (SBDC) — promotes growth, expansion, innovation, increased productivity and improved management skills for small businesses in the Lower Rio Grande Valley service area through counseling, technical assistance, training seminars and workshops, advocacy, research studies, resource information and coordination with the U.S. Small Business Administration and other community business support services. UT Pan American Annex, 2412 S. Closner Blvd., Edinburg, telephone 956/316-2610.
- Data and Information Systems Center (DISC) — is the storehouse and provider of timely, relevant and quality data about the people and economy of the Southwest Border Region. International Trade and Technology Building.
- Southwest Border Nonprofit Resource Center (SBNRC) serves as the catalyst for sustainable, long-term development of nonprofit organizations in the Rio Grande Valley and South Texas. UT Pan American Annex, 2412 S. Closner Blvd., Edinburg.
- Mexican Business Information Center (MBIC) — provides the client with comprehensive information on Mexico to enable them to make better decisions and facilitate accurate analysis of Mexican market potentials. International Trade and Technology Building.
- Industrial Partnership Center (IPC) — assists manufacturers and suppliers by providing assistance to aid them in qualifying as vendors in a global manufacturing environment; also supports the post-secondary and secondary education systems in the area of advanced technical training, partnering with colleges and universities to provide training, services and assistance to students. Center for Manufacturing.
- Center for Entrepreneurship and Economic Development (CEED) - serves as a catalyst for business and economic development, job creation and income growth by providing a broad range of technical and educational assistance targeted to businesses, public officials, economic development organizations and the community in general. International Trade and Technology Building.
- The International Trade and Technology Center ( $I^{2}$ ) promotes international trade through the use of technology and provides access to a variety of managerial, research and
technical services designed to promote international commerce. International Trade and Technology Building.
- Minority Business Opportunity Committee (MBOC) creates opportunities (procurement and international trade) for minority entrepreneurs. UT Pan American Annex, 2412 S. Closner Blvd., Edinburg.
- One Stop Capital Shop (OSCS) - seeks to grow businesses and create jobs in the Empowerment Zone and maximize business success by coupling financial programs with managerial and technical assistance. UT Pan American Annex, 2412 S. Closner Blvd., Edinburg, telephone 956/ 316-2610.
- EDA University Center (EDA-UC)— serves as a catalyst to assist distressed communities in achieving their long-term competitive economic potential through the strategic investment of resources. International Trade and Technology Building.
- Center for Local Government (CLG) - works to increase the capacity of local governments (counties and cities) and special districts in the Rio Grande Valley of Texas to more efficiently manage scarce public resources and to meet the present and future problems in a positive, creative and constructive manner. Director's office, International Trade and Technology Building; faculty advisor, Social and Behavioral Sciences Building Room 124, telephone 956/ 381-2386.
- Center for Manufacturing (CFM) — provides assistance to current and prospective manufacturers through the utilization of services available from the center and from academic, industrial, governmental or private sources; also facilitates faculty research, providing training, experience and employment for students. Center for Manufacturing, telephone 956/316-7011.
- Community Outreach Partnership Center (COPC) mobilizes university resources to act as a catalyst for economic and community development in South Texas’ rural communities known as colonias. International Trade and Technology Building.


## Cultural Activities

## - Art Department Exhibits

The Charles and Dorothy Clark Gallery, located in the Fine Arts Complex, and the CAS Gallery, located in the Communication Arts and Sciences Building, feature art exhibitions that are open to the public. Works by UT Pan American students, faculty and other professional artists are displayed. All art exhibitions are sponsored by the

Department of Art, Fine Arts Building B, Room 225, telephone 956/381-3480.

## - 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. Throughout 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 119, 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 Choir, the Concert Band, the Jazz Ensemble, the South Texas Chamber Orchestra, the Mariachi and the Valley Symphony Orchestra and Chorale. Telephone 956/381-3471 for more information.

## - University Theatre

The University 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 and an early summer "Shakespeare in the Park" production. The community can purchase individual tickets to each performance; season

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subscriptions are also available. University ID card holders are permitted free admission, as space permits. Actors include university students, faculty and staff, along with community members. The University 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 University Theatre is supplied by Student Activity Fees. Communication Arts and Sciences Building, 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.

## Undersfaduate <br> 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 General Education 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 coals 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 ability to read and listen, a knowledge of logic and scientific method, and the mental self-discipline 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 interrelationships 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 University College and General Education Requirements.

## TNIVERETH GOLL = CF E  <br> EDUGAHION RE9U|REM|三NTS

The University College and General Education Requirements apply to all students who enter The University of Texas-Pan American to pursue a bachelor's degree. General Education requirements total 60 hours of work, primarily in the humanities, the social sciences and the natural sciences. These 60 hours must be completed before graduation; however, a subset of these requirements, known as the University College requirements (described below) must be completed within the first 60 hours of college work.

Students enrolled in the ADN program in Nursing (see page 46 and page 135) are exempt from University College and General Education requirements because that degree is not at the baccalaureate level. All other undergraduate students must complete the requirements.

## - Summary of General Education Requirements

## Humanities

24 hours

- 6 hours of freshman English
- 6 hours of sophomore literature
- 6 hours in a language other than English
- 6 hours from two of these areas: the arts, communication, philosophy and honors


## Science and Mathematics

## 11 hours

- 8 hours of a laboratory science
- 3 hours of college algebra or higher-level mathematics

Computer Literacy
3 hours

- 3 hours

Kinesiology
4 hours

- 4 hours of kinesiology or appropriate ROTC courses


## Social Science

18 hours

- 6 hours of American history
- 6 hours of American and Texas government
- 6 hours from any two of these areas: anthropology, economics, psychology and sociology

Courses that may be used to satisfy these requirements are outlined on the following page.

## - University College Requirements

To satisfy the University College requirements, a student must complete 30 hours: 6 hours of freshman English, Mathematics 1340 (or a higher-level mathematics course) and 21 other hours selected from the General Education requirements.

The University College requirements must be completed within the first 60 hours of college work with at least a 2.0 grade point average. Students may not enroll in other courses until these requirements are met. Freshman English and MATH 1340 (or a higher-level mathematics course) must be taken every semester until successfully completed with a grade of "C" or better. Junior-level students may not begin taking upper-division courses those on the junior and senior levels - until they have completed their University College requirements.

## - Special Considerations for Transfer Students

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 College and General Education requirements before graduation. Transfer students who lack 6 hours of freshman English and/or 3 hours of mathematics or their equivalents 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.

## - State Core Curriculum/Major Field of Study

At the time of publication of this catalog, the Texas Higher Education Coordinating Board was finalizing a statewide core curriculum and field of study curriculum pursuant to the Texas Education Code, Section 61.821 et seq, which were expected to be implemented after the fall semester 1998. The statewide transferability plan will allow students to transfer to any public institution in the State of Texas without losing course credits that complete the requirements as set forth by the Coordinating Board. For current information, contact the Office of Admissions and Records, Student Services Building 108, The University of Texas-Pan American, 1201 W. University Drive, Edinburg, TX 78539-2999; telephone 956/381-3040 or 956/381-2201; Voice/Telecommunications Device for the Deaf: 956/3812215.

## - Specific Courses that Meet University College and General Education Requirements

Individual degree programs may require that specified courses be completed to meet these General Education requirements rather than allowing the full range of selections shown here. Students should check the 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. Humanities

24 hours
Group 1. Freshman English
6 hours
Complete one of the following:
ENG 1301 Composition
ENG 1387 Rhetoric and Composition (Honors Plan)
Complete one of the following:
ENG 1302 Rhetoric
ENG 1388 Rhetoric and Literature (Honors Plan)
Group 2. English Literature
6 hours
Select two from the following:
ENG 2300 Introduction to Literature
ENG 2303 Readings in American Literature
ENG 2305 Readings in English Literature
ENG 2307 Readings in World Literature
ENG 2308 Readings in Special Topics
ENG 2313 Readings in Dramatic Literature
ENG 2387 Readings in World Literature (Honors Plan)
ENG 2388 Readings in World Literature (Honors Plan)

## Group 3. Language Other Than English 6 hours

(Must be in the same language)
Complete one of the following sequences: (A higher-level course in the same language may be substituted for any beginning course.)

## Chinese

CHIN 1391 Beginning Chinese
CHIN 1392 Beginning Chinese

## French

FREN 1321 Beginning French I
FREN 1322 Beginning French II
or
FREN 1387 Beginning French (Honors Plan)
FREN 1388 Beginning French (Honors Plan)

## German

GERM 1331 Beginning German
GERM 1332 Beginning German

## Japanese

JAPN 1351
Beginning Japanese

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)

## Sign Language

COMD 1310 Sign Language I (beginning)
COMD 1320 Sign Language II (intermediate)

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Group 4. Other Humanities
6 hours
Select hours from two of the following four areas:
Area 1: The Arts
ART 1301 Art Appreciation
ART 3381 Perception and Expression in Art I
COMM 2312 Theatre Appreciation
KIN 2323 Dance Appreciation
MUS 1307 Music Appreciation
MUS 1308 Mexican Folk Music
MUS 2301 Music Literature I
MUS 2302 Music Literature II
MUS 3311 Essentials of Music I
Area 2: Communication
COMM 1303 Presentational Speaking
COMM 1313 Fundamentals of Speech Communication

Area 3: Philosophy
PHIL 1310 Introduction to Philosophy
PHIL 1320 Introduction to Logic
PHIL 2330 Ethics
PHIL 2340 Philosophy of the Person
PHIL 2350 Social Philosophy
PHIL 2370 Eastern Thought
PHIL 2390 Professional Ethics
Area 4: Honors Studies
HONR 2387 Humanities I
HONR 2388 Humanities II

## B. Science and Mathematics

11 hours
Group 1. Natural Science
8 hours
(Must be in same discipline)
Complete one of the following course sequences:

## Astronomy

ASTR 1401 General Astronomy
ASTR 1402 General Astronomy

## Biology

BIOL 1401 General Biology
BIOL 1402 General Biology
or
BIOL 1487 Honors Biology
BIOL 1488 Honors Biology
or
BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology

## Chemistry

CHEM 1301 General Chemistry I and CHEM 1101 (Laboratory)
CHEM 1302 General Chemistry II and CHEM 1102 (Laboratory)

Geology
GEOL 1401 Physical Geology
GEOL 1402 Historical Geology

## Physical Science

PSCI 1421 Physical Science
PSCI 1422 Physical Science

## Physics

PHYS 1401 General Physics
PHYS 1402 General Physics

## Group 2. Mathematics

3 hours
MATH 1340 College Algebra
or higher-level mathematics course, excluding MATH 2306 and MATH 2307

## C. Computer Literacy

3 hours
Select 3 hours from the following:
CSCI $1300 \quad$ Computers and Society
CSCI $1380 \quad$ Computer Science I
CSCI $2325 \quad$ Survey of Elementary Scientific Programming
CIS $1301 \quad$ Computer Information Systems
(or an appropriate computer course)

## D. Kinesiology

4 hours
Select any two kinesiology activity courses (except folkloric dance) or equivalent Military Science courses.

Under the circumstances defined below, students may be eligible for a waiver of this requirement. If a waiver of kinesiology activity courses is obtained, then KIN 2301 or NURS 2301 is required. The form to request the waiver is available at the Office of Admissions and Records, Student Services Building, Room 108.

The waiver may be obtained under the following circumstances:

1. A student who has been honorably discharged from the military service, and who has served a minimum of one year therein, may obtain a waiver of the required hours in physical education (kinesiology) on the basis of 1 hour for each six months of military service or major fraction thereof.
2. A student unable to participate in physical education activity courses because of a health or physical condition may obtain a waiver based upon a physician's certificate to that effect.
3. A student with a child or children in his/her care may obtain a waiver of required kinesiology hours.
4. A student who is at least 25 years of age at the time of initial admission, or at the time of readmission after an absence from college of at least two years, may obtain a waiver from kinesiology. Any other student is required to take kinesiology activity courses after reaching age 25 only
to the extent that the student has failed to earn one kinesiology credit during each semester of the freshman and sophomore years completed prior to reaching age 25.

## E. Social Sciences

18 hours

## Group 1. American History

6 hours
Complete one of the following sequences:
HIST 2313 American Heritage I
HIST 2314 American Heritage II
or
HIST 2387 American Heritage I (Honors Plan)
HIST 2388 American Heritage II (Honors Plan)
Group 2. Political Science
6 hours
Complete one of the following sequences:
POL S 2313 United States and Texas Government and Politics
POLS $2314 \quad$ United States and Texas Government and Politics
or
POLS 2387 United States and Texas Government and Politics (Honors Plan)
POLS $2388 \quad$ United States and Texas Government and Politics (Honors Plan)

Group 3. Other Social Science
6 hours
Select hours from two of the following four areas:
Area 1. Anthropology
ANTH 1323 Introduction to Cultural Anthropology
ANTH 1324 Human Evolution
ANTH 1342 Introduction to Archaeology
ANTH 1353 Introduction to Folklore
ANTH 2323 Mexican-American Culture
Area 2. Economics
ECO 1301 Introduction to Economics
ECO 2301 Principles of Economics I
Area 3. Psychology
PSY 1310 Introduction to Psychology
Area 4. Sociology
SOC 1313 Principles of Sociology
SOC 1323 Current Social Issues
SOC 1387 Principles of Sociology (Honors Plan)
SOC 2333 Marriage and the Family

## UUGESTED COURSE SEPUENEE FOR GENARAL EDUGATION REQUIREMENTS

## Freshman Year

## First Semester:

| Course | Credits |
| :--- | :---: |
| English $1301^{*}$ | 3 |
| Math $1340^{*}$ | 3 |
| History | 3 |
| Kinesiology** | 2 |
| Language Other than English | 3 |
| Other Humanities | 3 |
|  | Total |
|  | 17 |

## Second Semester:

Course Credits
English 1302*
Computer Literacy 3
History 3
Kinesiology** 2
Language Other than English 3
Other Humanities 3
Total 17

## Sophomore Year

First Semester
Course Credits

Literature 3
Political Science 3
Science 4
Social Sciences 3
13
Other 3-6
Second Semester
Course Credits

Literature 3
Political Science 3
Science 4
Social Sciences 3
Sub-total 13
Other 3-6
Total 16-19
Total for the General Education
Requirements:
60 hrs

[^3]
## HONORS STUPIES Procian

## - Purpose of Program

The purpose of Honors Studies is to provide capable and interested students a means of enriching their college education. This purpose is achieved in several ways: by offering honors classes at the freshman and sophomore level; independent study at the upper level; and events such as guest speakers, development seminars, educational travel and a national student society to provide enrichment to the basic curriculum.

## - Honors Classes

Honors classes provide an ideal learning situation for the student. The classes are small - usually 20 students or less - and are attended by students with above average academic capabilities. This setting furnishes a student greater opportunity to function as an individual and the professor the chance to utilize creative and innovative teaching techniques. Enrichment rather than acceleration is the main objective. Honors classes are not necessarily more difficult, but rather more stimulating and interesting than many other offerings.

## - Independent Study

Independent study furnishes the honors student an opportunity, while still an undergraduate, to work on a one-to-one basis with a professor. In the junior year, honors students begin exploring topics of their own choice in their majors or related areas. This work is done under the supervision of faculty members who possess special expertise in the student's chosen area.

## - Admission Requirements

There are three ways beginning freshmen win admission to the Honors Studies Program:

1. have a composite ACT score of 22 or higher (or SAT equivalent); or
2. graduate in the top 10 percent of their class; or
3. graduate with a 90 percent or higher grade average in academic courses.

Students who already have college credit may also apply for admission. College grades and recommendations from professors determine a college student's admission to the program. Any student who has earned 12 hours or more of college credit with at least a 3.0 GPA is eligible for admission to the Honors Studies Program. Contact the Honors Studies Office for additional information.

## - Scholarships

The Honors Studies Program has a wide range of scholarships available for qualified students. Contact the Honors Studies Office for scholarship applications.

## - Honors Studies Curriculum

In choosing honors classes at the freshman and sophomore level, students should refer to the suggested curriculum under their major and select honors classes to substitute for regular classes whenever feasible to do so.

For example, if the suggested curriculum for the major lists ENG 1301, ENG 1302 and HIST 2313, HIST 2314, students may take the comparable honors ENG 1387, ENG 1388 and honors HIST 2387, HIST 2388. In the case of science, foreign language and mathematics, some majors require specific classes in these areas while other majors do not. If the suggested curriculum guide simply lists foreign language or science or mathematics but does not indicate a specific class, students may wish to take one of the honors classes in these areas. Contact the Honors Studies Office for information on offerings in any given semester. The director can help interested students fit the Honors Studies Program into any major on campus.

## - Graduating within the Framework of Honors Studies

While many students may wish to take honors courses as enrichment experiences, there are specific requirements for graduation within the framework of Honors Studies:

1. Completion of the two humanities courses, HONR 2387 and HONR 2388. The purpose of these courses is to give students a broad overview of their intellectual heritage, thus better enabling them to assimilate knowledge from their other courses and studies.
2. Completion of Independent Studies. Students receive credit in HONR 3187, HONR 3387 and HONR 4387 Independent study, leading to the Senior Honors Thesis, allowing students to delve into a specialized area of knowledge, thus giving them valuable experience as independent scholars. Students may receive credit in their major for Honors 4387.
3. An overall grade point average of at least 3.0.

## - Student Activities: Gamma Beta Phi

The Honors Studies Program sponsors a chapter of Gamma Beta Phi, a national honors and service society, which connects the academic program with wider social and service interests of honors students. Its national status and worthy reputation provide visibility and prestige for its members.

## - Inquiries about Honors Studies

For applications or for further information about the Honors Studies Program, write the Director of Honors Studies Program, The University of Texas-Pan American, 1201 West University Drive, Edinburg, Texas 78539-2999.

# colles dARTS \& HUMANITIES 

## 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 70 of this catalog.

## Academic Programs

The college offers the Bachelor of Arts in Art, English, History, Latin American Studies, Journalism, MexicanAmerican Studies, Music, Philosophy, Spanish, Speech Communication and Theatre. Students also may earn a Bachelor of Fine Arts in Art and may choose a further specialization in graphic design or biological illustration.

Students may minor in art, communication, English, French, history, journalism, Mexican-American studies, music, philosophy and Spanish.

Secondary teacher certification is available in art, English, French, history, journalism, music, Spanish, speech 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, Speech Communication 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 General Education requirements for the humanities and for the history portion of the social science requirement.


Dr. William Davis III, Dean<br>Communication Arts \& Sciences Building Room 334<br>1201 West University Drive<br>Edinburg, Texas 78539-2999<br>Telephone: 956/381-2175<br>Fax: 956/381-2177<br>E-mail: info@www.panam.edu<br>On the Web: http://www.panam.edu/<br>colleges/coah.cfm

## ART

Dr. Nancy J. Moyer, Department Chair Fine Arts Building B
Room 225
Telephone: 956/381-3480
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Full-time Faculty
Field, Philip S., Associate Professor
Hyslin, Richard P., Professor
Manuella, Frank R., Professor
Martin, Wilbert R., Associate Professor
Moyer, Nancy J., Professor
Nichols, E. E., Associate Professor

## General Overview

The Department of Art offers a Bachelor of Arts degree and Bachelor of Fine Arts degree. The BA degree is designed for future teachers in the public schools and normally includes all-level certification. The BFA is a professional degree and is offered with an emphasis in studio, such as ceramics, drawing, jewelry/metalworking, painting, printmaking or sculpture; graphic design; and secondary art certification The BFA prepares students for continued study at the graduate level.

## 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 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 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

## General Education Requirements

60 hours
Complete the requirements shown in the General Education Requirements section of this catalog on pages 70-73
EXCEPT for the Sections, Groups or Areas listed below, which must be satisfied only as shown below.

## Section A. Humanities

Group 4. Other Humanities
Students must select one course from Area 2.
Area 2. Communication COMM 1313 must be selected.

## Section B. Science and Mathematics

Group 2. Mathematics
MATH 1340 or higher must be selected.

## Section C. Computer Literacy

CSCI 1300 must be selected.

| Major Course Requirements | $\mathbf{5 1}$ hours |
| :--- | :--- |
| Core Courses | 39 hours |

ART 1311 Drawing I
ART 1331 Design I
ART 2303 Jewelry/Metalworking I
ART 2312 Drawing II
ART $2321 \quad$ Painting I or
ART 2322 Painting II
ART 2332 Design II
ART 2351 Art Survey I
ART 2352 Art Survey II
ART 2371 Ceramics I
ART $3381 \quad$ Perception and Expression in Art I
ART $3382 \quad$ Perception and Expression in Art II
ART 3383 Fundamentals of Creative and Critical Thinking
ART 4383 Career Aspects of the Visual Arts
Designated Electives
12 hours
Advanced Art History: 3 hours
Advanced Studio Art: 9 hours
Other Course Requirements
21 hours
Advanced Elective: 3 hours
Approved Minor: 18 hours
TOTAL
132 hours

## - BA with All-Level Certification

Complete the requirements shown above, except the minor must be in Professional Education as follows:
EDCI 4301 Foundations of Education
EDCI 4302 Educational Psychology
EDCI 4307 Secondary Curriculum: Internship I
EDCI 4308 Advanced Secondary Curriculum: Internship I
EDCI 4399 Secondary All-Level Internship

## Bachelor of Fine Arts with Major in Art

## - BFA-Studio

## General Education Requirements

60 hours
Complete the requirements shown in the General Education Requirements section of this catalog on pages 70-73.

## Major Course Requirements <br> Core Courses

67 hours
22 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 3311 Drawing III
ART 4193 Senior Exhibit
Designated Electives
45 hours
Select 9 hours from the following:
ART 2303 Jewelry/Metalworking I
ART 2321 Painting I
ART 2322 Painting II
ART 2341 Sculpture I
ART 2361 Printmaking I
ART 2371 Ceramics I
Art History
Select 12 advanced hours.
Studio Art
Select 12 advanced hours.
Art-Undesignated
Select 12 advanced hours.

## Other Electives

6 hours
Select 6 advanced 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 faculty studio panel, is required for the BFA degree.

## TOTAL

133 hours

## - BFA-Studio with Specialization in Graphic Design

General Education Requirements 60 hours
Complete the requirements shown in the General Education Requirements section of this catalog on pages 70-73.

## Major Course Requirements <br> 64 hours <br> Core Courses <br> 55 hours

ART 1311 Drawing I
ART 1331 Design I
ART 1332 Lettering/Typography
ART 2312 Drawing II
ART 2332 Design II
ART 2351 Art Survey I
ART 2352 Art Survey II
ART 3330 Illustration
ART 3331 Visual Communications I
ART 3333 Design and Production
ART 3334 Photography as an Art Form
ART 3335 Computer Graphics
ART 3336 Computer Graphics II
ART $4333 \quad$ Graphic Design I
ART $4334 \quad$ Graphic Design II
ART 4337 Digital Photography
ART 4391 Individual Problems/Internship/Co-op
ART 4392 Individual Problems
ART 4193 Senior Exhibit
Designated Electives
9 hours
Select 3 hours from the following:
ART $2321 \quad$ Painting I
ART 2322 Painting II
Art history
Select 6 advanced hours.
Other Electives
6 hours
Select 6 advanced 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 faculty studio panel, is required for the BFA degree.

## TOTAL

130 hours

## - BFA-Secondary Certification Option III

## General Education Requirements 60 hours

Complete the requirements shown in the General Education Requirements section of this catalog on pages 70-73
EXCEPT for the Sections, Groups or Areas listed below, which must be satisfied only as shown below.

## Section A. Humanities

Group 4. Other Humanities
Students must select one course from Area 2.
Area 2. Communication
COMM 1313 must be selected.

## Section B. Science and Mathematics

Group 2. Mathematics
MATH 1340 or higher must be selected.

## Section C. Computer Literacy

CSCI 1300 must be selected.

## Core Courses

28 hours
ART 1311
ART 1331
Drawing I
ART 2312 Drawing II
ART 2332 Design II
ART 2351 Art Survey I
ART 2352 Art Survey II
ART $2361 \quad$ Printmaking I
ART 3383 Fundamentals of Creative and Critical Thinking
ART 4383 Career Aspects of the Visual Arts
ART 4193 Senior Exhibit
Designated Electives
27 hours
Select 9 hours from the following:
ART 2303 Jewelry/Metalworking I
ART 2321 Painting I or
ART 2322 Painting II
ART 2341 Sculpture I
ART 2371 Ceramics I
Art history
Select 9 advanced hours.
Studio Art
Select 9 advanced hours.

## Other Electives

6 hours
Select 6 advanced hours of art.
Other Requirements 18 hours
EDCI 4301 Foundations of Education
EDCI 4302 Educational Psychology
EDCI 4307 Secondary Curriculum: Internship I
EDCI 4308 Advanced Secondary Curriculum: Internship I
EDCI 4641 Secondary Internship II

## 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 faculty studio panel, is required for the BFA degree.

## TOTAL

142 hours

## Minor in Art

18 hours in art, of which 9 hours must be advanced.

## Required Courses

ART 1311 Drawing I
ART 1331 Design I
ART 2332 Design II
ART 3352 Contemporary Art or
ART 4352 Latin American Art — Post Conquest

## Designated Electives

6 hours of advanced art history or studio.

## - Specialization for Certification in Art

Elementary Certification Option I: 15 hours in Art, of which 6 hours must be advanced.

## Required Courses

ART 1311 Drawing I
ART 1331 Design I
ART 2332 Design II or
ART 2371 Ceramics I
ART $3381 \quad$ Perception and Expression in Art I or
ART 3382 Perception and Expression in Art II
ART $3321 \quad$ Painting III or
ART 4311 Advanced Drawing


## Elementary Certification Option II:

24 hours in Art, of which 12 hours must be advanced.

## Required Courses

ART 1311 Drawing I
ART 1331 Design I
ART 2332 Design II or
ART 2371 Ceramics I
ART 2352 Art Survey II
ART $3321 \quad$ Painting III
ART 3352 Contemporary Art or
ART 4352 Latin American Art - Post Conquest
ART $4311 \quad$ Advanced Drawing
ART $3381 \quad$ Perception and Expression in Art I
ART 3382 Perception and Expression in Art II

## Secondary Certification Option II:

24 hours in Art, of which 12 hours must be advanced.

## Required Courses

ART 1311 Drawing I
ART 1331 Design I
ART 2332 Design II or
ART 2371 Ceramics I
ART 2352 Art Survey II
ART $2361 \quad$ Printmaking I
ART 3383 Fundamentals of Creative and Critical Thinking
ART 4383 Career Aspects of the Visual Arts
Designated Electives
Select 3 hours from the following:
ART $3321 \quad$ Painting III
ART $3361 \quad$ Printmaking II
ART 3371 Ceramics II
ART 4311 Advanced Drawing

## Course Descriptions

A listing of courses offered by the Department of Art can be found on pages 185-188.

## GOMMUNIGATION

## Dr. Jack R. Stanley, Department Chair Communication Arts \& Sciences Building Room 165 <br> Telephone: 956/381-3583 <br> Fax: 956/381-2685 <br> E-mail: info@www.panam.edu

## Full-time Faculty

Courtney, Janice Ray, Assistant Professor, Speech Communication
Ghanem, Salma, Assistant Professor, Program Coordinator, Journalism
Grabowski, Thomas E., Lecturer, Theatre
Hawley, James A., Associate Professor, Theatre
Mayo, Barbara J., Lecturer, Speech Communication
McCalman, Claudia, Assistant Professor, Speech Communication
McLemore, George C., Assistant Professor, Program Undergraduate Advisor, Speech Communication Monta, Marian F., Professor, Program Coordinator, Theatre Rieke, R. Neal, Assistant Professor, Speech Communication Rollins, Robert J., Lecturer, Journalism
Saavedra, Dora E., Assistant Professor, Speech Communication
Stanley, Jack R., Professor, Theatre, Television, Film
Strong, William, Associate Professor, Program Coordinator, Speech Communication
Wakefield, Robert W., Assistant Professor, Journalism

## 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 satisfy the oral communication skills competency required by the Southern Association of Colleges and Schools (SACS) Criteria for Accreditation, the Department of Communication offers two speech communication courses (COMM 1303 and COMM 1313) in the General Education curriculum.

## 80 - The College of Arts \& Humanities

To help satisfy the fine arts requirement in humanities, the Department of Communication offers a theatre course (COMM 2312) in the General Education curriculum.

The Department of Communication sponsors a chapter of Alpha Psi Omega, national theatre honorary fraternity, and hosts a university chapter of the American Advertising Federation.

The Department of Communication offers the following degree programs:

- Bachelor of Arts in Communication Option in Journalism Option in Speech Communication Option in Theatre
- Master of Arts in Speech 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.

## Bachelor of Arts in Communication

Communication is a broad-based major with three options. The student will select a single option area from either the Speech Communication, Theatre or Journalism 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

Print Journalism track
Broadcast Journalism track
Advertising/Public Relations track

## Speech Communication Option

Organizational Communication track
Persuasion/Influence Studies track

## Theatre Option

Design track
Performance track
Television, Film track

## Public School Teacher Certification

Career Tracks available under each option area are as follows: [NOTE: Teacher certification degree plans are structured differently, requiring teaching field(s), a possible minor and 18 advanced hours of Professional Development/ Education coursework. Confer with the undergraduate advisor.]

## - Speech Communication Option I 37 hours*

*Includes General Education Requirement of COMM 1303 or COMM 1313
COMM 1310 Oral Interpretation
COMM 1315 Survey of Radio/TV Broadcast/Cable
COMM 2315 Interpersonal Communication
COMM 3301 Rhetoric of Television
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 3413 Literature in Performance
Plus a Second Teaching Field 24 hours
(must include 12 advanced hours)

- Speech Communication Option II

24 hours
Recommended courses include:
COMM 1310 Oral Interpretation
COMM 1313 Fundamentals of Speech Communication
COMM 1315 Survey of Radio/TV Broadcast/Cable
COMM 2315 Interpersonal Communication
COMM 3301 Rhetoric of Television
COMM 3317 Speech for the Classroom Teacher
COMM 3330 Argumentation and Debate
COMM 3334 Communication through Group Process

## - Theatre Option

Secondary Level, Option 1 and Secondary Level, Option 2 Certifications are available. See page 82 for details.

## - Journalism Option

Secondary Level, Option 2 Certification is available. See page 81 for details.

## Minor in Communication

The student, with departmental advisement, will complete 18 hours, of which 9 hours must be advanced coursework, in a single concentration of Communication either Speech Communication, Theatre or Journalism.

## - 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.

The department permits 37 hours of journalism courses to be applied toward graduation. A student must earn 87 hours of non-journalism hours as part of the 124 hours required. Any professional work beyond the 37 hours must be added to the 124 hours required for graduation.

To enroll in upper-level journalism courses, a student must have a university grade point average 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 grade point average.)

In addition to completing the 60 hours of the General Education requirements, journalism students must have completed COMM 2350 with a grade of at least "C" prior to enrolling in any journalism courses.

## Option in Journalism Degree Requirements

## A. Core Courses

25 hours
Journalism students must take the following 25 hours of core courses:
COMM 2350 Writing for the Mass Media
COMM 2404 Television Production
COMM 3350 Research in Communication
COMM 4313 Mass Media Law or
COMM 4328
Ethics
COMM 4326 Photojournalism
COMM 4327 Mass Communication and Society
COMM 4329 Media Presentation
COMM 4332 Media Publishing

## B. Concentration Requirements

## 12 hours

Journalism students must take at least three courses from their concentration area and one other course from any of the three concentrations (including their own concentration).

Concentration Areas:

## Print

COMM 3305 Editing
COMM 3306 Feature Writing
COMM 3327 Reporting I
COMM 3328 Writing for Publication
COMM 4332 Media Publishing

## Advertising/Public Relations

COMM 3304 Advertising
COMM 4321 Public Relations
COMM 4334 Advanced Public Relations
COMM 4335 Advanced Advertising

Broadcast
COMM 3401 Broadcast News Writing
COMM 3403 Television News Production and Reporting
COMM 4314 Advanced Television/Film Production
COMM 4417 Radio and Television Advertising Production

## Other Requirements

A portion of the journalism student's upper-division coursework must be chosen outside the journalism area.
The outside concentration requirement may be elected as:

1. 18 hours in one academic department, or
2. 18 hours in an area of study to meet specific career goals.

In either option, 15 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.

A maximum of 37 hours in journalism courses is required for a major.

## Public School Teacher Certification

Students seeking state certification in journalism should consult the College of Education. Only Option II is available. Students wanting to teach journalism at the secondary level will complete the following 24 hours:
COMM 3304 Advertising
COMM 3305 Editing
COMM 3306 Feature Writing
COMM 3327 Reporting I (formerly COMM 1304)
COMM 3328 Writing for Publication
COMM 4313 Mass Media Law
COMM 4326 Photojournalism
COMM 4327 Mass Communication and Society

## Minor in Journalism

Applicants must complete 18 hours, of which 9 hours must be advanced coursework. All courses must be completed with a grade of "C" or better.

## - Option in Speech Communication

The option in Speech Communication offers students the opportunity to specialize in one of three tracks: Organizational Communication, Persuasion/ Influence Studies or Teacher Certification.

## General Education Requirements

60 hours
Complete the requirements shown in the General Education
Requirements section of this catalog on pages 70-73

## 82 - The College of Arts \& Humanities

EXCEPT for the Sections, Groups or Areas listed below, which must be satisfied only as shown below.

## Section A. Humanities

Area 2. Communication must be selected.
COMM 1303 Presentational Speaking or
COMM 1313 Fundamentals of Speech Communication

Core Courses
COMM 2315
COMM 3301
COMM 3314
COMM 3316
COMM 3332
COMM 3350 Research in Communication

- Specific Requirements for Organizational Communication Track

15 hours
Select 15 hours from the following courses:
COMM 3315 Communication in Human Relations (may be taken twice)
COMM 3331 Principles of Interviewing
COMM 3334 Communication through Group Process
COMM 3335 Advanced Public Speaking
COMM 4330 Communication Consulting and Training
COMM 4336 Applied Organizational Communication
TOTAL
124 hours

- Specific Requirements for Persuasion/ Influence Studies

15 hours
Select 15 hours from the following courses:
COMM 3318 Great American Oratory
COMM 3330 Argumentation and Debate
COMM 3331 Principles of Interviewing
COMM 3335 Advanced Public Speaking
COMM 4307 Contemporary Rhetoric of Social and Political Movements
COMM 4308 Special Problems in Rhetorical Criticism
COMM 4331 Senior Synthesis Seminar in Speech Communication

## TOTAL

125 hour
Minor in Speech Communication (non-certification)
A minor in Speech Communication (non-certification) requires a total of 18 semester hours, 3 of which are core hours, COMM 1303 or COMM 1313. The core hours should be taken before enrolling in any of the 15 additional hours of coursework. 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.

## - Option in Theatre

The option in Theatre supports three major educational objectives:

1. preparation for entry into the workforce as a theatre professional;
2. preparation for entry into a graduate degree program in theatre; and
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

Three basic curriculum tracks are available in Theatre: Performance; Design; and Television, Film. Teacher certification is available, both as Option I and as Option II. For the basic curriculum tracks, the following general degree requirements apply:

## General Education Requirements 60 hours

Complete the General Education requirements as shown on pages 70-73 of this catalog EXCEPT as shown below:

## Section A. Humanities

Group 2. English Literature
It is recommended that students select ENG 2313/COMM 2313 as one of the courses.

## Core Courses 19 hours

COMM 1305
Acting I
COMM 2404 Television Production
COMM 4301 Directing I
COMM 4302 Directing II
COMM 4314 Advanced Television/Film Production
COMM 4316 History of the Theatre II

## Technical Electives

28-33 hours
See individual requirements below.
Other Electives
17-12 hours
TOTAL
124 hours
-Specific Requirements: Performance Track
Technical Electives 33 hours
COMM 2101 Practicum -Theatre-TV-Film
(must be taken four times)
COMM 2306 Acting II
COMM 2411 Make-Up
COMM 3302 Speech for Stage and Screen
COMM 3409 Acting III or
COMM 3410 Acting IV
COMM 3311 Contemporary Drama
COMM 3323 World Drama
COMM 4101 Practicum - Theatre-TV-Film (must be taken twice)
COMM 4315 History of the Theatre I
COMM 4418 Theory and Styles of Acting or COMM 4419 Problems in Acting
Other Electives
12 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 Internship-
Cooperative Education - Theatre
Specific Requirements: Design Track
Technical Electives
30 hours
COMM 1411 Technical Production I
COMM 1412 Technical Production II
COMM 2412 Costuming
COMM 3309 Advanced Technical Production and Design
COMM 3310 Lighting for the Stage, Film and TV
COMM 3311 Contemporary Drama or
COMM 3323 World Drama
COMM 3324 Cinematography/ Videography
COMM 4101 Practicum - Theatre-TV-Film (must be taken three times)
COMM 4315 History of the Theatre I
Other Electives
15 hours
The following are recommended:
COMM 2101 Practicum - Theatre-TV-Film
(should be taken four times)
COMM 2411 Make-Up
-Specific Requirements: Television, Film Track
Technical Electives
28 hours
COMM 1412 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 Advanced Technical Production and Design
COMM 3310 Lighting for the Stage, Film and TV
COMM 3324 Cinematography/ Videography
COMM 3325 Motion Picture History and Significance
COMM 3623 Professional Internship-Cooperative Education - Theatre or
COMM 4615 Summer Theatre Workshop

## 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)

## * Certification Tracks

General Education
60 hours
Core Courses
19 hours
COMM 1305
Acting I
COMM 1411 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
Teaching Field: Secondary Theatre Arts, Option I Technical Electives

29 hours
COMM 2412 Costuming
COMM 3309 Advanced Technical Production and Design
COMM 3311 Contemporary Drama or
COMM 3323 World Drama
COMM 3412 Arts Management and Publicity
COMM 4101 Practicum - Theatre-TV-Film
(must be taken three times)
COMM 4418 Theory and Styles of Acting
Minor in a second teaching field (not certified)
19 hours of core courses
Minor in Secondary Education
19 hours of core courses
Electives
3 hours
The following are recommended:
COMM 2306 Acting II or
COMM 3409 Acting III or
COMM 3410 Acting IV
TOTAL
130 hours

## Teaching Field: Secondary Theatre Arts, Option II

Technical Electives 6 hours
COMM 3323 World Drama
COMM 4101 Practicum - Theatre-TV-Film (must be taken three times)

## Secondary Teaching Field

19 hours of core courses
Minor in Secondary Education
19 hours of core courses

Recommended Electives
7-8 hours
COMM 2306 Acting II or
COMM 3409 Acting III or
COMM 3410 Acting IV
COMM 2411 Make-Up

## TOTAL

125 hours

## Course Descriptions

A listing of courses offered by the Department of Communication can be found on pages 197-203.

## ENCLISI

Dr. Lee T. Hamilton, Department Chair Communication Arts \& Sciences Building Room 213<br>Telephone: 956/381-3421<br>Fax: 956/381-2177<br>E-mail: Ihamilton@panam.edu

## Full-time Faculty

Anderson-Mejias, Pamela, Associate Professor
Bloom, Leonard, Assistant Professor
Bruce, John H., Lecturer
Cararas, Sandra A., Assistant Professor
Daniel, Clay L., Associate Professor
Davidson, Judy, Lecturer
Davis, William, III., Associate Professor and Dean
Day, Lois, Lecturer
De La Fuente, Patricia, Professor
del Rio, Eduardo, Lecturer
Dowell, Bob, Professor
Frankenberger, Earl, Assistant Professor
Fritz, Donald E., Associate Professor
Hamilton, Lee, Associate Professor
Hamilton, Rebekah, Assistant Professor
Haule, James M., Professor
Heckler, Edward, Associate Professor
Johnson, Robert, Assistant Professor
Kikos, Timothy A., Lecturer
LaPrade, Douglas E., Assistant Professor
Lyford, Roland, Professor
McCurdy, Pamela P., Assistant Professor
Mery, Adelle, Lecturer
Mitchell, Paul, Associate Professor
Newman, Beatrice, Associate Professor
Newman, Donald, Assistant Professor
Pipkin, Catherine, Lecturer
Quick, Catherine, Assistant Professor
Reed, Michael D., Professor
Slavnic, Ivo, Assistant Professor
Taylor, Karen, Lecturer
Thompson, Frieda, Lecturer
Vielma, Barbara, Lecturer
von Ende, Frederick, Professor
West, Thomas, Lecturer
Zhu, Wei, Assistant Professor

## General Overview

The Department of English offers undergraduate major and minor programs in English, with specializations in literature, language and English as a Second Language. Teacher certification plans in English are available at both secondary and elementary levels.

In addition, the department also offers graduate major programs leading to the Master of Arts in English, the Master of Arts in English as a Second Language and the Master of Arts in Interdisciplinary Studies with a concentration in English. More information is available in the Graduate Catalog.

Major and minor programs in English offer students an opportunity to discover more about the world they live in, 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 36 hours of English, of which 24 must be advanced. ENG 2300 and ENG 2308 (when special topic is "Introduction to Classical Literature") or ENG 2387 and ENG 2388 are recommended sophomore literature courses for English majors. Required courses: ENG 3319; ENG 3312 or ENG 3313; and ENG 3331 or ENG 3332.

The Department of English offers courses in literature, language (linguistics), English as a Second Language and writing. Students may consider the offerings below in order to develop an individual degree plan in consultation with an advisor from the Department of English.

## Offerings in Literature:

ENG 2300, 2303, 2305, 2307, 2308 (when special topic is literary), 2313, 2387, 2388, 3301, 3304, 3305, 3306, 3307, $3309,3310,3311,3312,3313,3317,3320$ (when topic is literary), 3322, 3323, 3324, 3331, 3332, 4301, 4309, 4310, 4312, 4316, 4318.

## Offerings in Language (Linguistics):

ENG 3319, 3320 (when topic is linguistic), 3321, 3330,
4302, 4308, 4314, 4321, 4326, 4331.
Offerings in English as a Second Language:
ENG 3319*, 3321*, 4326, 4328*, 4331.

* Denotes courses that (in addition to EDCI 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.


## Offerings in Writing:

ENG 1301, 1302, 1320, 1387, 1388, 2308 (when special topic is writing), 3320 (when special topic is writing), 3333, 4322, 4325.

## Degree Requirements

## General Education Requirements

60 hours
Complete the requirements shown in the General Education Requirements section of this catalog on pages 70-73
EXCEPT for the Sections, Groups, or Areas listed below, which must be satisfied only as shown below.

## Section A. Humanities

Group 2. English Literature
The following are recommended:
ENG 2300 Introduction to Literature
ENG 2308 Readings in Special Topics (when the topic is "Introduction to Classical Literature")
ENG 2387 Readings in World Literature (Honors Plan)
ENG 2388 Readings in World Literature (Honors Plan)

Required Courses
3 hours
ENG 3319 Introduction to Descriptive Linguistics
Designated Electives
6 hours
Select one course from each sequence:
ENG 3312 Survey of American Literature or
ENG 3313 Survey of American Literature
ENG 3331 Survey of English Literature or
ENG 3332 Survey of English Literature
Other English Courses
27 hours

Other Requirements
At least 24 advanced hours of English


## CISTORY \& PHILOSOPHY

Dr. Rodolfo Rocha, Department Chair Social \& Behavioral Sciences Building, Room 319<br>Telephone: 956/381-3561<br>Fax: 956/384-5096<br>E-mail: info@www.panam.edu

## General Overview

The Department of History and Philosophy offers a major within the Bachelor of Arts degree and a minor in both 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.

## HISTORY

## Full-time Faculty

Adair, Penelope A., Assistant Professor
Faubion, Michael L., Assistant Professor
Garza, Juanita, Lecturer
Henggeler, Paul R., Associate Professor
Miller, Christopher L., Associate Professor
Neitzel, Sarah C., Professor
Pearson, Thomas D., Assistant Professor
Prather, Charles, Assistant Professor
Rocha, Rodolfo, Associate Professor
Salmon, Roberto M., Professor
Weaver, Michael K., Associate Professor
Welch, Raymond P., Professor

## 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 later 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 BA degree in Latin American Studies.

Beginning history majors are urged to take Civilization through the Centuries and American Heritage 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 (with or without Teacher Certification)

## General Education Requirements

60 hours
Complete the General Education requirements as shown on pages 70-73 of this catalog.

HIST 2313 American Heritage I*
HIST 2314 American Heritage II*
HIST 2331 Civilization through the Centuries*
HIST 2332 Civilization through the Centuries*

* With department approval, HONR 2387 and HONR 2388 may be substituted for HIST 2331 and HIST 2332. Honors HIST 2387 and HIST 2388 may be substituted for HIST 2313 and HIST 2314.


## Designated Electives

24 hours
6 advanced hours from American history
6 advanced hours from European history
6 advanced hours from Latin American history
6 hours of history from any area

## 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*

* With department approval, HONR 2387 and HONR 2388 may be substituted for HIST 2331 and HIST 2332. Honors HIST 2387 and HIST 2388 may be substituted for HIST 2313 and HIST 2314.


## Other Requirements

Minors must take 9 additional hours, including 6 advanced hours.

## Teacher Certification in History

The following criteria are required of all History majors and minors seeking teacher certification:

- Students must have a 2.5 cumulative GPA in their History courses.
- Students must have a "C" or better in each of their History courses.


## - Secondary Plan I:

36 hours of history, of which 24 hours must be advanced and include 6 hours from each of the three fields: American, Latin American and European history. No second teaching field is required.

## Required Courses

HIST 2313 American Heritage I
HIST 2314 American Heritage II
HIST 2331 Civilization through the Centuries
HIST 2332 Civilization through the Centuries
HIST 3330 A General Survey of the History of Texas

## - Secondary Plan II

24 hours of history, of which 15 hours must be advanced and include 3 advanced hours from each of the three fields: American, Latin American and European history.

## Required Courses

HIST 2313 American Heritage I
HIST 2314 American Heritage II
HIST 2331 Civilization through the Centuries or
HIST 2332 Civilization through the Centuries
HIST 3330 A General Survey of the History of Texas

## - Secondary Plan IV, Composite Social Studies Certification

48 hours in the social sciences. Must include the courses listed below.

## Required Courses

ECO 2301 Principles of Economics I
ECO 2302 Principles of Economics II
GEOG 2313 Principles of Physical Geography
HIST 2313 American Heritage I
HIST 2314 American Heritage II
HIST 2331 Civilization through the Centuries or
HIST 2332 Civilization through the Centuries
HIST 3330 A General Survey of the History of Texas
POLS 2313 United States and Texas Government and Politics
POLS 2314 United States and Texas Government and Politics

## Designated Electives

Select 6 hours from the following:
ECO 3351 Macroeconomic Theory
ECO 3352 Microeconomic Theory

ECO 3355
ECO 4359
POLS 3314
POLS 3333
POLS 3334
POLS 3343
POLS 3344

Economic Development History of Economic Thought
American State and Local Government
Classical Political Theory
Modern Political Theory
International Politics
Contemporary Political Theory

Select 12 advanced hours in history.
A minimum of 3 hours must be selected from each of the following history fields: American, Latin American, European.

## - Elementary Plan I, History Specialization

12 hours of history, which must include the courses listed below and 6 advanced hours in history.

## Required Courses

HIST 2331 Civilization through the Centuries or
HIST 2332 Civilization through the Centuries
HIST 3330 A General Survey of the History of Texas

## - Elementary Plan II, History Specialization

18 hours of history, which must include the courses listed below and 9 advanced hours with 3 hours from each of the American, Latin American and European fields of history.

## Required Courses

HIST 2331 Civilization through the Centuries or
HIST 2332 Civilization through the Centuries
HIST 3330 A General Survey of the History of Texas

## - Elementary Plan III, Social Studies Specialization

24 hours in social studies. Must include the courses shown below.

## Required Courses

ECO 1301 Introduction to Economics
ECO 3336 The Political Economy of Mexico
GEOG 2313 Principles of Physical Geography
POLS 2313 United States and Texas Government and Politics
POLS 2314 United States and Texas Government and Politics

## Designated Electives

Select one from the following:
HIST 3313 American Colonial Era to 1783
HIST 3324 Formative Period of the American
Nation, 1783-1840
HIST 4343 Era of Sectional Conflict, 1840-1877
Select one from the following:
HIST 4322 The Spanish Southwest to 1821
HIST 4325 The American Southwest after 1821

## Select one from the following:

HIST 4303 The Emergence of Modern America, 1877-1917
HIST 4313 Twentieth Century America, 1917 to the Present
HIST 4395 Special Topics in Historical Study

## Course Descriptions

A listing of History courses offered by the Department of History and Philosophy can be found on pages 221-224.

## PHILOSOPHY

## Full-time Faculty

Buckman, Kenneth L., Associate Professor
Carter, David K., Assistant Professor
Pearson, Thomas D., Assistant Professor Welch, Raymond P., Professor

## General Overview: Philosophy

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 would provide 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 would provide 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

## General Education Requirements 60 hours

 Complete the General Education requirements as shown on pages 70-73 of this catalog.Core Courses
PHIL 1310
PHIL 1320
PHIL 2330
PHIL 2350
PHIL 3320
PHIL 4320
PHIL 4310
PHIL 4340
PHIL 3360
PHIL 3361
PHIL 3362

## 24 hours

Introduction to Philosophy
Introduction to Logic
Ethics or
Social Philosophy
Symbolic Logic or
Philosophy of Science
Theories of Knowledge or
Philosophy of Mind
History of Philosophy: Ancient and Medieval
History of Philosophy: Modern
History of Philosophy: Contemporary

Designated Electives
12 hours
Select 12 additional hours of philosophy, at least 9 of which must be advanced.

## TOTAL

124 hours

## - Minor in Philosophy

18 hours in Philosophy, of which 6 hours must be advanced.

## Required Courses

PHIL 1310 Introduction to Philosophy or
PHIL 2330 Ethics
PHIL 1320 Introduction to Logic

## Course Descriptions

A listing of Philosophy courses offered by the Department of History and Philosophy can be found on pages 245-246.

## GENHER FOR MAHIN AMHEIGAN GTOPIES

Dr. Lino Garcia, Jr., Director<br>Assistant Vice President for Academic<br>Affairs for International Programs Communication Arts \& Sciences Building Room 342<br>Telephone: 956/381-3572<br>Fax: 956/316-7012<br>E-mail: info@www.panam.edu

## Full-time Faculty

The faculty associated with the Center for Latin American Studies and the Latin American Studies major are drawn from a wide variety of departments and programs
throughout the university. A list of all Latin American Studies faculty members is available in the director's office.

## Bachelor of Arts in Latin American Studies

The undergraduate major in Latin American Studies offers students a unique opportunity to combine concentrated work in one or more academic fields with specific skill/professional study 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 whose degree programs are related to Latin American concerns.

Established in 1983 to provide an academic focus for the university's unique linguistic, cultural and geographic characteristics, the Center for Latin American Studies is charged with developing, implementing and enhancing the Latin American Studies major. Students wishing to take advantage of this major should consult with the director of the center for the most recent opportunities. The degree requirements for this plan are listed below.

## Degree Requirements

## - Major in Latin American Studies

48 hours including a minimum of 36 advanced hours to include:

## History

12 hours
Select from the following:
HIST 3333 Colonial Mexico, Central and South America
HIST 3335 History of Spain
HIST 4322 The 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 United States-Latin American Relations
HIST 4374 The Caribbean and Central America

| Spanish <br> Required Courses <br> SPAN 1301 | Beginning Spanish |
| :--- | :--- |
| SPAN 1302 | Beginning Spanish |
| SPAN 1303 | Beginning Spanish |
| SPAN 1304 | Beginning Spanish |

SPAN 2307
SPAN 2308

Intermediate Spanish for Native Speakers Intermediate Spanish for Native Speakers

## Designated Electives

6 hours
Select from the following:
SPAN 3310 Masterpieces of Spanish-American Literature I
SPAN 3311 Masterpieces of Spanish-American Literature II
SPAN 3316 The Mexican Novel
SPAN 4307 Spanish-American Novel
SPAN 4329 Mexico's Contemporary Literature
Political Science
3 hours
Select from the following:
POLS 4383 Politics of Central America and the Caribbean
POLS 4386 South American Politics
Other Courses 9 hours
Select from the following:
ART $4351 \quad$ Latin American Art: Pre-Conquest
ART 4352 Latin American Art: Post-Conquest
ECO 3336 The Political Economy of Mexico
ECO 3353 International Trade
SOC 4323 The Mexican-American People
SOC 4373 Latin American Society
Other Requirements
A minimum of 36 advanced hours

## TOTAL

124 hours

## Secondary Teacher Certification

Students majoring in Latin American Studies may apply for secondary certification in History or Spanish. A grade point average of 2.25 is required for certification. Please consult with the director for specific course requirements.

## Course Descriptions

Descriptions of the courses listed above can be found under their respective headings in the Course Description section beginning on page 179 .

# ROPERN LANGUACES $\&$ 4HEARTVIF 

Dr. Lino Garcia, Jr., Department Chair Communication Arts \& Sciences Building Room 329<br>Telephone: 956/381-3441<br>Fax: 956/381-2177<br>E-mail: info@www.panam.edu

## Full-time Faculty

Ardalani, Elvia G., Lecturer, Spanish Behar, Stella, Associate Professor, French Brown, Peter E., Assistant Professor, Spanish Contreras, Victoria, Associate Professor, Spanish Davila, Adriana, Lecturer, Spanish Dominguez, Sylvia M., Professor, Spanish Garcia, Carmela, Lecturer, Spanish Garcia, Lino, Jr., Professor, Spanish Heartfield, Gilbert, Associate Professor, Spanish Juarez-Torres, Francisco, Assistant Professor, Spanish Kohler, Ninfa, Lecturer, Spanish
Lugones, Néstor A., Lecturer, Spanish
Maloney, James C., Associate Professor, Spanish
Martinez, Jose Maria, Lecturer, Spanish
Mejias, Hugo, Associate Professor, Spanish
Rea, Ramiro R., Associate Professor, Spanish
Sanchez, Encarnacion, Assistant Professor, Spanish
Trujillo, Toribio, Lecturer, Spanish
Vassberg, Liliane M., Associate Professor, French Villarreal, Atenojenes, Lecturer, Spanish

## General Overview

The Department of Modern Languages and Literature consists of the subject areas of Spanish, French, German, Russian, Chinese and Japanese. A major, leading to a Bachelor of Arts degree, is offered in Spanish, and a minor is offered in Spanish and in French. Beginning courses are offered in Chinese, German, Japanese and Russian.

Teacher certification plans in Spanish are available at both the elementary and secondary level.

The department also offers a graduate program with a major in Spanish leading to the Master of Arts degree. More information is available in the Graduate Catalog.

## Departmental Requirements

Major in Spanish (with certification)

## General Education Requirements

60 hours
Complete the requirements shown in the General Education Requirements section of this catalog on pages 70-73
EXCEPT for the Sections, Groups or Areas listed below, 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

ART 1301 or MUS 2307 must be selected.

## Core Courses

21 hours
Select one beginning sequence:
SPAN 1301 Beginning Spanish and
SPAN 1302 Beginning Spanish
or
SPAN 1303 Beginning Spanish and
SPAN 1304 Beginning Spanish
or
SPAN 1387 Beginning Spanish (Honors Studies) and
SPAN 1388 Beginning Spanish (Honors Studies)
Complete the following:
SPAN 2307 Intermediate Spanish for Native Speakers
SPAN 2308 Intermediate Spanish for Native Speakers
SPAN 3303 Advanced Spanish Composition or
SPAN 3304 Advanced Spanish Composition
SPAN 3330
SPAN 4336
Spanish Grammar or
Grammar and Composition
SPAN 4316 Problems and Issues Related to Language
Designated Electives
12 hours
Select 6 hours from the following:
SPAN 3301 Spanish Literature (from 1100 to 1750)
SPAN 3302 Spanish Literature (from 1750 to the Present)
SPAN 3310 Masterpieces of Spanish-American Literature I
SPAN 3311 Masterpieces of Spanish-American Literature II
Select 6 hours from the following:
SPAN 3309 Techniques of Literary Analysis
SPAN 3316 The Mexican Novel
SPAN 4303 Spanish Civilization
SPAN 4304 Spanish Lyric Poetry
SPAN 4305 Cervantes
SPAN 4306 History of the Spanish Language
SPAN 4307 Spanish-American Novel
SPAN 4308 Medieval Spanish Literature
SPAN 4309 Contemporary Spanish Literature

SPAN 4311 Mexican Literature I
SPAN 4318 Theater and Poetry of the Golden Age
SPAN 4325
SPAN 4331

SPAN 4338 Nineteenth Century Spanish Literature
SPAN 4339 The Spanish-American Short Story
SPAN 4340
Caribbean Literature
Problems in Grammar, Dialects and Language Performance

## TOTAL

124 hours

## Major in Spanish (without certification)

Same as above excluding SPAN 4316, which may be taken as an elective.

## Minor in Spanish (without certification)

18 hours in Spanish, of which 6 hours must be advanced.

## - Minor in Spanish (with certification)

- Elementary Plan I

24 hours of Spanish, of which 9 must be advanced.

## Required Courses

Complete one of the following sequences:
SPAN $1301 \quad$ Beginning Spanish and
SPAN 1302 Beginning Spanish
or
SPAN 1303 Beginning Spanish and
SPAN 1304 Beginning Spanish
Complete all of the following:
SPAN 2307 Intermediate Spanish for Native Speakers
SPAN 2308 Intermediate Spanish for Native Speakers
SPAN 3303 Advanced Spanish Composition or
SPAN 3304 Advanced Spanish Composition
SPAN $3306 \quad$ Basic Concepts of Spanish Phonetics and Phonology
SPAN $3330 \quad$ Spanish Grammar or
SPAN 4336 Grammar and Composition

- Elementary Plan II

24 hours of Spanish, of which 12 must be advanced.

## Required Courses

Complete one of the following sequences:
SPAN $1301 \quad$ Beginning Spanish and
SPAN $1302 \quad$ Beginning Spanish
or
SPAN 1303 Beginning Spanish and
SPAN $1304 \quad$ Beginning Spanish

Complete all of the following:
SPAN 2307 Intermediate Spanish for Native Speakers
SPAN 2308 Intermediate Spanish for Native Speakers
SPAN 3303 Advanced Spanish Composition or
SPAN 3304 Advanced Spanish Composition
SPAN $3306 \quad$ Basic Concepts of Spanish Phonetics and Phonology
SPAN $3330 \quad$ Spanish Grammar or
SPAN 4336 Grammar and Composition
SPAN 4303 Spanish Civilization

- Secondary Plan I

24 hours of Spanish, of which 12 must be advanced.

## Required Courses

Complete one of the following sequences:
SPAN 1301 Beginning Spanish and
SPAN 1302 Beginning Spanish
or
SPAN 1303 Beginning Spanish and
SPAN 1304 Beginning Spanish
Complete all of the following:
SPAN 2307 Intermediate Spanish for Native Speakers
SPAN 2308 Intermediate Spanish for Native Speakers
SPAN 3303 Advanced Spanish Composition or
SPAN 3304 Advanced Spanish Composition
SPAN $3306 \quad$ Basic Concepts of Spanish Phonetics and Phonology
SPAN $3330 \quad$ Spanish Grammar or
SPAN 4336 Grammar and Composition
SPAN 4316 Problems and Issues Related to Language

## - Minor in French (without certification)

18 hours, of which 6 must be advanced and among the following: FREN 3321, FREN 3322 and FREN 4322, FREN 4324, FREN 4325 or FREN 4339.

## Minor in French (with teacher certification)

24 hours, of which 12 must be advanced and among the following: FREN 3321, FREN 3322 and FREN 4322, FREN 4324, FREN 4325 or FREN 4339.

## 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 179.

# Mexican-American studies Program 

Dr. Lino Garcia, Jr., Director Assistant Vice President for Academic Affairs for International Programs Communication Arts \& Sciences Building Room 342<br>Telephone: 956/381-3572<br>Fax: 956/316-7012<br>E-mail: info@www.panam.edu

Students who want to major or minor in MexicanAmerican Studies should consult with the director.

## - 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 2363 Mexican-American Heritage
Spanish required courses
18 hours
SPAN $2307 \quad \begin{aligned} & \text { Intermediate Spanish } \\ & \text { (or equivalent course) }\end{aligned}$
SPAN 2308 Intermediate Spanish
(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 required courses
18 hours
HIST 2331 Civilization through the Centuries (or equivalent)
HIST 2332 Civilization through the Centuries (or equivalent)
HIST 3330 A General Survey of the History of Texas Choose 2 from these Latin American courses:
HIST 3333 Colonial Mexico, Central and South America
HIST 4345 Mexico's First Century as an Independent Republic
HIST $4353 \quad$ History of Mexican Culture
HIST 4354 Contemporary Mexico

Choose 1 from these American History courses:
HIST 4322 The Spanish Southwest to 1821
HIST 4325 The American Southwest after 1821
Choose 1 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 to 1650
HIST 4375 Absolutism and Enlightenment in Europe, 1650-1789
HIST 4376 Revolutionary Europe, 1789-1850
Sociology and Anthropology required courses $\mathbf{2 4}$ hours
SOC $1313 \quad$ Principles of Sociology
SOC 1323 Current Social Issues
ANTH 3375 Mexican-American Folklore
SOC 4323 The Mexican-American People
Choose 1 from the following:
SOC 3301 Methods of Social Research
SOC 4333 Social Theory
Choose 3 from the following:
ANTH 1353 Introduction to Folklore
ANTH 4353 Folklore of the Lower Rio Grande Valley
SOC 4313 American Minorities
SOC 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
SPAN 3311 Masterpieces in Spanish-American
SPAN 3316 The Mexican Novel
POLS 3360 American Minority Politics

## - Minor in Mexican-American Studies

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 Mexican-American students a more appreciable understanding of the heritage of their ancestry and its contributions to the present environment.

The minor in Mexican-American Studies 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 secondary 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

18 hours, of which 12 hours must be from core courses.

## Core courses

12 hours
Select from the following:
ANTH 2323 Mexican-American Culture
ANTH 3375 Mexican-American Folklore
ANTH 4353 Folklore of Lower Rio Grande Valley
ENG 4316 Mexican-American Literature
HIST 2363 Mexican-American Heritage
HIST 4322 The Spanish Southwest to 1821
POLS 3363 American Hispanic Politics
SOC 4323 The Mexican-American People
Support Courses
6 hours
Select from the following:
HIST 4325 The American Southwest after 1821
HIST 4353 History of Mexican Culture
HIST $4354 \quad$ Contemporary Mexico
SPAN 3316 The Mexican Novel
SPAN 4329 Mexico's Contemporary Literature
SPAN 3310 Masterpieces of Spanish American Literature I
SPAN 3311 Masterpieces of Spanish American Literature II
SPAN 4307 Spanish-American Novel
SPAN 4326 Contemporary Spanish-American Literature: A New Era
SPAN 4336 Grammar and Composition

## 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 179.

## CUSE

Dr. Wallace E. Tucker, Department Chair Fine Arts Building<br>Room 133<br>Telephone: 956/381-3471<br>Fax: 956/381-3472<br>E-mail: wtucker@panam.edu

## Full-time Faculty

Bomgardner, Stephen D., Assistant Professor
Canty, Dean R., Associate Professor
Crews, Ruth, Assistant Professor
Grossman, Morley K., Associate Professor
Guerra, Dahlia, Assistant Professor
Mizener, Charlotte, Associate Professor
Munn, Christopher, Associate Professor
Munn, Vivian, Assistant Professor
O'Neil, Lorne William, Assistant Professor
Raimo, John, Professor
Seale, Carl, Professor
Tucker, Wallace E., Associate Professor

## General Overview

The Department of Music offers a major within the Bachelor of Arts degree and minors in Applied Music and in Teacher Certification. In addition, it offers teaching fields for majors in both secondary and all-level Music Teacher Certification.

All students majoring in Music, in addition to taking courses in general education and in the 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 symphony orchestra.

Graduate music courses are offered leading to the 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.

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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 one-half of a public recital during the junior year and a complete 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 fulltime ( 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)

## General Education Requirements 60 hours

Complete the General Education requirements as shown on pages 70-73 of this catalog.

## Core Courses

## 32 hours

MUS 1313
MUS 1314
MUS 2301
MUS 2302
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
MUS 4201
MUS 4203 Orchestration and Arranging

## Designated Electives

- Applied Music

8 semesters minimum, of which 4 semesters must be advanced

- Music Ensemble

8 semesters minimum, of which 4 semesters must be advanced

## Other Requirements

Proficiency in piano
One-half of a Junior Recital
A full Senior Recital
A total of 83 hours in Music, of which 45 must be advanced

## NOTE: A minor is not required.

## TOTAL

143 hours

## - Requirements for All-Level Teacher Certification

## General Education Requirements

60 hours
Complete the General Education Requirements as shown on pages 70-73 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 $3301 \quad$ 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

Select 3 of the following:
MUS 2122 Class Percussion
MUS 2123 Class Brass
MUS 2124 Class Woodwinds
MUS $2125 \quad$ Class Strings
MUS 3121 Vocal Diagnosis*

[^4]- Applied Music

8 semesters minimum, of which 4 semesters must be advanced

- Music Ensemble

7 semesters minimum, of which 3 semesters must be advanced

## Professional Development

EDCI 4301 Foundations of Education
EDCI 4302 Educational Psychology
EDCI 4307 Secondary Curriculum: Internship I
EDCI 4308 Advanced Secondary Curriculum: Internship I
EDCI 4699 Internship - All-Levels

## Other Requirements

Proficiency in piano
Senior Recital
A total of 61 hours of Music, of which 28 hours must be advanced

NOTE: A second teaching field is not required.

## TOTAL

139 hours

## Requirements for Secondary Level <br> Teacher Certification:

## General Education Requirements

60 hours
Complete the General Education Requirements as shown on pages 70-73 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

Select 3 of the following:
MUS 2122 Class Percussion
MUS 2123 Class Brass
MUS 2124 Class Woodwinds
MUS $2125 \quad$ Class Strings
MUS 3121 Vocal Diagnosis*

* Required for students with a major instrument of voice or piano.
- Applied Music

8 semesters minimum, of which 4 semesters must be advanced

- Music Ensemble

7 semesters minimum, of which 3 semesters must be advanced

## Professional Development

EDCI 4301 Foundations of Education
EDCI 4302 Educational Psychology
EDCI 4307 Secondary Curriculum: Internship I
EDCI 4308 Advanced Secondary Curriculum:
Internship I
EDCI 4641 Secondary Internship II
Other Requirements
Proficiency in piano
Senior Recital
A total of 60 hours of Music, of which 28 hours must be advanced

NOTE: A second teaching field is not required.

## TOTAL

139 hours

- Minor in Music - Applied Music

Core Courses 12 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

| Designated Electives | $\mathbf{1 8}$ hours |
| :--- | :--- |
| Advanced Electives | 6 hours |
| - Applied Music | 8 hours |
| 4 semesters | 4 hours |
| - Music Ensemble |  |
| 4 semesters |  |
| Other Requirement <br> Proficiency in piano |  |

## - Minor in Music - Elementary Level Teacher Certification

## Core Courses

15 hours
MUS 1313
MUS 1314
First Year Music Theory I
First Year Music Theory II
MUS 2301 Music Literature I
MUS 2302 Music Literature II
MUS 3312 Essential Elements of Music II

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## Designated Electives

15 hours
Select 3 of the following:
MUS 2122 Class Percussion
MUS 2123 Class Brass
MUS 2124 Class Woodwinds
MUS $2125 \quad$ Class Strings
MUS 3121 Vocal Diagnosis*

* Required for students with a major instrument of voice or piano.
- Applied Music

8 hours
4 hours lower division over two semesters
4 hours upper division over two semesters

- Music Ensemble

4 hours
2 hours lower division
2 hours upper division

Other Required Courses 18 hours
ENG 4321 Fundamentals of Language Learning
HLTH 1354 Safety and First Aid
MATH 2306 Foundations of Mathematics I
MATH 2307 Foundations of Mathematics II
READ 3323 Reading Acquisition
READ 3325 Cognitive Development and Reading Comprehension

Professional Development Courses 18 hours
EDCI 4301 Foundations of Education
EDCI 4302 Educational Psychology
EDCI 4305 Instructional Planning and Curriculum Development
EDCI 4306 Instructional Methodology and Classroom Management
EDCI 4611 Directed Teaching - Elementary
or
EDCI 4310 Directed Teaching - ESL and
EDCI 4311 Directed Teaching - Elementary
or
EDCI 4311 Directed Teaching — Elementary and
EDCI 4312 Directed Teaching — Early Childhood
Other Requirements
Proficiency in piano
30 hours in Music, of which 9 hours are upper level

## Course Descriptions

A listing of courses offered by the Department of Music can be found on pages 236-239.

## collesed ADMINISTRRATION

## General Overview

The College of Business Administration (COBA) at The University of Texas-Pan American has 49 fulltime faculty who serve 2,800 Bachelor of Business Administration (BBA), Master of Business Administration (MBA) and doctoral students. The undergraduate and master's programs are fully accredited by the American Assembly of Collegiate Schools of Business (AACSB)-The International Association for Management Education. In 1999, COBA is expected to seek initial accreditation for its Doctor of Philosophy (PhD) degree in Business Administration.

## Academic Programs

The COBA is organized into four departments: the Department of Accounting and Business Law, the Department of Computer Information Systems and Quantitative Methods, the Department of Economics, Finance and General Business, and the Department of Management, Marketing and International Business. The four department chairpersons, the director of undergraduate studies, the director of information technologies, the director of the MBA and Professional MBA programs, and the director of the doctoral program coordinate the academic activities of the college.

Through the Small Business Institute, undergraduate students have the opportunity to serve as consultants and help local entrepreneurs solve business-related problems. The Institute for International Business Research (IIBR) provides support for the doctoral program and research focusing on Latin American and North American trilateral projects. The Neuhaus Center is committed to advancing the scholarship of entrepreneurship, and the Center for Tourism Research is devoted to meeting regional needs.


Dr. Linda McCallister, Dean
Business Administration Building Room 114 1201 West University Drive Edinburg, Texas 78539-2999
Telephone: 956/381-3311
Fax: 956/381-3312
E-mail:vhuerta@panam.edu
On the Web: http://www.panam.edu/
colleges/coba.cfm

## MEION \& MISSION

As the College of Business Administration engages in the process of continuous improvement, it is our desire to achieve the following:

## Vision

The College of Business Administration of The University of Texas-Pan American will serve as the synergistic educational center for the Rio Grande Valley for education in business and management. The doctoral program will achieve international recognition for its global perspective and for its contribution to the field of knowledge encompassing international business and North American Trilateral business practices. The undergraduate and MBA programs will receive regional and state recognition for excellence in teaching, applied research, and service to the business community. The college will receive international recognition for creating a stimulating, bicultural environment where diversity and academic excellence coexist.

## Mission

Through the process of continuous improvement, the College of Business Administration supports the mission of The University of Texas-Pan American by providing wellbalanced, high quality education for undergraduate and graduate students and by providing solutions to business problems through research and community service.

Involvement in research ensures that both students and faculty maintain currency in their disciplines and fosters the advancement of knowledge. The college promotes and produces research that mirrors current issues of business organizations and society, including topics from crossdiscipline and cross-cultural perspectives that are appropriate to international business. Faculty intellectual contributions are encouraged in applied scholarship, basic scholarship and instructional development.

Located in the technically diverse region along the U.S.-Mexico border, the college uses the social, bicultural, scientific and technical resources unique to South Texas to enrich its educational, outreach and research programs. The college is responsive to the needs of South Texas and the bicultural national community it serves and seeks to develop and strengthen partnerships with these external constituents. The college also fosters cooperative interactions with institutions of higher education throughout the world, with a special emphasis on Mexico and Latin America.

The local economy depends primarily upon agriculture, tourism, trade and government activities. Significant
growth is occurring in the manufacturing sector as a result of continued growth and industrial activity along the TexasMexico border and the North American Free Trade Agreement. These factors have caused the College of Business Administration to develop programs and curricula that recognize this dynamic and unique situation.

The University of Texas-Pan American is committed to perpetuating the best of American cultural heritage and blending it with the outstanding features of Latin American culture. The academic programs of the College of Business Administration support this philosophy by offering its students a broad foundation in the liberal arts and sciences followed by professional business curricula. Students are afforded the opportunity to acquire skills necessary for success in business and society while simultaneously developing a global awareness and an appreciation for the unique characteristics of the university and its constituents. As a professional college, specific attention is given to the following educational objectives:

- to develop critical thinking and logical problemsolving skills;
- to develop professional attitudes and an appreciation for the role of business in a free enterprise economy;
- to develop basic quantitative and analytical skills;
- to develop written and oral communication skills;
- to develop a global awareness and appreciation for cultural diversity; and
- to develop ethical decision-making skills.

The regional nature of the university and its obligation to serve the needs of the Lower Rio Grande Valley are recognized and emphasized in the research and service functions of the College of Business Administration. The college conducts research for state, county and city agencies and private firms. Additionally, the college holds or sponsors short courses, seminars and workshops for business and governmental agencies. These non-credit programs have served thousands of people in the Valley and have provided opportunities for students to work for and with the business community.

## Graduate Programs

The college provides the opportunity for advanced study leading to the Master of Business Administration (MBA) degree. The MBA program is designed for those who wish to pursue advanced study in a bicultural environment as a means of enhancing their business and administrative careers. Both full- and part-time students enroll in the regular MBA program.

The Professional MBA allows students to complete the program in two years by attending classes on Saturday only. The Professional MBA is designed to accommodate executives and professionals who wish to pursue a graduate

business education while maintaining full-time employment.
The recent addition of the Doctor of Philosophy degree in Business Administration with an emphasis in International Business has added the dimension of discovery research to the college's mission. The degree serves the population of the South Texas Region and the State of Texas by:

- offering graduates the opportunity to prepare to assume faculty positions in state or regional universities or to fill management roles in the private sector or in government service;
- developing a center for the study of international business, especially as it relates to rising trade expectations among North, Central and South American countries and the global business environment;
- strengthening itself as a research, teaching and service unit dedicated to the economic, social and cultural growth of the Rio Grande region; and
- producing quality graduates, which includes becoming the leading producer in the nation of HispanicAmericans with business doctoral qualification.
NOTE: More information on graduate programs may be found in the Graduate Catalog.


## Student 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 fraternity
- Beta Gamma Sigma, a national honor fraternity for business administration majors
- Data Processing Management Association
- Human Resource Management Society
- Financial Managers Association
- American Marketing Association
- Accounting Society
- MBA Association
- Forum for International Relations and Business
- Students in Free Enterprise


## Advisory Council

Advice and guidance from civic and business leaders is 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.

## Center for Advisement, Recruitment, Internships and Retention (CARIR)

Internships that lead to careers and job placement are handled by Victor Huerta, Director, Business Administration Building, Room 211, telephone 956/381-3355.

## - Minor in Business Administration

A minor in business administration may help make students with non-business majors more marketable upon graduation. This minor complements such degree programs as engineering, health care, nursing, counseling and communication.

The minor inbusiness administration consists of the following courses:
ACC 2329 Fundamentals of Managerial Accounting
ACC 2421 Introduction to Financial Accounting
ECO $2301 \quad$ Principles of Economics I
MANA 3361 Principles of Management and
Organizational Behavior
MARK $3371 \quad$ Principles of Marketing
FINA 3383
Managerial Finance
TOTAL
19 hours

## - Minor in Entrepreneurship

A minor in entrepreneurship serves as an ideal complement for economics and general business students wishing to start and successfully operate a small business upon graduation. The minor in entrepreneurship also meets the minor requirement for the Bachelor of Arts in Economics and General Business, as well as for nonbusiness degrees. The program particularly caters to understanding small business operations in the Lower Rio Grande Valley. The consists of the following courses:

The minor in entrepreneurship consists of the following courses:*
ECO $3359 \quad$ Family and the Small Business
FINA 3391 Small Business Financial Management
CIS 3370 Small Business Technology
MANA 4362
MANA 4366
ECO 4362
Small Business Venture
Small Business Management
Global Entrepreneurship
TOTAL
18 hours

* Non-business students wishing to minor in entrepreneurship must also take ACC 2421, ECO 1301 and MANA 3361 as prerequisites to the entrepreneurship courses.


## - Bachelor of Business Administration

## General requirement for graduation

All students seeking a BBA from the College of Business Administration must take at least 50 percent of their business courses at UT Pan American.

Degree applicability of coursework from business programs that are not accredited by the American Assembly of Collegiate Schools of Business (AACSB)-The International Association for Management Education must be determined through appropriate validation procedures and/or examination. Final approval of non-AACSB
accredited coursework will be by the Department Chair or Dean of the College of Business Administration.

NOTE: Before being allowed to enroll in 3000- or 4000level business courses, a student must:

1. Complete the following courses: ACC 2421, ACC 2329, CIS 1301, ECO 2301, ECO 2302.
2. Satisfy one of the following minimum grade requirements:
a. attain a grade of "C" or better in each course, or
b. attain a GPA of 2.25 or higher for the five courses.

## Transfer Credit - Verification

Any upper-division business course taken at a non-AACSB-accredited school must be validated before it will be applied to satisfy graduation requirements for business degrees at UT Pan American.

Validation may be accomplished by:

1. taking a higher-level course in the same subject area and making a grade of "C" or better,
2. taking an exam designed to validate the coursework and making a satisfactory grade on the exam, or
3. retaking the course.

Contact Dr. William Thompson, Director of Undergraduate Programs, College of Business Administration, Room 211, $956 / 381-3382$, for further information.

## Communication Skills Certification

All students receiving a degree from the College of Business Administration must participate in and pass a communication skills certification program.

Contact Margaret Allison, Director of Communication Skills, Business Administration Building, Room 211, telephone 956/381-3360, for further information.

## AGGOUNHING $\&$ BUEINTEGS LAN

Dr. A. George Petrie, Department Chair Business Administration Building Room 211<br>Telephone: 956/381-2406<br>Fax: 956/381-2307<br>E-mail: info@www.panam.edu

## Full-time Faculty

Atamian, Rubik, Assistant Professor, Accounting DeMoville, Wig B., Professor, Accounting Folk, Ellen, Assistant Professor, Business Law Ganguli, Gouranga, Professor, Accounting Hume, Evelyn, Associate Professor, Accounting Jarvis, Susan S., Professor, Business Law McCoy, Timothy L., Assistant Professor, Accounting Petrie, A. George, Associate Professor, Accounting Walker, Edward R., Assistant Professor, Accounting

## Adjunct Professors

Burford, Kenneth, Lecturer, Accounting Cook, Alton, Lecturer, Accounting
Frank, Norman Daniel, Lecturer, Business Law Ibanez, Rogelio, Lecturer, Business Law
Moreno, Larry, Lecturer, Business Law
Ramon, Israel, Lecturer, Business Law

## Mission

The Accounting program has a strong emphasis on general education and a business core with an Accounting focus. The program is located in an ethnically diverse region; therefore, it is able to provide social, cultural, scientific and technical resources unique to South Texas and Mexico. Major emphasis in research will be on international accounting and global financial markets.

## General Overview

The Department of Accounting and Business Law offers the Bachelor of Business Administration (BBA) degree with a major in Accounting. A major in Accounting is designed to prepare graduates for entry-level positions in both private and public accounting. The degree partially prepares a graduate to take each of the accounting certification examinations: CPA, CMA and CIA, depending on the graduate's interest. Since each examination is 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 aid
their satisfactory completion of certification requirements. An accounting specialization is available at the MBA level.

The coursework leading to the BBA degree in Accounting is classified as follows:
A. General Education Requirements
B. Business Foundation Courses
C. Business Core Courses
D. Specialization (Major) Courses

Total

60 hours
16 hours 33 hours
27 hours 136 hours

## Major in Accounting

## Admission Requirements

Admission into the Accounting major involves two steps: First, all students desiring an Accounting degree must initially specify "Pre-Accounting" as their major. This designation is effective for all students changing major, transfer students, special students and entering freshmen. Second, the student then applies to the Department of Accounting and Business Law for a change to "Accounting" major status when the following guidelines are met:

1. Applicants must be in good academic standing (nonprobationary status).
2. Applicants must have completed at the time of application at least 10 hours of Accounting, including ACC 2421, 2329 and 3321, with a grade point average of 2.2 for all Accounting courses taken at the time of application.

Admission of the applicant to the Accounting major will be determined by the Chair of the Department of Accounting and Business Law or his or her designated representative(s). Students who have been denied admission to the Accounting program may appeal to the Dean of the College of Business Administration according to the appeal requirements.

## Degree Requirements

In addition to having completed the General Education and Business Foundation courses and the Business Core requirements, Accounting majors must have an average grade point of at least 2.5 in all Accounting courses taken in order to graduate. Prerequisites cannot be repeated if the subsequent higher-level course has been completed.

Communication Skills Certification: All students receiving a degree from the College of Business Administration must have their communication skills certified.

## General Education Requirements 60 hours

Complete the requirements shown in the General Education Requirements section shown on pages 70-73 of this catalog EXCEPT for the Sections, Groups or Areas listed below, which must be satisfied only as shown below.

## Section A. Humanities <br> Group 4. Other Humanities

Students must select Area 2. Communication

COMM 1303 only.
Students must select the remaining course from only Areas 1 and 3.

## Section B. Science and Mathematics

Group 2. Mathematics
Students must select MATH 1321 or Math 1340.

## Section C. Computer Literacy

CIS 1301

## Section E. Social Sciences

Group 3. Other Social Sciences
Students must select Area 2. Economics ECO 2301 only.

## Business Foundation

## 16 hours

ACC 2421 Introduction to Financial Accounting
ACC 2329 Fundamentals of Managerial Accounting
ECO $2301 \quad$ Principles of Economics I
MANA 1331 Introduction to Business (not required of students scoring 19 or more on the ACT composite)
or upper division business elective
MATH 1322 Business Calculus
Business Core
33 hours
BLAW 3337
Business Law I
CIS 3390 Computer Decision Support Systems and Expert Systems
FINA 3383 Managerial Finance
INTB 3330 International Business
MANA 3335 Organizational Communication
MANA 3361 Principles of Management and Organizational Behavior
MANA 4363 Production Management
MANA 4369 Business Policy
MARK 3371 Principles of Marketing
QUMT 2341 Elementary Business and Economic Statistics
QUMT 3342 Intermediate Business and Economic Statistics

NOTE: Before being allowed to enroll in 3000- or 4000-level business courses, a student must

1. Complete the following courses: ACC 2421, ACC 2329, CIS 1301, ECO 2301, ECO 2302
2. Satisfy the following minimum grade requirements:
a. attain a grade of " $C$ " or better in each course, or
b. attain a GPA of 2.25 or higher for the five courses.

Accounting Specialization
27 hours
NOTE: A student must attain a GPA of 2.2 or higher in ACC 2421, ACC 2429 and ACC 3321 before being allowed to enroll in any other 3000- or 4000-level accounting course.

## Required Courses

21 hours

## ACC 3320

ACC 3321
Cost Accounting

Intermediate Accounting II
ACC 3323 Income Tax Procedure
ACC 3327 Fundamentals of Auditing
ACC 3329 Intermediate Accounting III
ACC 4330 Advanced Accounting I (Consolidation)

## Area Specialization <br> - Public Accounting

ACC 3325 Fund Accounting
ACC 3326 Accounting Information Systems
ACC 3350 International Accounting
ACC 4323 Contemporary Accounting Theory
ACC 4327 Advanced Auditing
ACC 4331 Advanced Accounting II (Topics)
BLAW 3338 Business Law II

- Managerial Accounting

ACC 3325 Fund Accounting
ACC 3326 Accounting Information Systems
ACC 3350 International Accounting
ACC 4329 Corporate and Partnership Taxation
ACC 4331 Advanced Accounting II (Topics)
BLAW 3338 Business Law II

- Tax Accounting

ACC 4329 Corporate and Partnership Taxation
ACC 4331 Advanced Accounting II (Topics)
ACC 4332 Advanced Income Tax Research
ACC 4333 Estate and Gift Taxation

## TOTAL

## 136 hours

## 150-Hour Program for Potential Certified Public Accountants

Students who are interested in being licensed as a Certified Public Accountant (CPA) in the State of Texas must complete at least 150 hours in order to be eligible to take the CPA examination after September 1, 1997. If the student desires to meet this requirement at the undergraduate level, the student should complete the Accounting major as shown above and the additional curriculum shown below. Comparable courses may be substituted with prior approval by the department.

## Additional Courses Recommended for Those Desiring to Take the CPA Examination Accounting (Area Specialization) 12 hours Other additional courses in area of specialization (i.e., Business Law II) 3 hours

The student should check the State Board Requirements in the state he or she selects for the CPA examination.

## Course Descriptions

A listing of courses offered by the Department of Accounting and Business Law can be found on pages 182183 (ACC) and 191 (BLAW).

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Dr. Lester M. RydI, Department Chair Academic Services Building<br>Room 2.166<br>Telephone: 956/381-3353<br>Fax: 956-381-3367<br>E-mail: IrydI@panam.edu

## Full-time Faculty

Allison, Margaret R., Assistant Professor, Computer Information Systems; Director of Communication Skills
Crews, R. Michael, Associate Professor, Computer Information Systems
Flores, Oscar R., Assistant Professor, Computer Information Systems
Hodges, DeWayne L., Assistant Professor, Quantitative Methods
Rose, Mary, Lecturer, Computer Information Systems Rydl, Lester M., Associate Professor, Computer Information Systems, Quantitative Methods
Thorn, Ron, Associate Professor, Computer Information Systems, Quantitative Methods
Vincent, Vern C., Professor, Quantitative Methods; Director of Tourism Research

## General Overview

This department offers students a major in Computer Information Systems leading to the Bachelor of Business Administration degree. In addition to completing the General Education requirements as outlined in this catalog, the student will be responsible for fulfilling the requirements of the selected major.

Communication Skills and Computer Literacy Certification: All students receiving a degree from the College of Business Administration must have their communication skills and computer literacy certified. A minor in Computer Information Systems is available
to students from all non-business areas of the university and is designed to prepare the student for entry-level positions in computer processing.

A Management Information Systems (MIS) emphasis is available at the master's level. More information is available in the Graduate Catalog.

## Degree Requirements

## Major in Computer Information Systems

The coursework leading to the BBA degree is classified as follows:
A. General Education Requirements
B. Business Foundation Courses
C. Business Core Courses
D. Specialization (Major) Courses

$$
\text { Total } \overline{133 \text { hours }}
$$

NOTE: Students should file an official degree plan after earning 60 hours. An official degree plan must be filed before an application for graduation will be processed.

## General Education Requirements 60 hours

Complete the requirements shown in the General Education Requirements section on pages 70-73 of this catalog
EXCEPT for the Sections, Groups or Areas listed below, which must be satisfied only as shown below.

## Section A. Humanities

Group 4. Other Humanities
Students must select Area 2. Communication COMM 1303 only.
Students must select the remaining course from only
Areas 1 and 3, but are encouraged to take PHIL 1320.

## Section B. Science and Mathematics

Group 2. Mathematics
Students must select MATH 1321.

## Section C. Computer Literacy

CIS 1301

## Section E. Social Sciences

Group 3. Other Social Sciences
Students must select Area 2. Economics ECO 2301 only.

## Business Foundation <br> 16 hours

ACC 2421 Introduction to Financial Accounting
ACC 2329 Fundamentals of Managerial Accounting
ECO 2302 Principles of Economics II
MANA 1331 Introduction to Business (not required of students scoring 19 or more on the ACT composite)
or upper division business elective
MATH 1322 Business Calculus

Business Core
30 hours
BLAW 3337
FINA 3383
INTB 3330
MANA 3335
MANA 3361
MANA 4363
MANA 4369
MARK 3371
QUMT 2341 Elementary Business and Economic Statistics
QUMT 3342 Intermediate Business and Economic Statistics

Computer Information Systems Specialization 27 hours
CIS 2308 Introduction to Program and Development Design
CIS 2310 COBOL Programming
CIS 2311 Advanced Programming Techniques
CIS 2312 Microcomputer Software and Hardware Concepts with Business Applications
CIS 3335 Database Management
CIS 3336 Systems Analysis
CIS 4333 Information Systems
CIS Electives (6 hours, 3 hours of which must be advanced)
TOTAL

## 133 hours

## - Minor in Computer Information Systems (for non-business majors)

| ACC 2421 | Introduction to Financial Accounting |
| :--- | :--- |
| MANA 3361 | Principles of Management and <br> Organizational Behavior |
| CIS 2308 | Introduction to Program and Development <br> Design |
| CIS 2310 | COBOL Programming |
| CIS Electives (6 hours) at 3000 or 4000 level |  |

Total Minor Requirements 19 hours

## Teacher Certification in Business

## Administration

All majors in the College of Business Administration may obtain certification to teach in Texas secondary schools through alternative certification.

## Course Descriptions

A listing of courses offered by the Department of Computer Information Systems and Quantitative Methods can be found on pages 194-195 (CIS) and 252-253 (QUMT).

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Dr. Alberto Dávila, Department Chair Business Administration Building Room 216<br>Telephone: 956/381-3354<br>Fax: 956/384-5020<br>E-mail: adavila@panam.edu

## Full-time Faculty

Assefa, Zewdineh, Associate Professor, Finance Cardenas, Gilbert, Professor, Economics
Dávila, Alberto, Professor, Economics
Ellard, Charles J., Professor, Economics
Maberly, Edwin D., Associate Professor, Finance Pagán, José A., Assistant Professor, Economics Prock, Jerry D., Professor, Finance Soydemir, Gokce, Assistant Professor, Finance Taube, Paul M., Associate Professor, Economics Vento, Edward, Associate Professor, Economics

## General Overview

The Department of Economics, Finance and General Business 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.

## General Degree Requirements

The following are required for the Bachelor of Business Administration (BBA) degrees in Economics and Finance:

Communication Skills Certification: All students receiving a degree from the College of Business Administration must have their communication skills certified.

## General Education Requirements 60 hours

Complete the requirements shown in the General Education Requirements section on pages 70-73 of this catalog EXCEPT for the Sections, Groups or Areas listed below, which must be satisfied only as shown below.

## Section A. Humanities

Group 4. Other Humanities
Students must select Area 2. Communication COMM 1303 only.
Students must select the remaining course from only Areas 1 and 3.

Section B. Science and Mathematics

Group 2. Mathematics
Students must select MATH 1321.

## Section C. Computer Literacy

CIS 1301

## Section E. Social Sciences

Group 3. Other Social Sciences
Students must select Area 2. Economics ECO 2301 only.

## Business Foundation

16 hours
ACC 2421 Introduction to Financial Accounting
ACC 2329 Fundamentals of Managerial Accounting
ECO $2301 \quad$ Principles of Economics I
MANA 1331 Introduction to Business (students scoring 19 or more on the ACT composite may elect to make MANA 1331 or upperdivision business elective)
MATH 1322 Business Calculus
Business Core
33 hours
BLAW 3337 Business Law I
CIS 3390 Computer Decision Support Systems and Expert Systems
FINA 3383 Managerial Finance
INTB 3330 International Business
MANA 3335 Organizational Communication
MANA 3361 Principles of Management and Organizational Behavior
MANA 4363 Production Management
MANA 4369 Business Policy
MARK 3371 Principles of Marketing
QUMT 2341 Elementary Business and Economic Statistics
QUMT 3342 Intermediate Business and Economic Statistics

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Programs in Economics
■ Major in Economics - BBA

| General Education, Business Foundation and Business |
| :--- |
| Core Requirements |
|  |
| Economics |


| Specialization Courses |
| :--- |


| ECO 3351 | Macroeconomic Theory |
| :--- | :--- |


| ECO 3352 | Microeconomic Theory |
| :--- | :--- |
| ECO 4359 | History of Economic Thought |

Economics Electives (Upper Division) 15 hours

## TOTAL

133 hours
■ Economics Major - BA (Minor Required)

## General Education and Economics

BA Foundation
70 hours
The General Education and Economics BA Foundation includes all requirements listed for the General Education and Business Foundation requirements above except MANA 1331 and ACC 2329, which are not required.

Designated Elective
3 hours
QUMT 2341 Elementary Business and Economic Statistics

| Economics | Specialization Courses |
| :--- | :--- |
| ECO 3351 | Macroeconomic Theory |
| ECO 3352 | Microeconomic Theory |
| ECO 4359 | History of Economic Thought |

Economics Electives (Upper Division) 15 hours

Electives (including minor hours) 36 hours
TOTAL
133 hours

## - Minor in Economics

A minor in Economics is available to students from all areas within the university and requires 18 hours of Economics that include 6 hours of Economics electives.

Required Courses
12 hours
ECO 2301 Principles of Economics I
ECO 2302 Principles of Economics II
ECO 3351 Macroeconomic Theory
ECO 3352 Microeconomic Theory

Economics Electives
6 hours

Total minor requirements
18 hours

## - M A E =

Programs in Finance
■ Major in Finance - BBA
General Education, Business Foundation and Business Core Requirements 109 hours
Finance Specialization Courses 15 hours

FINA 3381 Money and Banking
FINA 3382 Investment Principles
FINA 4381 International Finance
FINA 4383 Advanced Managerial Finance
ACC 3321 Intermediate Accounting I or
ACC 3320 Cost Accounting
Finance electives*
9 hours
TOTAL
133 hours

* MANA 4399 and/or an upper-level Accounting course may be substituted for a Finance elective with consent of the advisor.


## Course Descriptions

A listing of courses offered by the Department of Economics, Finance and General Business can be found on pages 208-210 (ECO) and 218-219 (FINA).


Dr. Ercan Nasif, Department Chair Business Administration Building Room 222<br>Telephone: 956/381-3351<br>Fax: 956/384-5065<br>E-mail: info@www.panam.edu

## Full-time Faculty

Avellano, George, Professor, Marketing Brewerton, F. J., Professor, Management Cortes, Angelica, Assistant Professor, Marketing de los Santos, Gilberto, Professor, Marketing Greene, Walter E., Professor, Management Kaynak, Hale, Assistant Professor, Management LeMaster, Jane, Assistant Professor, Management Matthews, Linda, Assistant Professor, Management McCallister, Linda, Professor and Dean, Management Minor, Michael, Associate Professor, Marketing Nasif, Ercan, Associate Professor, Marketing Neipert, David, Assistant Professor, International Business Sargent, John, Assistant Professor, Management Sturges, David L., Associate Professor, Management Thompson, William W., Professor, Marketing Vasquez, Arturo, Associate Professor, Marketing

## General Overview

The Department of Management, Marketing and International Business offers the Bachelor of Business Administration (BBA) in three areas: Management, Marketing and International Business.

## Curriculum in Management, Marketing and International Business

The coursework leading to the BBA degree is classified as follows:
A. General Education Requirements 60 hours
B. Business Foundation Courses 16 hours
C. Business Core Courses 33 hours
D. Specialization (Major) Courses $\quad \underset{\text { Total }}{\underline{24} \text { hours }}$

The following are required for the BBA degrees in Management, Marketing and International Business:

General Education Requirements 60 hours
Complete the requirements shown in the General Education Requirements section on pages 70-73 of this catalog
EXCEPT for the Sections, Groups or Areas listed below, which must be satisfied only as shown below.

## Section A. Humanities

Group 4. Other Humanities
Students must select Area 2. Communication COMM 1303 only.
Students must select the remaining course from only
Areas 1 and 3.

## Section B. Science and Mathematics

Group 2. Mathematics
Students must select MATH 1321.

## Section C. Computer Literacy

CIS 1301

## Section E. Social Sciences

Group 3. Other Social Sciences
Students must select Area 2. Economics ECO 2302 only.

Business Foundation
16 hours
ACC 2421 Introduction to Financial Accounting
ACC 2329 Fundamentals of Managerial Accounting
ECO $2301 \quad$ Principles of Economics I
MANA 1331 Introduction to Business (not required of students scoring 19 or more on the ACT composite)
or upper division business elective
MATH 1322 Business Calculus
Business Core
33 hours
BLAW 3337 Business Law I
CIS 3390 Computer Decision Support Systems and Expert Systems
FINA 3383 Managerial Finance
INTB 3330 International Business

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MANA 3335
MANA 3361

MANA 4363
MANA 4369
MARK 3371
QMT 2341

Organizational Communication
Principles of Management and Organizational Behavior
Production Management
Business Policy
Principles of Marketing
Elementary Business and Economic Statistics
QMT 3342 Intermediate Business and Economic Statistics

## Specialization (Major) Courses

In addition to the University College and General Education requirements, the business foundation courses and the business common body of knowledge, majors in the Department of Management, Marketing and International Business must comply with the following requirements:

## Major in Management

General Education, Business Foundation and Business Core Requirements** 109 hours

Management Specialization 12 hours
MANA 3332 Human Relations in Management
MANA 3362 Personnel Management
MANA 4364 Societal Problems in Business
CIS Elective above CIS 1301
Management Electives
12 hours
Select 12 hours from:
MANA3364 Organizational Theory and Design
MANA 3365 Wage and Salary Administration
MANA 4361 Human Behavior in Organizations
MANA 4366 Small Business Management
MANA 4368 Industrial Relations
MANA 4399 Business Practicum
ECO 3351 Macroeconomic Theory

## TOTAL

133 hours

* See detailed requirements above.


## Major in Marketing

General Education, Business Foundation and Business Core Requirements

109 hours

Marketing Specialization
12 hours

Advanced Professional Electives
6 hours
Select 6 hours from 3000- and 4000-level courses taught in the College of Business Administration

Marketing Electives
6 hours
Select 6 hours from:
MARK 3376 Professional Salesmanship
MARK 3373 Industrial Marketing
MARK 3375 Retailing
MARK 4330 International Marketing
MARK 4372 Promotions Management
MARK 4379 Special Problems in Marketing
BLAW 3339 Consumer Law

TOTAL
133 hours

* See detailed requirements above.


## ■ Major in International Business

General Education, Business Foundation and Business Core Requirements* 109 hours

International Business Specialization 21 hours
INTB 3310 Entering International Trade
INTB 3340 Legal Considerations of International
INTB 4364 Management Environment in International Business
INTB 4365 International Competitiveness
ECO 3353 International Trade
FINA 4381 International Finance
MARK 4330 International Marketing
Electives
3 hours
Electives selected must be approved by the Department Chair.

## TOTAL

133 hours

* See detailed requirements above.


## Course Descriptions

A listing of courses offered by the Department of Management, Marketing and International Business can be found on pages 228-229 (MANA), 231-232 (MARK) and 225 (INTB).

## Collese d <br> EDUCATION

## General Overview

The College of Education includes the Department of Curriculum and Instruction, the Department of Educational Psychology, the Department of Health and Kinesiology and the Department of School Administration and Supervision.

## Academic Programs

At the undergraduate level, the college offers a Bachelor of Science degree with majors in Kinesiology and Health. The College of Education also offers undergraduate certification in Elementary, Secondary and All-Level Art, Music and Kinesiology education with options for specialized endorsements. Students are encouraged to check with the departments early in their program for specific degree requirements and development of degree plans.

At the graduate level, the College of Education also offers a Master of Education degree with specializations in Elementary Education, Secondary Education, Special Education, Early Childhood Education, Reading, Educational Diagnostician, Bilingual Education, Counseling and Guidance, Educational Administration, Gifted Education, Supervision and Kinesiology. The College of Education also offers a Master of Arts degree in School Psychology.

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 MEd 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).


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colleges/coe.cfm

## CISEION SHTEMENT

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.

## ■ General Information

## - Certificate Requirements for Teachers

Teachers in Texas elementary, middle and secondary schools are required by law to hold a valid Texas teacher's certificate at the appropriate level in the teaching field and delivery system to which they are assigned.

Students pursuing teacher certification must enter under the State of Texas "CPDT Rule" for teacher education.
Prospective teacher education students should consult with the undergraduate advisor and the appropriate department in the College of Education. Individuals seeking an emergency teaching credential should consult the credentialing officer in the Certification Office of the College of Education.

## 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 certificate:
a. Be a citizen of the United States or indicate intent to become a naturalized citizen as evidenced by filing a Statement of Intention to Become a United States Citizen (TCER-023) with the Division of Teacher Certification;
b. Be at least 18 years of age;
c. Be of good moral character as evidenced by statement of three individuals or be recommended by a Texas senior college, and be clear of a felony or misdemeanor conviction for a crime which directly relates to the duties and responsibilities of the teaching profession;
d. Be willing to support and defend the constitutions of the United States and Texas;
e. Have college credit or examination credit in knowledge of the Texas and federal constitutions and United States history; and,
f. Be able to speak and understand the English language sufficiently to use it easily and readily in conversation and teaching.

## Texas Testing Requirements for Certification

To be approved for the provisional or professional teacher's certificate, the superintendent's certificate or other administrative or professional certificates, 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 ExCET - Examination for the Certification of Educators in Texas. The ExCET must be taken and passed for the appropriate level, specialization, delivery system, certificate and endorsement 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, for a person who has been convicted of a felony or misdemeanor for a crime which directly relates to the duties and responsibilities of the teaching profession. All potential certificate applicants with felony or misdemeanor criminal convictions should contact the Certification Officer immediately to seek clarification of their certification status.

## - Admission to Teacher Education \& Internship II

## Admission to the Teacher Education Program: Regular Undergraduates

The College of Education is a professional college whose students must work closely with school-age individuals in the public schools. Consequently, admission to the college and continued enrollment in its programs is subject not only to meeting the formal requirements listed above but also to obtaining the endorsement of the undergraduate advisor or the credentialing officer, as appropriate, and meeting the faculty's expectations for effective and professional behavior. Students who enroll in education courses without being formally admitted to teacher education will be dropped from these courses; in the event these courses have been completed, no course credit toward the teaching credential will be awarded.

A student must apply for admission to the Teacher Education Program during the semester in which the student will have earned 75 hours for elementary certification or 60 hours for secondary or all-level certification. A formal application for admission must be filed with the undergraduate advisor of the College of Education and students must meet the following requirements prior to admission into the Teacher Education Program:

1. Pass all three subtest areas of the Texas Academic Skills Program (TASP) test with the following minimum scores in each area:
a. Reading 230
b. Mathematics 230
c. Writing 220
2. Successfully complete a minimum of 75 hours for elementary certification or 60 hours for secondary or alllevel certification, which must include the following:
a. ENG 1301 with a "C" or better

ENG 1302 with a "C" or better
b. MATH 1340 or higher with a "C" or better
c. MATH 2306 and 2307 (elementary)
d. 6 hours of a foreign language (same language)
e. 8 hours of a laboratory science (same science)
3. For elementary certification, achieve a 2.25 cumulative grade point average (GPA) in general education, and overall; for secondary or all-level certification, achieve a cumulative 2.5 GPA for all hours earned.
4. Unless prior approval is received from the student's department chair, no course may be substituted for another unless a grade of " C " or better has been earned in that course, and does not result in the GPA falling below 2.25.
5. File an official degree plan if seeking elementary or secondary certification.

NOTE: Transfer students must delay application until successful completion of the above requirements.

## 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 grade point average of 2.5 overall and 2.25 in their interdisciplinary area (major) and academic specialization. This requirement applies to all students irrespective of their admission date to the university. For more information on Internship II, see page 119.

## Admission to Teacher Education: Emergency Permit Deficiency Plan

In order to meet their staffing needs on an emergency basis, school districts sometimes hire individuals who have not yet completed all of the requirements to receive a teaching certificate.

The hiring school district must request that a Deficiency Plan be developed by the Certification Office, and the student must apply for admission to the Teacher Education Program. All requirements as described above by the regular Teacher Education Program must be met along with all requirements indicated on the Deficiency Plan. (An appropriate fee will be charged for the preparation of the Deficiency Plan.)

A student must not lack more than 36 hours for graduation or certification.

The following requirements also apply:

- For Elementary Certification - 12 hours of Elementary Education courses must be completed prior to applying for the Deficiency Plan.
- For Secondary and All-Level Certification - 24 hours must be completed in the area of teaching placement prior to applying for the Deficiency Plan.

NOTE: For persons on Deficiency Plans - The University of Texas-Pan American's College of Education will not recommend persons on Deficiency Plans for certification without their completing the courses outlined in their plans, passing the ExCET tests and submitting a signed and certified statement from a designated school district official (personnel director or building principal) which attests to their success in working with students in a setting that corresponds to the area of certification sought.

## - Alternative Certification Program (ACP)

The 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 seven tracks: elementary, elementary/bilingual, elementary/ESL, secondary (all specializations), secondary/ESL and special education. Preassignment courses provide the academic foundation to enter the classroom in a specific track. The assignment (internship) phase consists of two 6-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 TASP or PPST and credit for college algebra (or higher) with a "C" or better.

## - Policy and Advisory Groups

## The University Teacher Education Committee

All departments that offer certification programs at The University of Texas-Pan American maintain membership on the University Teacher Education Committee. The basic functions of the committee are to:

1. Approve any teacher education program changes originating in the College of Education or in departments offering certification programs.
2. Approve any changes in courses that are part of any university certification program.
3. Approve candidates for elementary, secondary and all-level Internship II.
4. Approve appeals made by prospective student teachers who had previously been denied or dropped or who failed Internship II.

It shall be understood that approval of an application does not constitute subsequent recommendation on the part of the university for a certificate to teach. Such recommendation is contingent upon continued demonstration of promise as a prospective teacher and completion of the certification requirements both in professional education and in the major or minor teaching fields.

## The South Texas Center for Professional Development of

 Teachers (STCPDT)The South Texas CPDT is a collaborative composed of university faculty; administrators from the university, public school districts and Region One Education Service Center; 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.


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## Full-time Faculty

Boran, Sibel B., Assistant Professor
Dowell, Nancy, Assistant Professor
Galligan, Martha Villalobos, Assistant Professor
Gomez, Leo, Assistant Professor and COE Office of Field
Experiences Director
Harrison, Martha, Lecturer
McBride, John, Professor
McPherson, Judy, Assistant Professor
Medrano, Hilda, Professor and Dean
Morse, Kevin, Professor
Perez, Ricardo, Professor
Reeve, Robert, Professor
Salinas, Analida, Lecturer and Director, Reading Recovery
Program
Solis, Dalinda, Assistant Professor
Solis, Juan, Associate Professor and Alternative
Certification Program Director
Taube, Sylvia Rebollos, Assistant Professor
Tevis, Martha, Professor
Valerio, Mary, Assistant Professor
Williams, Irma, Lecturer and Director, Reading Recovery Program

## Admission to Teacher Education Program

A student must file an application for admission to the College of Education with the undergraduate advisor in the College of Education for the Teacher Education Program during the semester in which the student will have earned 75 hours for elementary certification or 60 hours for secondary or all-level certification. The following admission requirements must be met before admission will be granted:

1. Passing scores on all three subtest areas of the Texas Academic Skills Program (TASP) test with the following minimum scores in each area:
a. Reading230
b. Mathematics 230
c. Writing 220
2. Successful completion of a minimum of 75 hours for elementary certification or 60 hours for secondary or alllevel certification which must include the following:
a. ENG 1301 with a "C" or better
b. ENG 1302 with a "C" or better
c. MATH 1340 with a "C" or better
d. MATH 2306 and 2307 (elementary)
e. 8 hours of the same laboratory science
f. 6 hours of the same foreign language
g. A cumulative 2.25 grade point average (GPA) for all hours earned for students pursuing elementary certification.*
h. A cumulative 2.50 grade point average (GPA) for all hours earned for students pursuing secondary certification.

* Students admitted to the elementary teacher education program need to complete a minimum of five courses in their interdisciplinary area before beginning teacher education courses.


## Degree Programs

## For Elementary Teachers

A Bachelor of Interdisciplinary Studies was implemented in Fall 1989 and revised Fall 1997 for students seeking state certification in Elementary Education. In compliance with Texas Education Code, Sections 13.036 to 13.039, and the new "CPDT Rule" on teacher education, the following specializations and delivery systems are offered:

## Specializations

Art
Biology
English
Health
History
Kinesiology
Mathematics
Music
Physical Science
Reading
Social Studies
Spanish

## Delivery Systems

Bilingual Education
Generic Special Education
Early Childhood

## ■ For Secondary Teachers

Provisional teacher certification at the secondary level is offered in the following teaching fields:

Art
Biology
Chemistry

## Computer Information Systems <br> Earth Science <br> English <br> Generic Special Education <br> Government <br> Health <br> History <br> Journalism (Print) <br> Kinesiology <br> Mathematics <br> Music <br> Physical Science <br> Physics <br> Psychology <br> Reading <br> Social Studies <br> Sociology <br> Spanish <br> Speech Communication <br> Theatre Arts

Specific requirements for all certification programs at the secondary level may be located within program descriptions under individual departments throughout this catalog.

## - For All-Level Teachers

All-level provisional teacher certificates are offered in Art, Music and Kinesiology. Specific requirements for certification programs may be located within each department.

## Teacher Certification Programs

## General Education Requirements for Teacher Education Certification

Students pursuing teacher certification must complete an academic major prescribed by the standards for teacher education. Prospective teacher education students should consult with their major advisors and with the appropriate department in the College of Education.

Students pursuing teacher certification at the elementary level are required to satisfy the university's General Education requirements as specified by the State Board of Education, the State Board for Educator Certification, and the Texas Higher Education Coordinating Board. Students must complete the requirements shown in the General Education Requirements section on pages 70-73 of this catalog EXCEPT for the Sections, Groups, or Areas listed below, which must be satisfied only as shown below.

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## Section A. Humanities

## Group 1. Freshman English

A grade of "C" or better must be obtained in both courses.

## Group 3. Language Other than English

Spanish is required for the Bilingual Delivery System

## Group 4. Other Humanities

Area 1. The Arts
Subarea 1. ART 1301 or ART 3381
NOTE: Students must complete a course from the arts subarea not selected as an additional degree requirement.

Area 2. Communication
COMM 1313 or COMM 1303 must be selected.

## Section B. Science and Mathematics

## Group 1. Natural Science

Biology or Physical Science must be selected.

## Group 2. Mathematics

MATH 1340 must be completed with a "C" or better for certification.

## Section C. Computer Literacy

CSCI 1300 or CIS 1301 must be selected.

## * Provisional Elementary Certification within the Baccalaureate Interdisciplinary Degree

In addition to completing the General Education requirements noted above, students must complete the following:

## Minimum

Academic Specialization or Delivery System

Interdisciplinary Area
(Combination of Subjects)
Professional Development Sequence
18-21 hours
[including 9 advanced (upperdivision)]

34-37 hours 18-24 hours

## Specialization/Delivery Systems for Elementary Certification

Elementary (Grades 1st-8th) Certification -
Various Academic Specializations
The following Academic Specializations are available; they require a minimum of 18 hours, with a minimum of 9 advanced hours:

Art
Biology
English

Health
History
Kinesiology
Mathematics
Music
Physical Science
Reading
Social Studies
Spanish

## Elementary (Grades 1st-8th) Certification

The following Delivery Systems are available; they require a minimum of 21 hours, with 18 advanced hours:

Bilingual Education
Generic Special Education

## Elementary (Pre/K-6th) Certification

The following Delivery System is available; it requires a minimum of 18 hours, all at the advanced level:

Early Childhood

## * Requirements for Specializations

 and Delivery SystemsThe requirements for the Specializations and Delivery Systems for Elementary Certification that are offered through the College of Education are shown below. The requirements for all other Academic Specializations are shown in their respective departments.

## - Specialization: Reading

READ $3310 \quad$ Narrative and Expository Analysis Elementary/Secondary
READ 3323 Reading Acquisition
READ 3325 Cognitive Development and Reading Comprehension
READ 3326 Reading Across the Curriculum Content Areas
READ 3327 Assessment and Diagnosis of Special Needs Students
READ 3329 Language Arts Curriculum
$\bullet$ Delivery System: 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
EDCI 3305 Foundations of Multicultural Education
HLTH 2352 Personal Health and Wellness

- Delivery System: Bilingual EducationMath/Science Option
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
3 advanced hours in mathematics or science

- Delivery System: Generic Special Education

SPED 1305 Introduction to the Exceptionalities
SPED 4301 Strategies, Methods and Materials for Teaching Individuals with Mild to Moderate Disabilities
SPED 3301 Inclusion of the Exceptionalities
SPED 3302 Theories of Learning Disabilities
SPED $4300 \quad$ Testing and Assessment of Exceptional Individuals
SPED 4303 Theories of Social Competence and Behavioral Interventions
SPED 4309 Program Planning for Secondary Special Education

## - Delivery System: Early Childhood

EDEC 4314 Research in Early Childhood
EDEC 4390 Developmentally Appropriate Practices in Early Childhood Education
EDEC 4391 Foundations of Early Childhood
EDEC 4392 Acquisition and Conceptualization Processes in Early Childhood
EDEC 4393 Cultural Dimensions Related to Early Childhood
EDEC $4394 \quad$ Cognitive and Psychomotor Development in Early Childhood
HLTH $2372 \quad$ Nutrition and Health
Elementary Certification - Various Academic Specializations
Interdisciplinary Area 34 hours

## Elementary Certification

Language Arts:
READ 3323 Reading Acquisition
READ 3325 Cognitive Development and Reading Comprehension
READ 3326 Reading Across the Curriculum Content Areas
ENG $4321 \quad$ Foundations of Language Learning

## Math/Science:

MATH 2306 Foundations of Mathematics I
MATH 2307 Foundations of Mathematics II
Select from one of the following*:
BIOL 1401, 1402 General Biology I or II or
PSCI 1421, 1422 Physical Science I or II or
PSCI $2408 \quad$ Survey of Physical Science

Social Science/Other Humanities:
HIST $3302 \quad$ World History Studies
GEOG 2313 Principles of World Geography or
COMM 3308 Creative Drama or
ANTH 3333 U.S. and Other World Cultures
HLTH $1354 \quad$ Safety and First Aid or
HLTH 2352 Personal Health and Wellness**
MUS 1307 Music Appreciation or
MUS 1308 Mexican Folk Music or
MUS 3311 Essential Elements of Music I

* Physical Science, if Biology was selected in General Education;

Biology, if Physical Science was selected in General Education.
** If Health is selected as academic specialization, HLTH 2352
must be completed in this area.

## Elementary Certification — Reading

Interdisciplinary Area 34 hours
ENG 4321 Foundations of Language Learning
ENG 3320 Advanced Topics — English
COMM 3308 Creative Drama

Math/Science:
MATH 2306 Foundations of Mathematics I
MATH 2307 Foundations of Mathematics II
GEOG 2313 Principles of Physical Geography or
BIOL 2305 Environmental Biology
Select from one of the following*:
BIOL 1401, 1402 General Biology I or II or
PSCI 1421, 1422 Physical Science I or II or
PSCI 2408 Survey of Physical Science
Social Science/Other Humanities:
HIST 3302 World History Studies
ANTH 3333 U.S. and Other World Cultures
HLTH 2352 Personal Health and Wellness
MUS 1307 Music Appreciation or
MUS 1308 Mexican Folk Music or
MUS 3311 Essential Elements of Music I

* Students following this option take PSCI 1421 and PSCI 1422 for General Education.

Elementary Certification - Bilingual Education
Interdisciplinary Area
37 hours
Language Arts:
READ 3323 Reading Acquisition
READ 3325 Cognitive Development and Reading Comprehension
ENG 3319 Introduction to Descriptive Linguistics
ENG 3320 Advanced Topics in English or
ENG 3313 Survey of American Literature or ENG 4316 Mexican-American Literature

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| SPAN 2307 | Intermediate Spanish for Native Speakers |
| :---: | :---: |
| SPAN 2308 | Intermediate Spanish for Native Speakers |
| SPAN 3303 | Advanced Spanish Composition or |
| SPAN 3330 | Spanish Grammar or |
| SPAN 4336 | Spanish Grammar and Composition or |
| SPAN 4316 | Problems and Issues Related to <br>  <br>  <br> Language |

Math/Science:
MATH 2306 Foundations of Mathematics I
MATH 2307 Foundations of Mathematics II
Select from one of the following:
BIOL 1401, 1402 General Biology I or II or
PSCI 1421, 1422 Physical Science I or II or
PSCI 2408 Survey of Physical Science
Social Science/Other Humanities:

| HIST 2363 | Mexican-American Heritage or |
| :---: | :---: |
| HIST 4354 | Contemporary Mexico |
| MUS 1307 | Music Appreciation or |
| MUS 1308 | Mexican Folk Music or |
| MUS 3311 | Essential Elements of Music |

## Bilingual with Math/Science Option

Interdisciplinary Area 33 horus
READ 3323 Reading Acquisition
READ 3325 Cognitive Development and Reading Comprehension
ENG 4321 Fundamentals of Language Development
SPAN 2307 Intermediate Spanish for Native Speakers
SPAN 2308 Intermediate Spanish for Native Speakers
MATH 2306 Foundations of Mathematics I
MATH 2307 Foundations of Mathematics II
HIST 2363 Mexican-American Heritage
HIST $4353 \quad$ History of Mexican Culture or
HIST 4325 The American Southwest after 1821
Math/Science Option* 6 hours in Math or Science

* Advanced hours are required.
Elementary Certification — Special Education
Interdisciplinary Area
Reading:

READ 3323 $\quad$| Reading Acquisition |
| :--- |
| READ 3325 |
|  |
| Cognitive Development and Reading |
| Comprehension |

Interdisciplinary Area 34 hours
Reading:
READ 3323 Reading Acquisition
READ 3325 Cognitive Development and Reading Comprehension

Language Arts/Communications:
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:
MATH 2306 Foundations of Mathematics I
MATH 2307 Foundations of Mathematics II

Science:
PSCI 1421
PSCI 1422
Physical Science I or

PSCI 2408
Physical Science II or
Survey of Physical Science
Kinesiology:
KIN 4351 Adapted Kinesiology
Other Humanities:
Select 3 hours from the following:
MUS 1307 Music Appreciation or MUS 1308 Mexican Folk Music or MUS 3311 Essential Elements of Music or PHIL $1320 \quad$ Introduction to Logic or PHIL 1388 Introduction to Logic (Honors Plan)

## Elementary Certification — Early Childhood <br> Interdisciplinary Area <br> 37 hours

Reading:
READ 3323 Reading Acquisition
READ 3325 Cognitive Development and Reading
Comprehension

Language Arts:
ENG 4321 Fundamentals of Language Learning or
ENG 4326 Language Acquisition
ENG 3321 Language and Culture
COMM 3308 Creative Drama

## Math/Science:

MATH 2306 Foundations of Mathematics I
MATH 2307 Foundations of Mathematics II
GEOG 2313 Principles of Physical Geography or
ANTH 3333
U.S. and Other World Cultures

Select from one of the following:
BIOL 1401, 1402 General Biology I or II or PSCI 1421, 1422 Physical Science I or II or PSCI 2408 Survey of Physical Science
Social Science/Other Humanities:
PSY 3332 Infancy and Childhood
HLTH $1354 \quad$ Safety and First Aid or
HLTH 2352 Personal Health and Wellness
MUS 1307 Music Appreciation or
MUS 1308 Mexican Folk Music or
MUS 3311 Essential Elements of Music

## * Professional Education <br> (Certification Coursework)

## Elementary - Various Academic Specializations (including Reading): 24 hours <br> EDEC 4390, EDBE 3322, EDCI 3305, SPED 3301, EDCI 4305, EDCI 4306 and EDCI 4611

Bilingual Education: 18 hours
EDEC 4390, SPED 3301, EDCI 4305, EDCI 4306 and EDCI 4611

Special Education: 21 hours
EDCI 3305, EDCI 4302, EDCI 4305, EDBE 3322, EDCI 4306, EDCI 4311 and ED 4313

## Early Childhood:

21 Hours
EDBE 3322, SPED 3301, EDCI 3305, EDCI 4305, EDCI 4306, EDCI 4311 and EDEC 4312

## * Endorsement Requirements

Endorsements consisting of 9-12 additional hours may be added to Texas teacher certificates in Bilingual Education, English as a Second Language, Early Childhood (see page 117) and Information Technology. A certification of 24 hours in Generic Special Education may be added.

## - Endorsement: Bilingual Education

The Bilingual Education endorsement may be added to valid provisional teacher certificates and provisional special education certificates. The professional development sequence for the endorsement 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 3.
b. Written proficiency shall be determined by the College Level Examination Program (CLEP) with a passing score of 50 .
2. 12 hours at the graduate or undergraduate level earned after the bachelor's degree as follows:

EDBE 3315 or ED 6335
EDBE 3316 or ED 6350
EDBE 3322 or ED 6322
EDBE 4304 or ED 6351
3. One year of successful teaching experience in a state-approved bilingual classroom.
4. Successful completion on ExCET/Bilingual.

## - Endorsement: Early Childhood

The Early Childhood endorsement may be added to valid provisional teacher certificates with elementary or alllevel options and provisional special education certificates.

The professional developmental sequence for the Early Childhood endorsement consists of:

1. 12 hours: EDEC 4390, EDEC 4391, EDEC 4392, EDEC 4393. In addition, EDEC 4394 is strongly recommended.
2. 3 hours of Early Childhood student teaching (EDCI 4312 Student Teaching in Early Childhood); or one year of successful Early Childhood teaching experience on a permit in an accredited school and 3 additional hours (EDEC 4314 Survey of Research in Early Childhood) of Early Childhood education. Teaching or student teaching in a multi-age class that includes kindergarten shall be acceptable as appropriate experience.

- Endorsement: English as a Second Language (ESL)

The English as a Second Language (ESL) endorsement may be added to valid provisional teacher certificates (elementary or secondary) and provisional special education certificates. The professional development sequence for the ESL endorsement consists of 12 hours ( 2.25 GPA ):
ENG 3319 Introduction to Descriptive Linguistics
ENG 3321 Language and Culture
ENG 4328 Introduction to English as a Second Language
EDBE 3324 English as a Second Language
Students who are completing this endorsement as part of their initial teacher certificate should partially fulfill their student teaching requirements with the following course:
EDCI 4310 Directed Teaching - ESL

## - Endorsement: Information Technology

This endorsement may be added to valid teaching certificates, special education certificates or vocational education certificates that require a college degree. The Level I endorsement shall consist of the following 9 hours:
CSCI $1380 \quad$ Computer Science I
CSCI 3321 Survey of Computer Concepts
ED 3350 Information Technology

## * Certification Requirements for Secondary

For the prospective secondary teacher, The University of Texas-Pan American offers bachelor's degrees (BA, BS, BFA or BBA) in various academic disciplines with secondary certification through the College of Education. The General Education and major requirements for the various academic disciplines are specified by the departments in this catalog.

In addition to the General Education requirements and the major requirements, the following requirements apply for students seeking Provisional Teacher Certificates at the secondary level:

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## Professional Development Sequence 21 hours

18 hours upper division, including EDCI 4301, EDCI 4302, EDCI 4307, EDCI 4308, READ 4351 and EDCI 4641 (and/ or appropriate student teaching course number for Generic Special Education). For All-Level Certificates, see "Requirements for All-Level Certificates."

## Electives

12 hours
Students must complete one course from two of the following areas:

Area 1.
ART 1301 Art Appreciation
Area 2.
COMM 1303 Presentational Speaking
Area 3.
PHIL 1320 Introduction to Logic PHIL 2330 Ethics
Students must complete one course from two of the following areas:

Area 1.
ANTH 1323 Introduction to Cultural Anthropology
ANTH 1353 Introduction to Folklore ANTH 2323 Mexican-American Culture
Area 2.
ECO 1301 Introduction to Economics
ECO 2353 Principles of Economics I
Area 3. PSY 1310 Introduction to Psychology
Area 4.
SOC $1313 \quad$ Principles of Sociology
SOC 1323 Current Social Issues
SOC 2333 Marriage and the Family

## Secondary Teacher Certifications

The College of Education offers Provisional Secondary Teacher Certifications in the teaching fields and delivery systems shown below.

- Secondary (Grades 7th-12th) Option I:

An Option I certificate requires one 36-hour (minimum) teaching field, including 21 upper division hours. They are available in the following fields:

Biology
Chemistry
Computer Information Systems
Earth Science
English
Political Science
History
Mathematics
Spanish
Speech Communication
Theatre Arts

## - Secondary (Grades 7th-12th) Option II:

An Option II certificate requires two 24-hour (minimum) teaching fields/delivery systems, including 12 upper
division hours. They are available in the following fields:
Art
Biology
Chemistry
Computer Information Systems
Earth Science
English
Generic Special Education
Health
History
Journalism
Kinesiology
Mathematics
Physical Science
Physics
Political Science
Psychology
Reading
Sociology
Spanish
Speech Communication

## - Secondary (Grades 7th-12th) Option III:

An Option III certificate requires one 48 -semester hour (minimum) broad teaching field, including 24 upperdivision hours. They are available in the following fields:

Art
Music

## - Secondary (Grades 7th-12th) Option IV:

An Option IV certificate requires one 48 -semester hour (minimum) composite teaching field, including 24 hours in one area, of which 12 hours must be upper division. It is available in the following field:

Social Studies

## * Requirements for Teaching Fields/Delivery Systems Offered in the College of Education

The requirements for the teaching fields/delivery systems offered in the College of Education for those seeking a provisional Secondary teacher certificate are shown below.

- Secondary Option II (minor or second teaching field) in Generic Special Education 24 hours
SPED 1305 Introduction to the Exceptionalities
SPED 2304 Computer Applications and Adaptations for Individuals with Disabilities
SPED 3301 Inclusion of the Exceptionalities
SPED 3302 Theories of Learning Disabilities
SPED 4300 Testing and Assessment of Exceptional

| SPED 4301 | Individuals <br> Strategies, Methods and Materials for <br> Teaching Individuals with Mild to <br> Moderate Disabilities |
| :---: | :--- |
| Theories of Social Competence and |  |
| SPED 4302 |  |

## * Requirements for All-Level Certificates

Provisional Teacher Certificates, All-Level, are offered in Art, Kinesiology and Music. A Kinesiology All-Level major requires a second teaching field of 24 hours; second teaching fields are not required for Art and Music All-Level majors. Specific requirements for each are located in the appropriate departments elsewhere in this catalog; however, the professional development (21 upper-division hours) sequence for provisional teacher certificate All-Level, offered through the College of Education for Art and Music, is as follows: EDCI 4301, EDCI 4302, EDCI 4307, EDCI 4308, READ 4351, EDCI 4398 and EDCI 4311. All-Level for Kinesiology is as follows: EDCI 4301, EDCI 4302, EDCI 4307, READ 4351, EDUK 4354, EDCI 4311 and EDCI 4398.

## * Internship II (Student Teaching)

The College of Education offers the student teaching 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 Internship II

## - Elementary Education

1. Minimum overall grade point average (GPA) of 2.5.
2. All General Education and professional education courses completed with a minimum GPA of 2.25 .
3. ENG 1301 and ENG 1302 completed with a minimum grade of "C" in each.
4. Successful completion of MATH 1340, MATH 2306 and MATH 2307 with a grade of "C" or better in each.
5. Completed minimum of 27 total hours required in the Interdisciplinary Area with a minimum 2.25 GPA.
6. Satisfactory completion of the following courses in Elementary Education: EDBE 3322, SPED 3301, EDEC 4390, EDCI 4305, EDCI 3305, EDCI 4306, READ 3323 and READ 3325 with a minimum GPA of 2.25 .
7. Completed minimum of $3 / 4$ of total hours required in academic specialization or delivery system with a minimum GPA of 2.25 in each.

All requirements for Internship II, including a minimum of 45 clock hours of field experience, must be met before a student is given a Clear Admission status for student teaching. Option IV Elementary requires a minimum of 60 clock hours of field experience. All students are required to successfully complete both programs and developmental benchmarks. See College of Education program advisors for specific information.

## - Secondary Education

1. Minimum of 90 hours total university course work completed.
2. Minimum overall grade point average (GPA) of 2.5.
3. General Education required courses completed with a minimal GPA of 2.25 .
4. ENG 1301 and ENG 1302 completed with a minimum grade of "C" in each.
5. Successful completion of MATH 1340 with a grade of "C" or better.
6. Completed minimum of $3 / 4$ of total hours required in major teaching field.
7. Minimum of 2.25 grade point average (GPA) in major.
8. Additional requirements as specified by major department.
9. Completed minimum of 18 hours for Internship II in the minor or second teaching field.
10. Minimum of 2.25 grade point average (GPA) in minor.
11. Additional requirements as specified by minor department.
12. 15 hours in Secondary Education: EDCI 4301, EDCI 4302, EDCI 4307, EDCI 4308 and READ 4351.
13. Minimum of 2.25 grade point average (GPA) in Professional Education.

## - All-Level Kinesiology

1. Minimum of 90 hours total university coursework completed.
2. Minimum overall grade point average (GPA) of 2.5.
3. General Education required courses completed with a minimal GPA of 2.5 .
4. ENG 1301 and ENG 1302 completed with a minimum grade of " $C$ " in each.
5. Successful completion of MATH 1340 with a grade of "C" or better.
6. Completed minimum of $3 / 4$ of total hours required in major teaching field.
7. Minimum of 2.5 grade point average in major.
8. Additional requirements as specified by major department.
9. Completed minimum of 18 hours for student teaching in the minor or second teaching field.
10. Minimum of 2.5 grade point average in minor.
11. Additional requirements as specified by minor department.
12. 15 hours in Secondary Education: EDCI 4301, EDCI 4302, EDCI 4307, READ 4351 and EDUK 4354.
13. Minimum of 2.25 grade point average in Professional Education.

## Course Descriptions

A listing of courses offered by the College of Education can be found in the Course Descriptions section beginning on page 179 .

## EPUGATOMAL PSTAHOLOCY

Dr. Ana Maria Rodriguez, Department Chair Education Building Room 244<br>Telephone: 956/381-3466<br>Fax: 956/381-2395<br>E-mail: info@www.panam.edu

## Full-time Faculty

Alvarado, Victor, Professor
Bernal, Ernesto, Professor
Burns, Jo Ann Mitchell, Associate Professor
Carlson, Ralph, Associate Professor
Estevis, Marjorie Anne, Assistant Professor
Goertz, Mary Jean, Assistant Professor
Negy, Charles, Assistant Professor
Otsuji, Robert, Assistant Professor
Poelzer, Harold, Assistant Professor
Rodriguez, Ana Maria, Associate Professor

## General Overview

The Department of Educational Psychology offers an undergraduate area of Specialization (minor) in Generic Special Education. The Department also offers the Master of Education degree (MEd) in Gifted Education, Educational Diagnostician, Special Education and Guidance and Counseling, and a Master of Arts degree (MA) in School Psychology.

Certificates and/or endorsements in Seriously Emotionally Disturbed and Autistic, Severely and Profoundly Handicapped, Generic Special Education, Gifted Education, Information Technology, Licensed Specialist in School Psychology and School Psychologist (NASP) are also offered by the department.

A second very important focus for the department is the coordination of all studies that are generic or core to all undergraduate and graduate degree programs. These include studies in Measurement, Statistics, Research, Educational Psychology, History and Philosophy of Education, Multicultural Education, Human Growth and Development, Child Growth and Development, and Educational Technology.

## Degree Requirements

Generic Special Education may be attached to a major in three different ways: Baccalaureate in Interdisciplinary Studies, Elementary Option: Certification-Generic Special Education; Teaching Certification Secondary Option II (minor or second teaching field); Minor in Generic Special Education (non-certified or institutional minor)

## - Baccalaureate in Interdisciplinary Studies, Elementary Option III: Certification Generic Special Education

## General Education Requirements

Complete the requirements shown in the General Education Requirements section shown on pages 70-73 of this catalog EXCEPT for the Sections, Groups, or Areas listed below, which must be satisfied only as shown below.

## Section A. Humanities

Group 4. Other Humanities
Students may select only from the following list:
Three hours from ART 1301 or ART 3381
Three hours from MUS 1307, MUS 1308, MUS 3311, or PHIL 1320 or PHIL 1388

## Section B. Science and Mathematics

Group 1. Natural Science
BIOL 2403 and BIOL 2404

## Section C. Computer Literacy

CSCI 1300 or CSCI 1301

Group 3. Other Social Sciences
Students must take Psychology 1310
Students may select only from the following list:
Three hours from ANTH 1323, ANTH 2323, ANTH 1353, or ECON 1301, ECON 2353, or SOC 1313, SOC 1323, SOC 1387 or SOC 2333, or HONR 2387, HONR 2388.

Interdisciplinary Studies Area
34 hours
READ 3323
READ 3325
ENG 4321
ENG 4326, ENG 4328, ENG 3321
COMD 1310
COMD 1320
MATH 2306
MATH 2307
PSCI 1421, PSCI 1422, PSCI 2308

## KIN 4351

Select 3 semester hours from the following: MUS 1307, MUS 1308, MUS 3311, or PHIL 1320, PHIL 1388 or ANTH 3333

## Professional Education

21 hours
EDCI 3305 Foundations of Multicultural Education
EDCI 4302 Educational Psychology
EDCI 4305 Instructional Technology and Curriculum Development
EDBE 3322 Foundations of Bilingual Education
EDCI 4306 Instructional Methods and Classroom Management
EDCI 4311 Directed Teaching -Elementary
ED 4313 Directed Teaching -Generic Special Education

Academic Specialization: Generic Special Education

## 21 hours

SPED 1305 Introduction to the Exceptionalities
SPED 3301 Inclusion of the Exceptionalities
SPED 3302 Theories of Learning Disabilities
SPED 4300 Testing and Assessment of Exceptional Individuals
SPED 4301 Strategies, Methods and Materials for Teaching Individuals with Mild to Moderate Disabilities
SPED 4303 Theories of Social Competence and Behavioral Interventions
SPED 4309 Program Planning for Secondary Special Education

- Teaching Certification: Secondary Option II (minor or second teaching field) in Generic Special Education 24 hours
SPED 1305 Introduction to the Exceptionalities
SPED 2304 Computer Applications and Adaptations for Individuals with Disabilities
SPED 3301 Inclusion of the Exceptionalities
SPED 3302 Theories of Learning Disabilities
SPED 4300 Testing and Assessment of Exceptionalities
SPED 4301 Strategies, Methods and Materials for Teaching Individuals with Mild to Moderate Disabilities
SPED 4303 Theories of Social Competence and Behavioral Interventions
SPED 4309 Program Planning for Secondary Special Education
*KIN $4351 \quad$ Adaptive Kinesiology or
SPED 4372 Individual Differences or
READ 3327 Assessment/Diagnosis of Special Needs Students

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- Certificate: Generic Special Education 21 hours The Generic Special Education certificate may be added to valid provisional teacher certificates with elementary, secondary or all-level options certificates. The professional developmental sequence for the Generic Special Education certificate consists of 24 hours, as follows:
SPED 1305 Introduction to the Exceptionalities SPED 2304 Computer Applications and Adaptations for Individuals with Disabilities
SPED 3301 Inclusion of the Exceptionalities
SPED 3302 Theories of Learning Disabilities
SPED 4300 Testing and Assessment of Exceptional Individuals
SPED 4301 Strategies, Methods and Materials for Teaching Individuals with Mild to Moderate Disabilities
SPED 4303 Theories of Social Competence and Behavioral Interventions
SPED 4309 Program Planning for Secondary Special Education
*KIN $4351 \quad$ Adaptive Kinesiology or
SPED 4372 Individual Differences or READ 3327 Assessment/Diagnosis of Special Needs Students
- Minor in Generic Special Education (non-certified or institutional minor) 24 hours
SPED 1305 Introduction to the Exceptionalities
SPED 2304 Computer Applications and Adaptations for Individuals with Disabilities
SPED 3301 Inclusion of the Exceptionalities
SPED 3302 Theories of Learning Disabilities
SPED 4300 Testing and Assessment of Exceptional Individuals
SPED 4301 Strategies, Methods and Materials for Teaching Individuals with Mild to Moderate Disabilities
SPED 4303 Theories of Social Competence and Behavioral Interventions
SPED 4309 Program Planning for Secondary Special Education
*KIN $4351 \quad$ Adaptive Kinesiology or
SPED 4372 Individual Differences or
READ 3327 Assessment/Diagnosis of Special Needs Students
* Students majoring in Kinesiology are required to take SPED 4372 Individual Differences
- Directed Student Teaching Requirements for Generic Special Education
A student seeking certification in Elementary or Secondary Education and minoring in generic Special Education must complete one-half of his or her student teaching semester in an elementary or secondary classroom
and one-half in a special education classroom. Before entering student teaching, the student must have completed all minor courses, with the exception of night block students, who may take SPED 4300 concurrently with student teaching. For additional requirements please refer to the section on Student Teaching in the Department of Curriculum and Instruction.


## * Endorsements

## - Endorsement in Gifted Education

See Graduate Programs, Department of Educational Psychology.

## - Endorsement in Information Technology

1. Texas Teaching Certificate
2. 9 hours: ED 3350, CSCI 1380 and CSCI 3321

## - Certificate and Endorsements in Special Education (graduate level)

See Graduate Programs, Department of Educational Psychology.

## Course Descriptions

A listing of Education courses can be found in the Course Description section beginning on page 179.

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## Full-time Faculty

Chilek, Daniel R., Lecturer, Kinesiology
Grabowski, Laura, Lecturer, Kinesiology
Guinn, Robert, Professor and Program Coordinator, Health
Jorgensen, Layne, Professor, Kinesiology
Mottinger, Sue, Assistant Professor, Kinesiology
Munoz, Frank, Lecturer, Kinesiology
Pebworth, Katherine, Lecturer, Kinesiology
Ryman, Jeannean, Lecturer, Kinesiology
Semper, Thomas, Associate Professor and Program Coordinator, Kinesiology
Villas, Paul, Associate Professor, Health

## Mission Statement

The mission of the Department of Health and Kinesiology is congruous with those of The University of Texas-Pan American and the College of Education. Specifically, it is to prepare Health and Kinesiology students to function professionally in a changing diverse society, to fulfill the General Education requirements and to improve the quality of university life through the understanding, delivering 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. The department also offers minors in Health and in Kinesiology.

At the graduate level, the Department of Health and Kinesiology offers a Master of Education degree with a specialization in Kinesiology.

In teacher certification the following plans are offered:

## * Health

- Elementary Option I (within Interdisciplinary Elementary Majors only)
- Elementary Option II (within Interdisciplinary Elementary Majors only)
- Secondary Option II


## * Kinesiology

- Elementary Option I (within Interdisciplinary Elementary Majors only)
- Elementary Option II (within Interdisciplinary Elementary Majors only)
- Secondary Option II
- All-Level Kinesiology Option II

The General Education requirement for all students is 4 hours of credit in Kinesiology activity courses. This requirement is met during the freshman and/or sophomore years by taking two 2-hour physical activity courses. Students who are unable to participate in physical activity courses must obtain a waiver and are required to take KIN 2301 to satisfy the requirement. (See pages 70-73 for General Education Requirements.)

## Degree Requirements

Special General Education Requirements for Bachelor of Science Degrees in Health and Kinesiology

Complete the requirements shown in the General Education Requirements section on pages 70-73 of this catalog EXCEPT for the Sections, Group, 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 and KIN 1200 or another swim course (for Kinesiology majors only). This satisfies the General Education Requirements.

## * Student Teaching

Please refer to the Student Teaching section under the Department of Curriculum and Instruction. In addition, prior to Student Teaching, Health and/or Kinesiology students must satisfy the following:

## Health

Secondary Option II Major or First Teaching Field: Must have completed HLTH 1354 and 21 additional hours out of a total of 30 hours, in which 9 must be advanced, and have a GPA of 2.5 or better.

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Secondary Option II Minor or Second Teaching Field:
Must have completed HLTH 1354 and 15 additional hours out of a total of 24 hours, in which 6 must be advanced, and a GPA of 2.5 or better.

## Kinesiology

All-Level Option II Major or First Teaching Field: Must have completed KIN 1351, 1354, 2354, 3313, 3319, 3353, 3356, 3365 and 4351 out of a total of 36 hours and have a GPA of 2.5 or better.

Secondary Option II Major or First Teaching Field: Must have completed KIN 1351, 1354, 2354, 3312, 3319, 3353, 3365,4351 and 3 additional hours out of a total of 36 hours and have a GPA of 2.5 or better.

## Secondary Option II Minor or Second Teaching Field:

Must have completed KIN 1351, 1354, 2354, 3312, 3319, 3353,3365 and 4351 out of a total of 30 hours and have a GPA of 2.5 or better.

## * Health Degree Requirements

Health majors should consult with their advisor in the Department of Health and Kinesiology.

Health Major (non-certified)
Required Courses
30 hours
30 hours in Health, of which 15 must be advanced
Health Minor (non-certified)
18 hours in Health, of which 6 must be advanced
Teacher Certification in Health

| Health Elementary Option I (Elementary majors only) |  |
| :---: | :---: |
| Required Courses | 6 hours |
| HLTH 1354 | Safety and First Aid |
| HLTH 2352 | Personal Health and Wellness |
| 6 hours from the following: |  |
| HLTH 3373 | Human Sexuality |
| HLTH 3374 | Chronic and Degenerative Disease |
| HLTH 3375 | Consumer Health |
|  | TOTAL 12 hours |
| BIOL 2403 | Anatomy and Physiology |

Health Elementary Option II (Elementary majors only) Required Courses

9 hours
HLTH 1352 Community and Environmental Health
HLTH 2352 Personal Health and Wellness
HLTH 2372 Nutrition and Health
6 hours from the following:
HLTH 3373 Human Sexuality
HLTH $3374 \quad$ Chronic and Degenerative Disease
HLTH 3375 Consumer Health

3 advanced hours of HLTH electives TOTAL

18 hours
8 hours of biology with the following preferred:
BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology
Health Secondary Option II (Health Major or
First Teaching Field) First Teaching Field)
Required Courses
30 hours
HLTH 1354 Safety and First Aid
HLTH $4350 \quad$ Organization of the Health Program
12 hours from lower division courses
12 hours from upper division courses

## Professional Education

EDCI $4301 \quad$ Foundations of Education
EDCI 4302 Educational Psychology
EDCI 4307 Secondary Curriculum: Internship I
EDCI 4308 Advanced Secondary Curriculum: Internship I
READ 4351 Developmental Reading in Secondary Schools
EDCI 4641 Secondary Internship II

## Other Requirements

BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology

## Health Secondary Option II

(Minor or Secondary Teaching Field)
Required Courses 24 hours
HLTH $1354 \quad$ Safety and First Aid
HLTH $4350 \quad$ Organization of the Health Program
9 hours from the following:
HLTH 1352 Community and Environmental Health
HLTH 2371 Health Problems in the Use of Alcohol, Tobacco and Narcotics
HLTH $2372 \quad$ Nutrition and Health
HLTH 2373 Growth, Development and Fitness
9 hours from the following:
HLTH 3373 Human Sexuality
HLTH $3374 \quad$ Chronic and Degenerative Disease
HLTH 3375 Consumer Health
HLTH 4357 Health Seminar
Recommended Courses
BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology

## * Kinesiology Degree Requirements

Kinesiology majors should consult with their advisor in the Department of Health and Kinesiology.

## Major in Kinesiology

Required Courses
24 hours
KIN 1351 Introduction to Kinesiology
KIN 1354 Safety and First Aid
KIN 2354 Biomechanics
KIN 3312 Dance Activities for Adolescents
KIN 3319 Tumbling and Gymnastics
KIN 3353 Physiology of Exercise
KIN 3365 Tests and Measurements in Kinesiology
KIN 4351 Adapted Kinesiology
Designated Electives
6 hours
Select 6 hours from Professional Kinesiology courses, excluding KIN 2323

## Kinesiology Activity Courses

6 hours
(This requirement is in addition to the General Education requirements.) Select 2 hours from each of the following areas:

Area 1: Team Sports

| KIN 1250 | Speedball-Soccer |
| :--- | :--- |
| KIN 1255 | Softball |
| KIN 2201 | Flag Football |
| KIN 2202 | Volleyball |
| KIN 2221 | Basketball |

Area 2: Dual 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: Individual Sports
KIN 2206 Weight Training I
KIN 2207 Track and Field
KIN 2208 Gymnastics I
KIN 2216 Weight Training II
KIN 2225 Folk and Square Dance
KIN 2226 Modern Dance
KIN 2235 Mexican Folkloric Dance
KIN 2257 Golf
KIN 2258 Archery
KIN $2259 \quad$ Bowling
KIN 2273 Gymnastics II
TOTAL 36 hours

Minor in Kinesiology (non-certified) 24 hours
Professional Kinesiology (Theory Courses) $\mathbf{1 8}$ hours
A minimum of 6 must be advanced.

## Kinesiology Activity Courses

6 hours
The requirements below are in addition to General Education requirements.
KIN 1200 Swimming I or another swimming course KIN $1201 \quad$ Fitness and Motor Development
2 hours of electives
TOTAL 24 hours

## Teacher Certification in Kinesiology

## Kinesiology Elementary Option I (Elementary majors only)

 Required Courses 12 hoursKIN $3310 \quad$ Modified Team and Individual Sports
KIN 3313 Dance for Children
KIN 3317 Theory and Performance of Gymnastics
KIN 3356 Movement Exploration
Recommended Courses
BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology

## Kinesiology Elementary Option II (Elementary majors only)

 Required Courses18 hours
KIN $3310 \quad$ Modified Team and Individual Sports
KIN 3313 Dance for Children
KIN 3317 Theory and Performance of Gymnastics
KIN 3356 Movement Exploration
Designated Electives
6 hours
Select 6 hours 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 4351 Adapted Kinesiology

## Recommended Courses

BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology

## Kinesiology Secondary Option II (Major or First Teaching

Field) — Requires second teaching field
Required Courses
36 hours
KIN 1351 Introduction to Kinesiology
KIN 1354 Safety and First Aid
KIN 2354 Biomechanics
KIN 3312 Dance Activities for Adolescents
KIN 3319 Tumbling and Gymnastics
KIN 3353 Physiology of Exercise

KIN $3365 \quad$ Tests and Measurements in Kinesiology
KIN 4351 Adapted Kinesiology
Designated Electives
15 hours
Professional Kinesiology Courses
6 hours
Select 6 hours 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
Kinesiology Activity Courses
6 hours
Select 2 hours from each of the following areas:
Area 1: Team Sports

| KIN 1250 | Speedball-Soccer |
| :--- | :--- |
| KIN 1255 | Softball |
| KIN 2201 | Flag Football |
| KIN 2202 | Volleyball |
| KIN 2221 | Basketball |

Area 2: Dual 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: Individual Sports

| KIN 2206 | Weight Training I |
| :--- | :--- |
| KIN 2207 | Track and Field |
| KIN 2208 | Gymnastics I |
| KIN 2216 | Weight Training II |
| KIN 2225 | Folk and Square Dance |
| KIN 2226 | Modern Dance |
| KIN 2235 | Mexican Folkloric Dance |
| KIN 2257 | Golf |
| KIN 2258 | Archery |
| KIN 2259 | Bowling |
| KIN 2273 | Gymnastics II |

TOTAL 36 hours
Professional Education
18 hours
EDCI $4301 \quad$ Foundations of Education
EDCI 4302 Educational Psychology
EDCI 4307 Secondary Curriculum: Internship I
READ 4351 Developmental Reading in Secondary Schools
EDCI 4641
EDUK 4354 Kinesiology in the Public Schools

Other Requirements
8 hours
BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology

## - Kinesiology Secondary Option II (Minor or Second Teaching Field)

## Required Courses

30 hours
KIN 1351 Introduction to Kinesiology
KIN 1354 Safety and First Aid
KIN 2354 Biomechanics
KIN 3312 Dance Activities for Adolescents
KIN 3319 Tumbling and Gymnastics
KIN 3353 Physiology of Exercise
KIN 3365 Tests and Measurements in Kinesiology
KIN 4351 Adapted Kinesiology

## Kinesiology Activity Courses 6 hours

This requirement is in addition to General Education requirements.

## KIN 1200 Swimming I

KIN 1201 Fitness and Motor Development
2 hours of electives

|  | TOTAL |
| :--- | :--- |
| Professional | Education (Preferred) |
| EDCI 4301 | Foundations of Education |
| EDCI 4302 | Educational Psychology |
| EDCI 4307 | Secondary Curriculum: Internship I |
| READ 4351 | Developmental Reading in Secondary <br> Schools |
| EDCI 4641 | Secondary Internship II |
| EDUK 4354 | Kinesiology in the Public Schools |

## Recommended Courses 8 hours

## BIOL 2403 Anatomy and Physiology

BIOL 2404 Anatomy and Physiology

## - Kinesiology All-Level Option II (Major or First Teaching Field)

Requires a second teaching field,
Required Courses
27 hours
KIN 1351 Introduction to Kinesiology
KIN 1354 Safety and First Aid
KIN 2354 Biomechanics
KIN 3313 Dance Activities for Children
KIN 3319 Tumbling and Gymnastics
KIN 3353 Physiology of Exercise
KIN 3356 Movement Exploration

KIN $3365 \quad$ Tests and Measurements in Kinesiology
KIN $4351 \quad$ Adapted Kinesiology

## Designated Electives

9 hours
Professional Kinesiology Courses
3 hours
Select one of 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 of Athletic Injuries

## Kinesiology Activity Courses

6 hours
(This requirement is in addition to the General Education requirements.) Select 2 hours from each of the following areas:

| Area 1: Team Sports |  |
| :---: | :--- |
| KIN 1250 | Speedball-Soccer |
| KIN 1255 | Softball |
| KIN 2201 | Flag Football |
| KIN 2202 | Volleyball |
| KIN 2221 | Basketball |

Area 2: Dual 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: Individual Sports

| KIN 2206 | Weight Training I |
| :--- | :--- |
| KIN 2207 | Track and Field |
| KIN 2208 | Gymnastics I |
| KIN 2216 | Weight Training II |
| KIN 2225 | Folk and Square Dance |
| KIN 2226 | Modern Dance |
| KIN 2235 | Mexican Folkloric Dance |
| KIN 2257 | Golf |
| KIN 2258 | Archery |
| KIN 2259 | Bowling |
| KIN 2273 | Gymnastics II |

TOTAL
36 hours

Professional Education
18 hours

| EDCI 4301 | Foundations of Education |
| :--- | :--- |
| EDCI 4302 | Educational Psychology |
| EDCI 4307 | Secondary Curriculum: Internship I |
| READ 4351 | Developmental Reading in Secondary <br>  <br> Schools |
| EDCI 4699 | Internship - All Levels |
| EDUK 4354 | Kinesiology in the Public Schools |

Other Requirements 8 hours
BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology

## - Athletic Coaching Specialization

In an effort to meet the demand for men and women coaches in all sports, an Athletic Coaching Specialization Certificate is offered. With the completion of this program, a Departmental Certificate is awarded. The student need not be either a major or minor in Kinesiology to complete this program.

To be eligible to receive the Athletic Coaching Specialization Certificate, the student must complete the following program of study:

## Required Courses

12 hours
$\begin{array}{ll}\text { KIN 2354 } & \text { Biomechanics } \\ \text { KIN 3352 } & \text { Care, Treatment and Prevention of } \\ & \text { Athletic Injuries } \\ \text { KIN 3353 } & \text { Physiology of Exercise } \\ \text { HLTH/KIN 1354 } & \text { Safety and First Aid }\end{array}$
Designated Electives
12 hours
Select four 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

## - 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

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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 or
KIN 3353 Physiology of Exercise
KIN $1354 \quad$ Safety and First Aid (must include CPR Certification)
KIN 2354 Biomechanics
KIN 3352 Care, Treatment and Prevention of Athletic Injuries
Health - any 3 hours

## 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 T Trainer).
3. A minimum of 600 supervised "lab clock hours" each year for a total of 1800 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 1500 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.

## Course Descriptions

A listing of courses offered by the Department of Health and Kinesiology can be found on pages 224 (HLTH) and 226228 (KIN).

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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, 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 225).

## CLINCAL LABORATORY SGIENGES

Prof. Karen Chandler, Program Coordinator
Health Sciences Building
Room 2.116
Telephone: 956/381-2296
Fax: 956/384-5054
E-mail: kchandler@panam.edu

## Full-time Faculty

Chandler, Karen, Associate Professor
Felkner, Marilyn, Assistant Professor
Tijerina, Sandra L., Assistant Professor

## 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 84 hours of General Education requirements and 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 pre-professional years.

## Admission Requirements

In order to be accepted into the Clinical Laboratory Sciences Program, the student must submit an application to the Clinical Laboratory Sciences Program upon completion of 70 hours of pre-professional coursework, but no later than March 31 of his or her junior year. 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

## General Education Requirements 60 hours <br> Complete the requirements shown in the General Education requirements section on pages 70-73 of this catalog EXCEPT for the Sections, Groups or Areas listed below, which must be satisfied only as shown below.

## Section A. Humanities

## Group 4. Other Humanities

Students must select one course from Area 2. The other course may be selected from any other area.

## Section B. 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 and 3103 Biochemistry
Approved biology course to be selected from any of the following:
BIOL 3403 Medical Microbiology 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-todate 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.

## Other Admission Information

A. Students must complete all non-Clinical Laboratory Science coursework prior to entering the program. CLSC 3301 is an introductory-level course, and students are strongly encouraged to take this course prior to actually entering the professional phase of the program.
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.

## 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. 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 completed 16 hours of biology, including a course in microbiology, 16 hours of chemistry including organic, and 3 hours of college-level mathematics;
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 at least 90 hours of college credits completed, with 16 hours of biology, including a course in
microbiology; 16 hours of chemistry, including a course in biochemistry or organic chemistry; 3 hours of college-level mathematics; and an affiliation agreement from his or her parent university stating that, upon satisfactory completion of the Clinical Laboratory Sciences curriculum offered at The University of Texas-Pan American, the student will be awarded a baccalaureate degree.
B. A limited number of students who have completed all prerequisite coursework may apply to the program with a request to pursue coursework on a part-time basis. Students in the part-time option will be admitted on a space-available basis. No clinical laboratory science courses more than five years old may be used to meet graduation requirements.
C. Medical Laboratory Technicians with nationally recognized certification such as NCA or ASCP may be granted credit for the following courses following validation by challenge examination: CLSC 3301, CLSC 3410, CLSC 3530, CLSC 3513 and CLSC 3420. Students must attain a score of 70 percent or better on challenge exams. Challenge exams may only be attempted once. In addition, students may shorten the time required to complete practicum courses by demonstrating required competency in designated skill areas through practical examinations. Students who desire credit by examination for Clinical Laboratory Science courses must notify the program coordinator prior to their enrollment in these courses. Students must comply with university regulations, and no more than 45 total hours may be granted for credit by examination, correspondence or exemption.

## Certification Requirements

Certification requires a baccalaureate degree including 16 hours of biological sciences, 16 hours of chemistry, 3 hours of college algebra 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.

## Degree Requirements

Major in Clinical Laboratory Sciences

## Admission Prerequisite Requirements 84 hours See above

Major Course Requirements 58 hours
CLSC 3301 Introduction to Clinical Laboratory Science
CLSC 3410 Hematology I
CLSC 3513 Clinical Immunology and
Immunohematology

CLSC 3420
CLSC 3530
CLSC 4303
CLSC 4311
CLSC 4112
CLSC 4314
CLSC 4115
CLSC 4421
CLSC 4322
CLSC 4631
CLSC 4340
CLSC 4341
CLSC 4342
CLSC 4343
CLSC 4144

Clinical Chemistry I
Clinical Microbiology I
Medical Laboratory Leadership
Clinical Hematology II
Advanced Hematology
Advanced Immunohematology
Advanced Clinical Immunology
Clinical Chemistry II
Advanced Clinical Chemistry
Clinical Microbiology II
Clinical Practicum I
Clinical Practicum II
Clinical Practicum III
Clinical Practicum IV
Clinical Practicum V

NOTE: Senior year courses include clinical practicum work that may not necessarily conform exactly to the university calendar.

## 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

## 142 hours

## Course Descriptions

A listing of courses offered by the Program in Clinical Laboratory Sciences can be found on pages 195-196.


Dr. Barbara A. Johnson, Department Chair<br>Health Sciences Building<br>Room 2.138<br>Telephone: 956/316-7040<br>Fax: 956/381-3507<br>E-mail: bajo@panam.edu

## Full-time Faculty

Johnson, Barbara A., Associate Professor Mata-Pistokache, Teri, Associate Professor
Meline, Timothy J., Associate Professor Parchman-Gonzalez, Keri, Lecturer
Rodriguez, Monica, Lecturer
Salinas, Sonya, Lecturer
Wang, Bailey, Assistant Professor

## Major in Communication Disorders

The Bachelor of Arts 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. Because accreditation requirements mandate a graduate degree to practice in the field, this Bachelor of Arts degree is not designed to prepare its graduates for immediate employment in either profession.

## Degree Requirements

| General Education Requirements | 60 hours |
| :--- | :--- |
| Required Academic Coursework | $\mathbf{3 6}$ hours |
| COMD 2310 | Introduction to Speech-Language <br> Pathology |
| COMD 2320 | Voice and Phonetics |
| COMD 3310 | Normal Language Development |
| COMD 3315 | Anatomy and Physiology of the Speech <br> and Hearing Mechanism |
| COMD 3320 | Methods for Clinical Practice <br> COMD 3330 |
| Articulation Development and Disorders |  |
| COMD 3340 | Audiology I |

COMD 4310

COMD 4330
COMD 4340

COMD 4360
COMD 4390

Behavior Modification in SpeechLanguage Pathology
Aural Rehabilitation Neuro-Anatomy and Physiology for Speech, Language and Hearing Abnormal Language Development and Introduction to Clinical Management Diagnostic Procedures

## Required Clinical Experience 6 hours

Eligibility for beginning clinical experience requires successful completion of COMD 3320 (Methods) as well as a minimum GPA of 3.0 in all Communication Disorders courses. In order to complete the practicum, students must register for COMD 4350 (Clinical Experience I) and COMD 4355 (Clinical Experience II). Enrollment in COMD 4350 and COMD 4355 requires a minimum GPA of 3.0 in the major.

## Minor Area of Study

## 18-24 hours

With departmental advisement, students complete an 18- to 24-hour minor in one area. Choices for minor study include psychology, biology, Spanish, computer science, rehabilitative services, communication, special education and English.

## TOTAL

## 124 hours

## Course Descriptions

A listing of courses offered by the Department of Communication Sciences and Disorders can be found on pages 196-197.

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Dr. Esperanza Briones, Program Coordinator Health Sciences Building, Room 2.126
Telephone: 956/381-2291
Fax: 956/384-5054
E-mail: ebriones@panam.edu

## Full-time Faculty

Briones, Esperanza, Associate Professor
Edionwe, Alexander, Associate Professor
Faraji, Bahram (Bob), Assistant Professor

## General Description

Dietetics is a profession concerned with the science and art of human nutritional care, an essential component of health science. It includes the extending and imparting of knowledge concerning foods which will provide nutrients sufficient for health and during disease throughout the life cycle and the management of group feeding. Dietitians, by their education, training and knowledge of the interrelationships of food, nutrition and health, are uniquely qualified to help individuals and society to meet these needs.

The Coordinated Program in Dietetics is accredited by the American Dietetic Association. The "generalist" program allows the student to gain knowledge and experience required for a dietetics profession in food service management, clinical nutrition and community nutrition.
"Traditional" dietetic programs require students to complete a one-year internship after graduation with a bachelor's degree in foods and nutrition or institutional management. The University of Texas-Pan American's dietetic program is unique in that it combines the two into a four-year program. Completion of the dietetics program leads to a Bachelor of Science degree with a major in Dietetics, membership eligibility in the American Dietetic Association and eligibility to take the national registration examination.

## Requirements for Admission to the Dietetics Program

A. Submission of the following:

1. Completed application for admission to the Coordinated Program in Dietetics. (Call 956/3812291 for information.)
2. Unofficial transcript showing completion of at least 60 hours with a minimum of 2.5 grade point average to include (or to include at start of the program): ENG 1301 and ENG 1302
MATH 1340 (or equivalent)
Science Support Courses
BIOL 2403, BIOL 2404 and BIOL 3401
CHEM 1301, 1101, CHEM 1302, 1102, CHEM 2302 and CHEM 3403
Dietetic Core
HRP 2303
HRP 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. A minimum GPA of 2.5 with a minimum grade of " $C$ " in HRP 2303 and DIET 2352 and a minimum grade of " $B$ " in HRP 2351 is required in the Dietetic Core.
3. Three letters of recommendation.
4. Handwritten letter from the applicant stating reason
for interest in the Dietetics program.
5. Results of the Nelson-Denny Reading Test (test administered through the Learning Assistance Center).
6. Completion of a minimum of 80 hours of workrelated 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:
7. Completion and submission of the required material by the first Monday in April.
2 Grade point average overall and in science courses.
8. Evaluation of selected references and criteria.
9. Score on the Nelson-Denny Reading Test.
10. Responses to the student interview with the Admissions Committee.

## 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 Dietetics program Student Guidebook available in the department.

## Major in Dietetics

## Degree Requirements

## General Education Requirements 60 hours

Complete the requirements shown in the General Education Requirements section on pages 70-73 of this catalog EXCEPT for the Sections, Groups or Areas listed below, which must be satisfied only as shown below.

## Section A. Humanities

## Group 4. Other Humanities

Students must select one course from Area 2,
Communications, and PHIL 1320 or PHIL 2330 from Area 3.

## Section B. Science and Mathematics

Group 1. Natural Science
Students should select either BIOL 2403 and BIOL 2404 or 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 one course from Area 2, Economics, and SOC 1313 or SOC 1323 from Area 4, Sociology.

Science Support Courses
20-28 hours*
CHEM 1301 General Chemistry
CHEM 1101 General Chemistry Lab I
CHEM 1302 General Chemistry
CHEM 1102 General Chemistry Lab II
CHEM 3401 Organic Chemistry I
CHEM 3403 Biochemistry
BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology
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 General Education 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
$\begin{array}{ll}\text { MANA 3361 } & \begin{array}{l}\text { Principles of Management and } \\ \text { Organizational Behavior }\end{array} \\ \text { EDCI 4302 } & \begin{array}{l}\text { Educational Psychology }\end{array}\end{array}$
Admission Prerequisite Dietetic Core Courses 9 hours
DIET 2352 Food Preparation
HRP 2303 Medical Terminology
DIET 2351 Introduction to Clinical Nutrition
Dietetic Professional Courses (Enrollment eligibility based on acceptance into the Dietetics Program) 47 hours

## - 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 Nutritional Assessment and Introduction to Diet and Disease

- Summer II prior to second year (Senior)

DIET 4351 Diet and Disease

- 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 4259 Community and Life Cycle Nutrition

## Other Requirements

A minimum grade of " B " is required for HRP 2351. A minimum grade of " C " is required for all other Dietetics (DIET) courses (lecture, labs and clinicals) and for all Science Support Courses.

## TOTAL

141 hours

## Course Descriptions

A listing of courses offered by the Coordinated Program in Dietetics can be found on pages 207-208.

## NUEANG

Dr. Carolina Huerta, Department Chair Health Sciences Building Room 2.192<br>Telephone: 956/381-3491<br>Fax: 956/384-2384<br>E-mail: sagonzalez@panam.edu

## Full-time Faculty

Castillo, Helen M., Professor and Dean
Delgado, Diana, Assistant Professor
Eanes, Linda, Assistant Professor
Erdem, Orelia, Assistant Professor
Garza, Viola, Assistant Professor
Guzman, Isabel (Penny), Assistant Professor
Huerta, Maria Carolina, Professor
Johnson, Betty A., Assistant Professor
Kidd, Shirley Ann, Assistant Professor
Maville, Janice A., Associate Professor
Milan, Cindy L., Assistant Professor
Nadeau, Nancy G., Lecturer
Nieto, Beatriz, Assistant Professor
Rossow, Rosalinda, Assistant Professor
Sánchez, M. Sandra, Associate Professor
Skinner, Gwendolynne, Assistant Professor
Sullivan, Pamela, Assistant Professor
Tucker, Barbara A., Professor
Voss, Judy, Lecturer
Wilson, Bruce K., Associate Professor
Wilson, Karen, Assistant Professor

## General Overview

The Nursing Department offers three programs: an Associate of Applied Science Degree in Nursing,* a Bachelor of Science in Nursing and a Master of Science in Nursing, all accredited by the Board of Nurse Examiners for the State of Texas and the National League for Nursing (National League for Nursing Accreditation Commission, 350 Hudson Street, New York, NY 10014, 212/989-9393).

## ■ Associate of Applied Science Degree in Nursing Program*

Graduates of the Associate Degree in Nursing (ADN) Program will receive an Associate of Applied Science

Degree. Graduates will be eligible to make application to the Texas State Board of Nurse Examiners to write the National Council Licensure Examination. After successfully completing this examination, the graduate is issued a license to practice as a registered nurse (RN) in the State of Texas. The ADN Program is specifically designed to provide initial levels of skills, knowledge and sensitivities that will enable graduates to enter the nursing profession at a functional level. The area of emphasis is to provide the technical and human relations preparation necessary for a student to enter the profession of nursing.
*IMPORTANT NOTE: The Associate Degree Nursing Program at UT Pan American is scheduled for closure. The last class will be admitted for the Fall Semester 1998, and the program will close as of the year 2000. Students should check with their departmental advisor for further information on program status or academic standing.

## Requirements for Admission to the ADN Program (see note above)

The ADN applicant must:

1. Meet admission requirements to The University of Texas-Pan American. An application for admission may be obtained from the Office of Admissions and Records (956/ 381-2206) or the Department of Nursing (956/381-3491 or 316-7032).
2. Submit an admission application for the ADN program, which can be obtained from the Department of Nursing.
3. Submit verification of the following admission criteria:
a. ACT (or SAT) and TASP scores.
b. Nelson-Denny Reading grade level - a minimum of 11th grade is required.
c. Pass math portion of TASP.*
d. Prerequisite College Grade Point Average (GPA) a minimum GPA of 2.5 on a 4.0 scale.
e. Completion of prerequisite courses with a minimum grade of "C." NOTE: Prerequisite courses must be completed within a five-year period prior to entry into the Nursing Program.
4. Submit an application for the Fall Semester by the second Monday in February. Admission is NOT guaranteed. It is the applicant's responsibility to provide the department with the needed information for the selection process.
5. Be accepted by the ADN Student Development Committee.
6. Provide proof of current certification of cardiopulmonary resuscitation (CPR).
[^6]
## Admission Selection

Admission selection is based upon:

1. Space availability;
2. Completion of prerequisites; and
3. Total rank score of admission criteria.

The factors used in ranking are:

1. Nelson-Denny score;
2. ACT or SAT; and
3. Prerequisite College GPA. [Calculation of this GPA will be based upon three ADN prerequisite courses: PSY 1310 Introduction to Psychology, BIOL 1401 General Biology (or BIOL 1402), and BIOL 2403 Anatomy and Physiology (or BIOL 2404).]

## Challenging Courses

LVNs may challenge NURS 1801 (Fundamentals of Nursing) and, if successful, may challenge NURS 1802 (Medical-Surgical Nursing I). The challenge exams include both written and practical components. Passing scores are only valid for two years, and the exam(s) may not be repeated. Candidates who successfully complete the challenge exams must meet all prerequisites for the subsequent nursing course before admission is granted. Current information regarding LVN Challenge can be obtained from the Department of Nursing.

## Computerized Background Checks

According to the Texas Nurse Practice Act contained in Vernon's Civil Statutes (Chapter 7, Article 4525), the Board of Nurse Examiners (BNE) may refuse to admit persons to its examinations who have:

- had disciplinary action taken against their license by a licensing authority for nurses (LPN/LVN);
- been convicted of a crime other than minor traffic violations;
- been hospitalized or treated for mental illness and/or chemical dependency.

Any individual who is enrolled or planning to enroll in an educational program that prepares students for an initial license as a registered nurse and who has reason to believe that he/she is ineligible for the license may petition the Board for a declaratory order as to his/her potential ineligibility (Article 4519a).

## Professional Liability Insurance

All students enrolled in clinical nursing courses are required to maintain professional liability insurance. Information regarding blanket student coverage is available.

## Readmission

A student who receives a "D," "F," "DF" or "WF" in any nursing course will not be readmitted to the ADN program.

## Admission of Transfer Students

Students requesting transfer into the program must meet the admission and progression policies of the ADN program. A student in a nursing program from any other institution of higher learning who has received a "D," "F" or "DF" in any nursing course will not be eligible for transfer into the ADN program.

## Requirements for the Associate of Applied Science Degree in Nursing

The ADN student must:

1. File a Degree Plan approved by the Chairperson of the Nursing Department.
2. Achieve a minimum grade of " C " in each required course.
3. File an acceptable Application for Degree with the Office of Admissions and Records on or before the date specified in the university calendar.

## Suggested Degree Plan for the ADN Program*

Prerequisite Courses

## Hours

PSY 1310 Introduction to Psychology 3
BIOL 1401 General Biology or
BIOL 1402 General Biology 4
BIOL 2403 Anatomy and Physiology or
BIOL 2404 Anatomy and Physiology 4
Must pass math portion of TASP
CPR Certification

Freshman Year

## Fall Semester:

NURS 1202 Introduction to A.D. Nursing 2
NURS 1801 Fundamentals of A.D. Nursing 8
BIOL 2403 Anatomy and Physiology or
BIOL 2404 Anatomy and Physiology 4
(required before NURS 1802)

## Spring Semester:

NURS 1802 Medical-Surgical Nursing I 8
ENG 1301 Composition 3
PSY 2337 Psychology of Life Span
Development and Aging 3
(required before NURS 2406, NURS 2407 and NURS 2505)

## Summer Session I:

NURS 2604 Medical-Surgical Nursing II 6
SOC 1313 Principles of Sociology 3

## Summer Session II:

HRP 2351 Introduction to Clinical Nutrition 3
NURS 2505 Psychosocial Nursing** 5

## Sophomore Year

Fall Semester:
NURS 2406
Nursing Care of the
Childrearing Family
NURS 2407
ENG 1302
Nursing Care of the Childbearing Family 4
Rhetoric
Spring Semester:
NURS 2505 Psychosocial Nursing** 5
NURS 2508 Medical-Surgical Nursing III 5

## TOTAL 72 hours

* This format is a suggested curriculum. Non-nursing courses
may be taken at times other than listed. All other courses must be
taken as designated. Students may take additional university
courses as their schedules allow. Some nursing courses have non-
nursing prerequisites.
** Taken during summer or spring.


## Course Descriptions

ADN course descriptions can be found on pages 239-240.

## 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.

Generic BSN graduates are eligible to apply to the Texas State Board of Nurse Examiners to write 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.

## Requirements for Admission to the BSN Program

1. Meet UT Pan American's admission requirements.
2. Complete all prerequisites with a minimum grade of "C" in each course (see detail below).
3. Have a minimum 2.5 grade point average (GPA) on a 4.0 scale on all prerequisites.
4. Provide proof of current certification in cardiopulmonary resuscitation (CPR; health care provider).
5. Provide documentation verifying absence of active pulmonary disease.
6. If born after January 1, 1957: Provide documentation of two doses of Measles-Mumps-Rubella (MMR) vaccination.
7. Provide documentation verifying current immunization against Hepatitis B Virus (HBV).
8. Alternate pathway applicants:
a. Be a registered nurse in the State of Texas or have a temporary permit to practice professional nursing in Texas.
b. Pass advanced placement examination(s).
9. Submit application to BSN Program by October 1.
10. Be admitted by the BSN Student Development Committee. After being rank-ordered according to prerequisite GPA, students will be admitted on a space-available basis.

## Prerequisite Course Requirements for Admission

## General Education Requirements

60 hours
Complete the requirements shown in the General Education Requirements section shown on pages 70-73 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 must be selected.

## Group 2. Mathematics

Completion of MATH 2330 or STAT 2330 will also satisfy the statistics requirement in the Other Course Requirements below.

## Section E. Social Science

Group 3. Other Social Science
One course must be PSY 1310 (from Area 3, Psychology); the other must be ANTH 1323 (from Area 1, Anthropology) or SOCI 1313 (from Area 4, Sociology).

## Other Course Requirements

Natural Science
BIOL 1401
BIOL 1402
CHEM 1301 and 1101
Statistics
MATH 2330
PSY 2301
SOC 2301
STAT 2330
Nutrition
HRP 2351
HLTH 2372
Nursing
NURS 2301
Psychology
PSY 2337 Wellness

## 18-21 hours

 8 hoursGeneral Biology or General Biology General Chemistry I 0-3 hours * Survey of Elementary Statistics Basic Statistics for Psychologists Statistics for the Behavioral Sciences Survey of Elementary Statistics 3 hours
Introduction to Clinical Nutrition or Nutrition and Health 3 hours Psychology of Life Span Development and Aging

[^7]
## 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 a case-by-case basis.

## Advanced Placement

Alternate Pathway (RN) students may be granted credit for selected BSN courses after validation through examination. Scores on the advanced placement exam(s) will be valid for two years; students may petition for a oneyear extension.

## Computerized Background Checks

According to the Texas Nurse Practice Act contained in Vernon's Civil Statutes (Chapter 7, Article 4525), the Board of Nurse Examiners (BNE) may refuse to admit persons to its examinations who have:

- had disciplinary action taken against their license by a licensing authority for nurses (LPN/LVN);
- been convicted of a crime other than minor traffic violations;
- been hospitalized or treated for mental illness and/or chemical dependency.

Any individual who is enrolled or planning to enroll in an educational program that prepares students for an initial license as a registered nurse and who has reason to believe that he/she is ineligible for the license may petition the Board for a declaratory order as to his/her potential ineligibility (Article 4519a).

## Professional Liability Insurance

All students enrolled in clinical nursing courses are required to maintain professional liability insurance. Information regarding blanket student coverage is available.

## 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 annual proof of current certification in CPR (health care provider).
4. Maintain a 2.0 GPA on a 4.0 scale.
5. Achieve a minimum grade of " C " in each required course.
6. Satisfactorily complete nursing courses in approved sequence.
7. 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.

## Readmission

After failing (or dropping) a BSN course, the student must apply in writing for readmission to the program before continuing with nursing courses. A student who has failed (or dropped) a clinical course may petition to be allowed to enroll in non-clinical courses. Being allowed to do so does not guarantee that the student will be readmitted into the program. 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 instructor.

## 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 Admissions and Records on or before the date specified in the university calendar.
6. Meet UT Pan American's general requirements for a Bachelor's Degree.

## Degree Requirements for the Bachelor of Science in Nursing

## Major in Nursing (BSN Degree)

## Admission Prerequisite Courses

| Generic Pathway | 80 hours |
| :--- | :--- |
| Alternate Pathway | 77 hours* |

* NURS 2301 not required


## Core Courses

Generic Pathway 52 hours
NURS 3101, 3102, 3209, 3403, 3405, 3408, 3604, 3608, 4601, 4602, 4203, 4404, 4607
Alternate Pathway
28 hours
NURS 3403, 3407, 3209, 4601, 4203, 4404, 4607

## Designated Electives

Generic Pathway $\quad 0$ hours
Alternate Pathway 27 hours*

[^8]
## Other Requirements

1. Achieve a minimum grade of " $C$ " in each required course.
2. Have 2.0 GPA on a 4.0 scale.

## TOTAL

132 hours

## Semester-by-Semester Curriculum

## Junior Year

Spring (1)
12/8 hours
X NURS 3101 Nursing Concepts
X NURS 3102 Pharmacology
X NURS 3604 Nursing Fundamentals

* NURS 3403 Client Assessment

0 NURS 3407 RN Mobility

## Summer (1)

## 4 hours

NURS 3408 Health Promotion and Maintenance Across the Life Span

## Fall (2)

12/2 hours
X NURS 3608 Adult Health I

* NURS 3209 Research

X NURS 3405 Mental Health Nursing

## Senior Year

Spring (2)
12/6 hours

* NURS 4601 Adult Health II

X NURS 4602 Family Health Care
Fall (3)
12/12 hours

* NURS 4203 Issues in Nursing
* NURS 4404 Community Health Nursing
* NURS 4607 Leadership in Nursing

X generic pathway
0 alternate pathway

* both generic and alternate
/ generic hours/alternate hours


## Course Descriptions

BSN course descriptions can be found on pages 240-241.

## OGCUPAHONAL THN:PAPY PROGRAM

A Cooperative Program between The University of Texas Health Science Center-San Antonio and The University of Texas-Pan American

Prof. Judith E. Bowen, Program Coordinator Health Sciences Building<br>Room 2.168<br>Telephone: 956/381-2475<br>Fax: 956/381-2476<br>E-mail: Jebowen@panam.edu

## Full-time Faculty

Bowen, Judith E., Associate Professor
Cowan, Mary, Associate Professor
Hoffman, Marc, Assistant Professor

## General Overview

Occupational therapy is a vital, exciting and rewarding health profession. Therapists work with many different types of patients, helping them to regain independence and health. Occupational therapists treat a wide variety of conditions including physical illnesses and injuries such as arthritis and stroke, developmental problems of infants and children, social and emotional difficulties of people of all ages, and problems of aging. Therapists also provide services to prevent injuries and promote wellness education.

The therapist helps the patient learn to perform tasks of living (or occupations) that are essential to an independent and meaningful life. These activities might include eating, dressing, regaining lost skills, learning to manage artificial limbs, retraining eyes and hands through different forms of art and recreation, managing a household or returning to work after injury or illness.

New developments in occupational therapy include the use of work simulators, biofeedback techniques and microcomputers. These technological advances help the patient take a more active part in his or her treatment as it progresses, give the therapist more time to relate to the patient and allow those persons with severe disabilities to successfully manage their environments.

After graduation, a qualified occupational therapist might work in a hospital, clinic, school, rehabilitation
center, psychiatric facility, industrial setting, private home, or private practitioner environment or community setting.

The outlook for jobs is excellent for those who choose a career in occupational therapy. According to a recent report by the U.S. Department of Labor, occupational therapy is one of the fastest growing health professions, with the number of job openings expected to increase dramatically throughout the 1990s. There are opportunities for career advancement ranging from becoming an expert in specialized aspects of patient treatment to positions in administration, research, education and consultation.

Individuals considering a career in occupational therapy should have a practical attitude about illness and disability. The ability to establish sound interpersonal relationships and to communicate effectively are critical to successful practice.

## The Program

The Bachelor of Science degree in Occupational Therapy requires a minimum of 159 semester hours of credit, 36 hours of which are earned in the nine months of fieldwork. During the pre-professional phase (freshman and sophomore years), students complete general education requirements and occupational therapy prerequisites. This lower-division work may be taken at any regionally accredited college or university. The professional phase, which is comprised of two years of academic courses and nine months of fieldwork, is offered at UT Pan American and clinical facilities.

Completion of the program is required for eligibility to take the national examination for certification as a Registered Occupational Therapist (OTR). A license to practice in the State of Texas is contingent upon passing this examination.

## Admission Requirements

Requirements for admission to the professional phase of the occupational therapy program includes a minimum of 55 semester hours of prescribed coursework. Academic considerations include a minimum GPA of 3.0 in prerequisite coursework. Additional admission requirements include completion of 20 hours of volunteer and/or observation hours under the general supervision of a registered occupational therapist. Documentation of the volunteer/observation hours, as well as two letters of reference, must be submitted with the admission application.

A personal interview is required of all candidates who meet the basic admission requirements.

Additional considerations include nonacademic achievements, motivation, maturity and communication skills. A maximum of 20 students will be admitted to the Occupational Therapy Program each year. Admission is competitive.

## Prerequisites

The preprofessional phase requires a minimum of 55 semester hours of college-level prerequisites with a GPA of 3.0. The Occupational Therapy Program course requirements are outlined below.
Admission Prerequisites Hours
English ..... 6
(including 3 semester hours of Composition)
United States History ..... 6
United States Government ..... 6
(must include 3 semester hours of Texas Constitution)
College Algebra or higher ..... 3
Human or Comparative Anatomy with laboratory ..... 4
General Biology with laboratory ..... 4
General Chemistry with laboratory ..... 4
General Physics ..... 4
General Psychology ..... 3
Developmental Psychology (Lifespan) ..... 3
Abnormal Psychology ..... 3
Sociology or Anthropology ..... 3
Computer Literacy ..... 3
Statistics ..... 3
A maximum of two courses in science/math and/or
behavioral sciences can be taken by correspondence.

Preprofessional work may be completed at any regionally accredited college or university; however, completion of basic and professional prerequisites does not guarantee admission into the professional phase of the program. Admission is accomplished through an Admissions Committee, which evaluates applications and selects students for the professional phase, which begins in June of each year.

## Application Procedure

Application for admission to the professional phase should be made through the Registrar's Office at UTHSCSA between September 1 and February 1. Application forms are available in the UT Pan American Health Sciences Building Room 2.168. Individuals who are selected for admission will be notified by letter from the Dean of the UTHSC-SA School of Allied Health Sciences in early Spring.

Individuals who have the minimum requirements for admission to the professional phase would file an Application for Admission into the Professional Phase of Degree Programs in Allied Health Science.

It is the responsibility of the applicant to stay informed about possible prerequisite changes for each application period.

Prospective applicants may submit transcripts and a request for an unofficial evaluation to Allied Health

Admissions at UTHSC-San Antonio. All prerequisite coursework must be completed prior to the February 1 application deadline.

## Professional Phase Requirements

Students accepted into the professional phase begin upper-division work the summer before the junior year, taking the final two years of academic and clinical courses at UT Pan American. The final nine months of Level I fieldwork occurs at school, clinical or community sites. Coursework in the professional phase must be taken on a full-time basis and in sequence. The Professional Phase Curriculum is listed below: (Please note that these are UTHSC-SA course designations.)

## Junior Year

Summer Session
CSBL $3016 \quad$ Human Gross Anatomy
OCCT 3005 Medical Terminology 1
PHYS 30123
Fall Semester
OCCT 3001 Health and Occupation
OCCT 3004 Human Neurosciences
in Occupational Therapy
OCCT 3006 Foundations in Occupational Therapy
OCCT 3020 Biomechanical Approach in Occupational Therapy
OCCT 3104 Assistive Technology
in Occupational Therapy

## Spring Semester

MEDI 3007 Clinical Medicine 3
OCCT 3025 Design and Fabrication 3
OCCT 3031 Occupational Therapy in Physical Dysfunction 3
OCCT $3071 \quad$ Practicum in Physical

OCCT 3091 Skils Lab in Physical
PATH 3011 Pathology

## Senior Year

Fall Semester
OCCT 4028 Communications in Occupational Therapy
OCCT 4033 Occupational Therapy in Developmental Dysfunction
OCCT 4082 Management and Consultation in Occupational Therapy 3
OCCT 4093 Skills Lab in Developmental Dysfunction
OCCT $4173 \quad$ Practicum in Developmental Dysfunction

Spring Semester
MEDI 4012 Medical Management
in Psychosocial Dysfunction 2
OCCT $4010 \quad$ Social and Moral Values in the Health Sciences
OCCT 4027 Geriatric Issues
in Occupational Therapy
OCCT 4032 Occupational Therapy in Psychosocial Dysfunction 3
OCCT 4051 Research in Occupational Therapy 3
OCCT 4092 Skills Lab in Psychosocial Dysfunction

## - Fieldwork

OCCT 4071 Fieldwork in Physical Dysfunction
$\begin{array}{llr}\text { OCCT } 4172 & \text { Fieldwork in Developmental } & \\ & \text { Dysfunction } & 12\end{array}$
OCCT 4073 Fieldwork in Required Elective Area

## TOTAL

## 104 hours

The three extended, full-time fieldwork experiences (each being three months in duration) must be complete to fulfill requirements of the program. Fieldwork in Physical Dysfunction, Fieldwork in Developmental Dysfunction and Fieldwork in a Required Elective Area may be attempted only by students who have satisfactorily completed all corresponding academic coursework.

Fieldwork courses will be offered in the summer, fall and spring, allowing students some opportunity to choose the time and the order in which to complete these requirements. The Bachelor of Science degree in Occupational Therapy will be awarded to students at the completion of all fieldwork.

Fieldwork experiences are designed to permit students to demonstrate application of principles and techniques of practice under the supervision of experienced therapists. Fieldwork is accomplished at selected clinical sites. While students are given an opportunity to express their location preference for fieldwork placements, the program cannot grant assurances that any student will be placed in a setting of choice. Students should be prepared to incur expenses for transportation, food and lodging, if fieldwork placements require temporary location outside the Rio Grande Valley.

## Application Period/Deadline

```
Application Period: September 1-February 1
Application Deadline: February 1
```


## Advancement, Promotion, Dismissal

Unconditional advancement in the Occupational Therapy program requires that the student complete the scheduled requirements each semester or summer session with no grades lower than " C " and a minimum cumulative grade point average of 2.0 .

A student who receives an " $F$ " grade in any course will be dismissed. A student who receives a "D" grade in any course or whose grade point average falls below 2.0 will be placed on probation. If a student on probation receives an unsatisfactory grade ("D" or "F") in any course during the probational semester or fails to earn a grade point average of at least 2.0 , he or she may be suspended or dismissed.

A student who receives more than one unsatisfactory grade during any one semester will be subject to suspension or dismissal. Additionally, any student who accumulates three or more unsatisfactory grades ("D" or "F") during his/ her enrollment will be dismissed. A student who has been suspended remains on continuing academic probation following his/her return. Readmission is not automatic. Further academic difficulty for such students will result in dismissal.

Advancement to fieldwork requires satisfactory ("C" or above) completion of theory and skills courses appropriate to the placement.

## Additional Program Costs

In addition to tuition and required fees, students in the professional phase of the Occupational Therapy Program are required to purchase lab equipment, textbooks and manuals essential to the program.

Upon graduation, the student is certified by the program as eligible to sit for the national certification examination offered by the American Occupational Therapy Certification Board. This examination is required as part of the application for licensure to practice in Texas and in most other states.

## Course Descriptions

A listing of UT Health Science Center at San Antonio courses offered by the cooperative program in Occupational Therapy can be found on pages 241-242.

## PHYGICIAN agsistart STUPIES

A Cooperative Program between The University of Texas Medical Center at Galveston
and The University of Texas-Pan American

Dr. Jack Runyan,<br>UT Pan American Project Chair Health Sciences Building, Room 1.126<br>Telephone: 956/381-2438<br>Fax: 956/381-3438<br>E-mail: jrunyan@panam1.panam.edu

Full-time Faculty

Ambriz, Frank, Associate Professor and Associate Chair
Clark, Michael, Associate Professor
Kuhn, Lisa, Associate Professor
Lopez, Jose, Associate Medical Director
Runyan, Jack, Associate Professor
Wilkerson, James, Associate Medical Director

## General Overview

The Department of Physician Assistant Studies within the School of Allied Health Sciences (The University of Texas Medical Branch at Galveston) offers a two-year professional curriculum leading to the Bachelor of Science degree in Physician Assistant Studies and a certificate of completion. The program is offered collaboratively at The University of Texas Medical Branch at Galveston and The University of Texas-Pan American in Edinburg.

The Physician Assistant Studies program is designed to offer the student the opportunity to gain the competencies necessary to practice as an assistant to the primary care physician as defined by the Association of American Medical Colleges and the National Academy of Sciences. The graduate may be involved in assisting the physician in multiple and complex tasks directly related to health and medical care; interviewing, examining, compiling case record data; treatment as approved by the physician; followup care; maintaining a continuity of communications and observations; and coordinating other health-related personnel. In emergency situations and within the defined rules, the graduate may be called upon to carry out
responsibilities specifically assigned to him or her without the immediate surveillance of a physician. Nevertheless, the graduate remains directly responsible to the physicianemployer, who retains complete control over the management of the patient.

## Admission Requirements

All prerequisites must be completed prior to or within the semester of the application deadline. A minimum 2.5 grade point average on a 4.0 scale all previous work in three areas (overall, science and the last 30 college hours) is required. Fluency in Spanish, work experience and residency in predetermined medically underserved counties of South Texas may be considered as selection factors at the Edinburg program.

## Application Process

## Application Deadline

It is to the applicant's benefit to submit his or her application as early as possible, and it is the applicant's responsibility to ensure that all application materials including transcripts are submitted, postmarked and received by the annual deadline, November 1. For the most current information on deadline dates for inquiries, applications and transcripts, please check with the program.

## Application Fee

The University of Texas Medical Branch at Galveston has a $\$ 30$ application fee. Failure to submit the fee will make an application ineligible for further consideration.

## Number of Applicants

The program receives a large volume of completed applications annually. Applications are welcome regardless of age, race, handicap or residency status. However, the program is limited by state law in the number of out-of-state students it may accept (generally three to four, depending on class size). Average class size is 48 students at Galveston and 30 students at Edinburg; a sufficient alternate list is chosen at both sites.

## Letters of Recommendation

The program does not require letters of recommendation, but applicants must list references on their applications. If necessary, the program will contact these persons. When noting references, applicants should try to identify persons who have had recent contact with them and know their abilities and strengths. References may send letters to the Department of Physician Assistant Studies, School of Allied Health Sciences, The University of Texas Medical Branch at Galveston, 301 University Boulevard, Galveston, Texas 77555.

## Applying for Both Galveston and UT Pan American Programs

Students may apply for both the Galveston and UT Pan American programs, and may use the same application form and transcripts for both locations. Applicants must, however, pay an application fee for both sites (\$30 times two). Applicants should make sure they indicate that they are applying for both sites on the application by responding to item \#8 with the codes BSPAS (Galveston) and BSPASP.

## Where to Send Applications and Transcripts

Transcripts and applications should be sent to the Office of the Registrar, The University of Texas Medical Branch at Galveston, 301 University Boulevard, Galveston, Texas 77555. Inquiries about specific prerequisites or grade point averages should be directed to the Director of Student Admissions, School of Allied Health Sciences, The University of Texas Medical Branch at Galveston, 301 University Boulevard, Galveston, Texas 77555-1028. Inquiries about other prerequisites, the program, etc., may be sent to the department in care of the Recruitment Coordinator, School of Allied Health Sciences, Department of Physician Assistant Studies, The University of Texas Medical Branch at Galveston, 301 University Boulevard, Galveston, Texas 77555-1028.

## Interviews and Testing

The program interviews applicants in February and March. Interviews are generally scheduled for Fridays and require that the applicants be on campus all day. Testing, however, is conducted at a separate time. Information on the test dates and locations are located in the application materials.

## Invitation to Interview

Because of the large number of applicants, as well as the costs to the candidates, the program selects the top candidates, based on grade point averages and test scores, for interviews. To be selected for an interview, all of the applicant's testing must have been completed and all transcripts and other materials must have been received by the deadline. The program will send the applicant a letter asking him or her to confirm his or her interview in writing at least one week prior to the interview. Ideally, all candidates selected for interviews will be notified of their interview date by February 1. Since these are group sessions and because of large numbers of candidates, the program is not totally flexible in changing assignments. Notification is handled in writing through correspondence, not by telephone calls or personal visits.

## Interviews

Each candidate is provided three individual interviews of 15 minutes in length. The interviewer pool consists of P.A. faculty members, other allied health faculty members, physicians, health care professionals and/or counselors.

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## Tests

The UTMB-Galveston School of Allied Health Sciences requires applicants to sit for the Health Occupations Aptitude Exam. This exam covers content areas related to natural sciences, academic aptitude, vocational adjustment, spelling and comprehension. It is given numerous times during the year at several locations. Applicants should be attentive to the locations and dates as they relate to the program application deadline (November 1). The cost of the exam is $\$ 40$ at the Galveston and Edinburg sites, with costs varying at other sites and out of state. The registration form for Texas sites is included in the application packet; samples of questions are sent to the applicant with the test date and location confirmation notice (test pass). For more information on the aptitude exam, please contact the UTMB-Galveston Testing Service at 409/ 772-3030. Because the examination is a determining factor in a candidate's eligibility for interviews, tests must be taken prior to deadline dates.

## Retaking the Exam

Applicants who have taken the exam within the past three years are not required to retake the exam. However, applicants may opt to retake the exam. If so, the most recent scores will be recorded.

## Test Scores

Examinees may contact the UTMB-Galveston Testing Service at 409/772-3030 if they have not received their test scores.

## Prerequisites

The pre-professional course of study may be accomplished at any accredited junior college, senior college or university having a lower division, and must include the following:

## Course

English Language Hours

Literature
Communication Skills (includes courses in speech and technical writing)
United States history
United States government (includes courses with consideration of the Constitution of the United States and constitution of the states)
Biological Sciences (including laboratory) 8
Chemistry (including laboratory) 8
Microbiology/Immunology 3
Nutrition 3
Human Anatomy 3
Human Physiology 3

Behavioral Sciences (includes sociology, psychology or cultural anthropology) 6
Computer Sciences (word processing)
Total Prerequisite Hours 60

Note: The above prerequisites represent the minimum prerequisite courses and hours. In some cases, it may be necessary to enroll in a 4-hour science course to satisfy the lab requirement.

Classes in the Physician Assistant Studies Program begin annually in June at the Galveston and Edinburg sites. To be considered for admission, the student must also accomplish the following:

1. Applicants wishing to apply to both programs (UTMB-Galveston and UT Pan American) should submit one application but remit two filing fees.
2. It is the applicant's responsibility to ensure that all application materials, including transcripts, are postmarked by the annual deadline date. For information on deadline dates for inquiries, applications and transcripts, please contact the department.
3. Applicants must achieve acceptable scores on the admission test battery.
4. Applicants must provide acceptable letters of reference when requested by the Department of Physician Assistant Studies.

Documentation must be provided on the application that all prerequisites will be completed, and the applicant must have his or her most recent coursework submitted on an official transcript as soon as the records become available. A complete transcript indicating that all prerequisites have been completed must be received before the student may be considered for the next phase of the admissions process (interviews).

## Professional Course

The professional curriculum, six semesters in length, is as follows: (Please note that these are UTHSC-SA course designations.)

## - Junior Year

## Hours

3303 \& 2018 Anatomy and Physiology 8
3321 \& 3322 Patient Evaluation 4
3617 Clinical Medicine 6
3237 Preventative Medicine/Community Health 2
3125 \& 3226 Human Dynamics 4
3224 Problem Solving Techniques 2
4027 Clinical Methods 2
3029 Pharmacology 5
3662 Introductory Clerkship 5

## Core Curriculum

 9Includes 3021 Legal and Ethical Issues in Health Care, 3924 Introduction to Management Skills in Health Care, 3323 Pathological Processes in Disease, and 3025 Introduction to Research.

Total Hours, Junior Year

## Senior Year

4840 \& 4441 General Medicine Rotation 12
4631 General Pediatric Rotation 6
4633 Obstetrics/Gynecology Rotation 6
$4834 \& 4442$ Surgery Rotation 12
4835 Preceptorship 8
4843 Clinical Elective 8
Total Hours, Senior Year 52
Upon completion of academic and clinical training requirements, the student is conferred the degree of Bachelor of Science in Physician Assistant Studies and a certificate of completion for the professional curriculum.

Students matriculating in the UT Pan American program will be awarded degrees through The University of Texas Medical Branch at Galveston.

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 American Medical Association. The program is fully accredited by the Committee on Accreditation of Allied Health Education Programs, and is a member of the Association of Physician Assistant Programs.

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, administered by the National Board of Medical Examiners. 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.

## Academic Fresh Start

For information on the Academic Fresh Start policy, see page 13.

## Course Descriptions

A listing of UT Medical Branch at Galveston courses offered by the cooperative program in Physician Assistant Studies can be found on pages 242-245.

## REMABMLTATIUE GERMCES <br> PROCRAM

Dr. Bruce Reed, Program Coordinator Health Sciences Building
Room 2.136
Telephone: 956/316-7038
Fax: 956/384-5054
E-mail: bjreed@panam.edu

## Full-time Faculty

Marini, Irmo, Associate Professor
Newman, Jane, Assistant Professor
Reed, Bruce J., Associate 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, after all, the basic premise underlying free enterprise and the

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American way of life. Work is also a major source of selfesteem and identification.

The Rehabilitative Services 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 Rehabilitative Services 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 non-profit 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 Rehabilitative Services Program should apply prior to the year in which they intend to be an upper-division major. Applicants must provide the following to the Program Coordinator by April 1:

1. A completed application form. (Application forms are available in Health Sciences Building Room 2.136.)
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<br>Rehabilitative Services Program<br>The University of Texas-Pan American<br>College of Health Sciences and Human Services<br>Health Sciences Building<br>1201 W. University Drive<br>Edinburg, Texas 78539-2999

Application material will be reviewed by, and a personal interview will be scheduled with, the Admissions Committee. Admission to the Rehabilitative Services Program is competitive and based upon a rating system using the following criteria:
a. Completion of all application material.
b. Grade point average. 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 spring semester in which they apply.

## Degree Requirements

- Major in Rehabilitative Services (BS Degree)


## General Education Requirements <br> 60 hours

Complete the General Education Requirements as shown on pages 70-73 of this catalog. The following are recommended, but not required:

## Recommended General Education Courses

6 hours of Spanish
8 hours of Anatomy and Physiology (BIOL 2403, BIOL 2404)

PSY 1310
ANTH 2323
COMM 1313
PHIL 1320 or PHIL 2330

## Support Courses

18 hours
HRP 2303 Medical Terminology
PSY 1310 Introduction to Psychology
SOC/PSY2301 Statistics
COMM 3316 Intercultural Communication
MANA 3361 Principles of Management
PSY 4313 Abnormal Psychology

Major Electives
3 hours
REHS 4100 Independent Study
REHS 4350 Special Topics
REHS 4360 Assistive Technology
Rehabilitative Services Concentration Courses 36 hours
REHS 2301 Introduction to Rehabilitation
REHS 2311 Disability Policy and Consumerism
REHS 2331 Psychology of Disability (PSY 2331)
REHS 3303 Case Management I
REHS 3320 Family and Disability
REHS 3330 Medical Aspects of Rehabilitation
REHS 4301 Vocational Assessment
REHS 4302 Job Placement
REHS 4303 Case Management II
REHS 4330 Clinical Topics in Rehabilitation
REHS 4602 Clinical Practicum

Electives

## TOTAL

## 7 hours

124 hours
Minor in Rehabilitative Services
Required Courses
12 hours
REHS 2301 Introduction to Rehabilitation
REHS 2311 Disability Policy and Consumerism
REHS $2331 \quad$ Psychology and Disability
REHS 3330 Medical Aspects of Rehabilitation

## Designated Electives

6 hours
6 hours of rehabilitative services from REHS 3320, REHS 4100, REHS 4330, REHS 4350 and REHS 4360.

## Course Descriptions

A listing of courses offered by the Rehabilitative Services Program can be found on pages 253-254.

## GOCIAL WOETK

Dr. James Patrick Mace, Department Chair
Social \& Behavioral Sciences Building
Room 342
Telephone: 956/381-3575
Fax: 956/381-3516
E-mail: socwork@panam.edu

## Full-time Faculty

Cavazos, Alonzo, Assistant Professor
De Hoyos, Librado R. Jr., Associate Professor
Fong, Lina, Associate Professor
Mace, James Patrick, Associate Professor
Solis, Raul H., Assistant Professor

## General Overview

The Department of Social Work offers a Bachelor of Social Work degree program, which is a four-year broad field major with a liberal arts base, a required foundation content in behavioral sciences and professional social work courses. It provides basic knowledge of the social welfare systems, the social work profession and the knowledge, values and skills necessary for social change in practice, and prepares students to pursue graduate study in social work and related professions. The BSW Program is accredited by the Council on Social Work Education.

The department also offers a Master of Science in Social Work, which is detailed in the Graduate Catalog.

The overall goal of the program is to impart knowledge, values, skills and attitudes for beginning professional social work practice with special emphasis on 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 problem-solving approach to assessing needs, intervening, evaluating responses and linking individuals with resources and opportunities for change. Mastery of the required standards for social work practice will be required of the BSW candidate.

A student who wishes to major in Social Work should complete SOCW 1313 Introduction to the Social Work Profession, and after successful completion of the

University College requirements, the student should apply for admission into the Social Work program. Eligibility for field instruction in social work requires an official degree plan and application for the internship on file in the Social Work Office. A 2.5 GPA is required for entry into the major. Academic advisement is required for all Social Work majors. As part of his or her General Education Requirements, the student must take 8 hours in Human Anatomy and Physiology and 6 in Spanish. Students must complete a 480-clock-hour field internship.

Full-time students in the Social Work program are eligible for membership in the Student Association of Social Work (The Social Work Club) and the National Association of Social Workers, Texas Chapter and local NASW Unit. Upon graduation, a BSW student may be licensed as a social worker under the Texas Professional Social Work Act.

## Degree Requirements

## Major in Social Work

## General Education Requirements 60 hours

Complete the requirements shown in the General Education Requirements section shown on pages 70-73 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 other than English
Spanish must be selected.

## Section B. Science and Mathematics

Group 1. Natural Science
BIOL 2403 and BIOL 2404 must be selected.

## Social Work Core Courses

35 hours
(23 hours are advanced)
SOCW 1313 Introduction to the Social Work Profession
SOCW 2314 The Social Welfare Institution
SOCW 2323 Human Behavior and the Social Environment I
SOCW 2324 Human Behavior and the Social Environment II
SOCW 3314 Social Welfare Policy and Programs
SOCW 3323 Social Work Practice I
SOCW 3324 Social Work Practice II
SOCW 3353 Research for the Social Services
SOCW 4314 Social Work Practice III
SOCW 4818 Field Block Placement
Foundation Courses
24 hours
21 advanced hours are required
Group A Statistics 3 hours Select from the following:
SOC 2301 Statistics for the Behavioral Sciences

PSY $2401 \quad$ Basic Statistics for Psychologists
MATH $2330 \quad$ Survey of Elementary Statistics
STAT $2330 \quad$ Survey of Elementary Statistics
Group B - Psychology 6 hours
Select from the following:
PSY 3405 Behavior Management and Modification
PSY 3333 Psychology of Adulthood: Maturity and Old Age
PSY $3340 \quad$ Stress Management
PSY $3343 \quad$ Tests and Measurements in Psychology
PSY 4313 Abnormal Psychology
PSY 4333 Theories of Personality
Group C Sociology 6 hours
Select from the following:
SOC 3324 Sociology of Health
SOC 3353 Juvenile Delinquency
SOC 4310 Sex Roles in Contemporary America
SOC 4313 American Minorities
SOC $4352 \quad$ Social Inequality
Group D-General Topics 9 hours
Select from the following:
ANTH 3375 Mexican-American Folklore
ANTH 4353 Folklore of the Lower Rio Grande Valley
COMM 3315 Communication in Human Relations
COMM 3316 Intercultural Communication
CRIJ $3303 \quad$ Nature of Crime
CRIJ $3341 \quad$ Probation and Parole
HIST $4353 \quad$ History of Mexican Culture
HIST 4354 Contemporary Mexico
PHIL 3320 Symbolic Logic
PHIL 3362 History of Philosophy: Contemporary
PHIL 4310 Theories of Knowledge
POLS 3323 Introduction to Public Administration
POLS 3344 Contemporary Political Theory
POLS 3360 American Minority Politics
POLS 3363 American Hispanic Politics
POLS 3365 Politics of Immigration
SOCW 3333 Special Topics in Social Work Issues
SOCW 3334 Social Work Practice with the Aging Family
SOCW 3345 Occupational Social Work
SOCW 4320 Social Work in Health Care
SOCW 4321 Domestic Violence in Society
SOCW 4352 Substance Abuse Counseling in the Community

General Electives 5 hours

## TOTAL

124 hours

## Course Descriptions

A listing of courses offered by the Department of Social Work can be found on pages 257-259.

## Colley 0 d SCIENCE $\&$ ENGINEERING

## General Overview

The College of Science and Engineering consists of the departments of Biology, Chemistry, Computer Science, Engineering, Mathematics, and Physics and Geology.

## Academic Programs

The college offers the Bachelor of Science in Biology, Chemistry, Computer Science, Electrical Engineering, Manufacturing Engineering, Mathematics, Mechanical Engineering and Physics.

Students may minor in biology, chemistry, computer science, electrical engineering, elementary mathematics, geology, manufacturing engineering, mathematics, mechanical engineering/thermal, physical science, physics and statistics. Secondary teacher certification is available in biology, chemistry, computer information systems, earth science, mathematics, physical science and physics, and elementary teacher certification is available in biology, mathematics and physical science.

Also included in the Biology and Chemistry departments are programs for pre-dental and pre-medical students. Chemistry also has a plan of study for prepharmacy students.

At the graduate level, students can earn master's degrees in Biology, Computer Science and Mathematics. 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 College/General Education requirements in science, mathematics and computer literacy.

New state-of-the-art facilities house the departments of Biology, Chemistry, Engineering and Computer Science.


Dr. John Villarreal, Interim Dean
Science Building
Room 1.352
1201 W. University Drive
Edinburg, Texas 78539-2999
Telephone: 956/381-2404
Fax: 956/381-2428
E-mail: gilpatrick@panam.edu
On the Web: http://www.panam.edu/ colleges/cose.htm

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## Premedical Honors College Program

Some students may qualify for the Premedical Honors College, a cooperative program of UT Pan American and Baylor College of Medicine. Students accepted into the program receive a tuition and fee waiver for four years of undergraduate study at UT Pan American as a Biology or Chemistry major and four years of medical education at Baylor College of Medicine, if they meet minimum requirements.

For application information, telephone the Office of Admissions and Records at 956/381-2206. For specific information about the program, contact Dr. Cindy Martinez Wedig, program coordinator, Science Building, Room 1.308, telephone 956/316-7025.

## 310LOन7

## Dr. Frank Judd, Department Chair

 Science BuildingRoom 2.352
Telephone: 956/381-3537
Fax: 956/381-3657
E-mail: fjudd@panam.edu

## Full-time Faculty

Allison, Terry C., Professor
Brush, Timothy, Associate Professor de la Peña, Antonio M., Assistant Professor
DeYoe, Hudson, Assistant Professor
Edwards, Robert J., Professor
Egle, Ardath L., Lecturer
Farooqui, Mohammed Y. H., Professor
Gunn, Scott J., Associate Professor
Henry, Brad, Associate Professor
Judd, Frank W., Professor
Lonard, Robert I., Professor
Materon, Luis A., Assistant Professor
Murray, Keith D., Assistant Professor
Ortega, Jacobo, Professor
Wedig, Cindy M., Lecturer

## 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 elementary or 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 expected to furnish their own transportation for laboratory sessions and field work.

## Degree Requirements

## ■ Major in Biology

General Education Requirements 60 hours
Complete the General Education requirements as shown on pages 70-73 of this catalog.

Core Courses
9 hours
BIOL 1401 General Biology
BIOL 1402 General Biology
BIOL $4100 \quad$ Biology Seminar

## Designated Electives

## 21 hours

Select one course from each of the following areas:

- Cellular Biology or Microbiology

BIOL 3401 General Microbiology
BIOL3412 Cell Biology
BIOL 3415 Introduction to Molecular Biology

- Genetics or Biological Evolution

BIOL 3301 Biological Evolution
BIOL 3413 Genetics

- Developmental or Morphological Biology

BIOL 2401 Vertebrate Zoology
BIOL 2402 Comparative Vertebrate Anatomy
BIOL 3405 Histology
BIOL 3407 Comparative Embryology
BIOL 3408 Plant Morphology

- Organismal or Environmental Biology

BIOL 2305 Environmental Biology
BIOL 3403 Medical Microbiology and Immunology
BIOL 3409 Ecology
BIOL 3410 A Survey of the Plant Kingdom
BIOL 3414 Invertebrate Zoology
BIOL 4303 Mammalogy
BIOL 4304 Ichthyology
BIOL 4309 Herpetology
BIOL 4314 Plant Taxonomy
BIOL 4402 Marine Zoology

BIOL 4407 Animal Parasitology
BIOL 4408 Plant Pathology
BIOL 4410 Marine Botany
BIOL 4412 Ornithology
BIOL 414 Freshwater Macroinvertebrates
BIOL 4415 Entomology
BIOL 4416 Environmental Toxicology

- Physiology

BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology
BIOL 3411 Mammalian Physiology
BIOL 4305 Plant Physiology
BIOL 4311 Ecological Physiology
Select additional biology courses to complete 30 hours in biology, of which 15 must be advanced.

## Other Requirements

Where appropriate, the following requirements may also be used to satisfy General Education requirements.

## - Mathematics

Complete 6 hours from the following:
MATH 1340 College Algebra
MATH 1356 Trigonometry
MATH 1401 Calculus I
MATH 1402 Calculus II
MATH 2330 Survey of Elementary Statistics

- 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 3 hours
MATH 2330 Survey of Elementary Statistics 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

Major and Minor GPA. A minimum GPA of 2.0 in the required hours for both the major and minor fields is required.

## - Pre-Dental/Pre-Medical/Pre-Optometry

Biology majors who are pre-dental, pre-medical or preoptometry students should include BIOL 2402 in their major and should minor in Chemistry. Additional course requirements include: CHEM 2102, CHEM 2302, CHEM 2103, CHEM 2303, PHYS 1401, PHYS 1402 and MATH 1401, which are required by all UT System medical schools.
(MATH 1401 is not required for admission to Baylor College of Medicine or most dental schools.) Additional courses suggested include: CHEM 3103, CHEM 3303, PSY 1313 or 1323, and an introductory statistics course. Premedical, pre-dental and pre-optometry students who have completed a minimum of 90 hours and the general education requirements at UT Pan American may apply for the BS 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 the major and minor in Biology or Chemistry.

## ■ Major in Biology with Teacher Certification

## Core Courses <br> 9 hours

BIOL 1401
General Biology or
BIOL 1487
BIOL 1402 Honors Biology

BIOL 1488
BIOL 4100 General Biology or Honors Biology
Biology Seminar
Designated Electives 27 hours
Select at least 3 hours from each of the following areas:

- Cellular Biology or Microbiology

BIOL 3401 General Microbiology
BIOL 3412 Cell Biology
BIOL 3415 Introduction to Molecular Biology

- Genetics or Biological Evolution

BIOL 3301 Biological Evolution
BIOL 3413 Genetics

- Vertebrate Morphology or Physiology

BIOL 2401 Vertebrate Zoology
BIOL 2402 Comparative Vertebrate Anatomy
BIOL 2403 Anatomy and Physiology
BIOL 2404 Anatomy and Physiology
BIOL 3411 Mammalian Physiology
BIOL 4311 Ecological Physiology

- Environmental Biology

BIOL 2305 Environmental Biology
BIOL 3409 Ecology
BIOL 4402 Marine Zoology
BIOL 4410 Marine Botany
BIOL 4416 Environmental Toxicology

- Advanced Zoology

BIOL 3405 Histology
BIOL 3407 Comparative Embryology
BIOL3414 Invertebrate Zoology
BIOL 4303 Mammalogy
BIOL 4304 Ichthyology
BIOL 4407 Animal Parasitology
BIOL 4309 Herpetology
BIOL 4412 Ornithology
BIOL 4414 Freshwater Macroinvertebrates
BIOL 4415 Entomology

- Advanced Botany

BIOL 3403 Medical Microbiology and Immunology
BIOL 3408 Plant Morphology
BIOL 4305 Plant Physiology
BIOL 3410 A Survey of the Plant Kingdom
BIOL 4314 Plant Taxonomy
BIOL 4408 Plant Pathology
Select additional biology courses to complete 36 hours in Biology, of which 21 must be advanced.

## Minimum GPA Requirements

Major and Minor GPA. Graduates who seek certification as elementary or secondary teachers must have a minimum GPA of 2.5 in both the major and minor fields.

## Minor in Biology

18 hours in Biology, of which 6 hours must be advanced
$\square$ Teacher Certification with Biology Minor

## - Elementary Plan II

## Required Courses

BIOL 1401 General Biology
BIOL 1402 General Biology
BIOL 3409 Ecology

## Designated Electives

Select one course from the following:
BIOL 2401 Vertebrate Zoology
BIOL 2402 Comparative Vertebrate Anatomy
BIOL 2305 Environmental Biology
BIOL 3301 Biological Evolution
Select one course from the following:
BIOL 3408 Plant Morphology
BIOL 3414 Invertebrate Zoology
BIOL $4314 \quad$ Plant Taxonomy
Select additional advanced hours to complete 9 hours at the advanced level.

## TOTAL

20 hours

## - Secondary Plan II

Required Courses
BIOL 1401 General Biology
BIOL 1402 General Biology
BIOL 3409 Ecology
Designated Electives
Select one course from the following:
BIOL 2401 Vertebrate Zoology
BIOL 2402 Comparative Vertebrate Anatomy

BIOL 2403 Anatomy and Physiology
BIOL 2305 Environmental Biology
BIOL 3301 Biological Evolution
Select one course from the following.
BIOL 3408 Plant Morphology
BIOL 3414 Invertebrate Zoology
BIOL 4314 Plant Taxonomy
Select additional advanced hours to complete 12 hours at the advanced level.

TOTAL
24 hours

## Course Descriptions

A listing of courses offered by the Department of Biology can be found on pages 188-191.

GMEMASTRY

Dr. Jalal Mondal, Department Chair Science Building<br>Room 3.360<br>Telephone: 956/381-3371<br>Fax: 956/384-5006<br>E-mail: jmondal@panam.edu

## Full-time Faculty

Ahmad, Hassan, Associate Professor, Biochemistry
Baca, Ernest J., Professor, Physical Chemistry Bhat, Narayan, Assistant Professor, Organic Chemistry Castrillon, José P., Associate Professor, Organic Chemistry Gregorius, Roberto, Assistant Professor, Polymer Chemistry Mondal, Jalal U., Associate Professor, Inorganic Chemistry Villarreal, John R., Professor, Physical Chemistry, and Interim Dean

## General Overview

The Department of Chemistry offers a major leading to a Bachelor of Science degree and a minor in chemistry. The department also offers programs of study for pre-medical 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.

## Degree Requirements

## Major in Chemistry

## General Education Requirements: 60 hours

Complete the requirements shown in the General Education Requirements section on pages 70-73 of this catalog EXCEPT for the Sections, Groups or Areas listed below, 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 2202 Analytical Chemistry
CHEM 2201 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 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 4204 Instrumental Analysis
CHEM 4203 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 45 advanced hours or to acquire greater depth in a specific area of chemistry.)

CHEM 3303 Biochemistry
CHEM 3103 Biochemistry Lab
CHEM 3306 Polymer Science and Engineering
CHEM 4202 Chemistry Problems II
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

124 hours

Students are required to select electives that will bring their total number of advanced hours to 45 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

Major and Minor GPA. A minimum GPA of 2.0 is required for both major and minor fields.

## - Pre-Dental and Pre-Medical

Chemistry majors in pre-dental and pre-medical programs are required to complete 18 hours of biology, of which 6 hours must be advanced. These hours must include BIOL 2402.

## - Teacher Certification in Chemistry

There are two options available to students who desire teaching certification with Chemistry as the teaching field.
Secondary Option I: 37-38 hours in Chemistry, of which 25-26 hours must be advanced.
Secondary Option II: 28 hours in Chemistry, of which 16 hours must be advanced.

Students seeking teacher certification must have a minimum GPA of 2.25 in both the major and minor fields. They should consult with the Teacher Certification Office regarding other specific requirements.

## - Pre-Pharmacy

Students are required to complete the following courses in their freshman and sophomore years.
Freshman Year: ENG 1301, ENG 1302; CHEM 1301, CHEM 1101, CHEM 1302, CHEM 1102; BIOL 1401, BIOL 1402; MATH 1401; HIST 2313, HIST 2314; Kinesiology 2 hours.

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Sophomore Year: English (Sophomore Literature) 6 hours; CHEM 2302, CHEM 2303, CHEM 2102, CHEM 2103; MATH 2330; PHYS 1401; POLS 2313, POLS 2314; Kinesiology 2 hours.

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, 3 hours of social science electives, and 6 hours of cultural heritage electives, while UT Austin requires 9 hours of electives. Texas Southern University requires 1 hour of medical terminology and a 3-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

18 hours of Chemistry, of which 6 must be advanced.

## Course Descriptions

A listing of courses offered by the Department of Chemistry can be found on pages 192-193.

## GOMPUTER SGIENGE

Prof. Pearl W. Brazier, Department Chair Engineering Building<br>\section*{Room 3.295}<br>Telephone: 956/381-2320<br>Fax: 956/384-5099<br>E-mail: brazier@panam.edu

## Full-time Faculty

Abraham, John P., Associate Professor
Brazier, Pearl W., Assistant Professor
Chen, Zhixiang, Assistant Professor
Egle, David L., Lecturer
Fowler, Richard H., Associate Professor
Fox, Richard K., Assistant Professor
Gilpin, Jerry M., Lecturer
Lawrence-Fowler, Wendy A., Assistant Professor
Meng, Xiannong, Assistant Professor
Nelson, Michael L., 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.

The Department of Computer Science offers a Bachelor of Science degree with a major in Computer Science based upon the IEEE Computer Society and the Association for Computing Machinery recommendations for curricula and courses. As part of their program, students may choose to complete a senior software development project under the direction of a faculty member.

The department also offers a Master of Science in Computer Science. For more information, consult the Graduate Catalog.

## Mission/Goals/Objectives

The curriculum in computer science is designed to provide the student with marketable expertise to enter the computer field, to develop the skills necessary to adapt to the rapidly changing nature of the field, and/or to prepare students to pursue graduate study in computer science.

The department also provides service courses in support of the general education computer literacy requirement and the degree requirements of other disciplines that require more extensive knowledge of computing.

## Departmental Admission Requirements

Students must have computer experience equivalent to CSCI 1300 and must have completed or be concurrently enrolled in MATH 1340 before enrolling in CSCI 1380, Computer Science I.

## 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. A lab of Pentium-based PCs donated by the Intel Corporation is dedicated specifically to the Computer Science program. Advanced courses and research efforts are supported by departmental Unix workstations.

## Degree Requirements

The Department of Computer Science offers a 36-hour major leading to a Bachelor of Science degree and an 18hour minor in computer science. The Computer Science major can be completed to fulfill an Option I plan for secondary teacher certification. The department also offers a 24-hour Option II plan for secondary teacher certification.

Students are required to complete a minor and are
encouraged to select the minor from a supporting discipline. Typical minors have been mathematics, business administration, computer information systems and electrical engineering; however, a variety of other minors can support the degree. The degree requires 9 hours of mathematics, including calculus and discrete structures, and 3 hours of a designated elective. Students are encouraged to complete their calculus requirement by selecting a minimum of 6 hours from MATH 1357, MATH 1401 and MATH 1402.

Students should seek advisement from the Computer Science faculty in 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.

## Major in Computer Science

Students wishing to major in Computer Science must complete the university General Education 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 the calculus sequence.

## General Education Requirements 60 hours

Complete the requirements shown in the General Education Requirements section shown on pages 70-73 of this catalog EXCEPT for the Sections, Groups, or Areas listed below, which must be satisfied only as shown below.

## Section A. Humanities

Group 4. Other Humanities
Selections are recommended or required from the following area:

## Area 2, Communication

COMM 1303 recommended; COMM 1313 required for teacher certification.

## Section C. Computer Literacy

CSCI 1380 or higher CSCI course may be recommended by the department for students with prior computer experience.

## Computer Science Core Courses <br> 24 hours

CSCI 1380 Computer Science I
CSCI 1381 Foundations of Computer Science
CSCI $2330 \quad$ C++ Programming
CSCI 2333 Computer Organization and Assembly

- Language

CSCI 2380 Computer Science II
CSCI 3333 Algorithms and Data Structures
CSCI 3334 Systems Programming
CSCI 3336 Organization of Programming Languages
Designated Electives in Computer Science 12 hours
Select 12 hours from any advanced CSCI courses.

## Designated Elective

3 hours
Select 3 hours from the following: any Computer Science course other than CSCI 1300, ENG 3333, CIS 2310, ELEE 2330, MATH 2345, or MATH 3337.

Mathematics 9 hours minimum
MATH 3373 Discrete Structures
Select one sequence from the following:
Sequence 1 (recommended). Complete at least two of the following courses:
MATH 1357 Precalculus Mathematics
MATH 1401 Calculus I
MATH 1402 Calculus II
Sequence 2. Student may substitute for Sequence 1 with advisor approval:
MATH 1321 Business Algebra
MATH 1322 Business Calculus
Other Requirements
6-15 hours
Students must complete all Computer Science Core Courses with a grade of "C" or better.

Students must select electives to complete a total of 45 advanced hours in their degree. Depending on the number of required advanced courses for the minor and the selection of elective hours in the major, and the selection of Other Course Requirements, this will require from 6 to 15 hours of advanced electives.

## TOTAL

132-141 hours

## Major in Computer Science with Computer Engineering Emphasis

Although UT Pan American does not offer a computer engineering degree, through a careful choice of electives from advanced computer science, mathematics, electrical engineering and physics, a student can design a degree that can be marketed as Computer Science with a Computer Engineering emphasis.

## Complete Major Course Requirements for BS degree in Computer Science 36 hours

Complete the required Computer Science Core Courses
(24 hours, 9 advanced)
Choose the following to fulfill Computer Science Advanced
Electives
(12 advanced hours)
CSCI 4335
Computer Architecture
CSCI 4334 Operating Systems
CSCI 4345 Computer Networks
CSCI 3340 Software Engineering

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Complete the requirements for the Electrical Engineering minor
( 18 hours, 6 advanced)
Complete the following Mathematics courses:
(17 hours, 6 advanced)
MATH 1401 Calculus I
MATH 1402 Calculus II
MATH 2345 Linear Algebra
MATH 3373 Discrete Structures
MATH 3337 Applied Statistics I or
ELEE 3340 Probability and Random Processes
Select Advanced General Electives (12 advanced hours)
Choose from advanced Computer Science, advanced Electrical Engineering or MATH 3349

## Complete University College/General Education Requirements <br> (54 hours) <br> Choose PHYS 2301, PHYS 2101 and PHYS 2302, PHYS 2102 for Lab Science

TOTAL
137 hours (45 advanced)

## - Teacher Certification in Computer Information Systems

Teacher certification in Computer Information Systems is required for teachers of Computer Science I and II in the secondary schools. This certification also allows teachers to teach the computer literacy course in the junior high school. To graduate with completion of the 36 -hour Option I plan for secondary certification in Computer Information Systems, students must be admitted to the Teacher Education Program and complete the Computer Science degree as specified below:

## Core Courses

24 hours
CSCI 1380 Computer Science I
CSCI 1381 Foundations of Computer Science
CSCI $2330 \quad$ C++ Programming
CSCI 2380 Computer Science II
CSCI 2333 Computer Organization and Assembly Language
CSCI 3333 Algorithms and Data Structures
CSCI 3334 Systems Programming
CSCI 3336 Organization of Programming Languages

## Designated Electives

12 hours
Select 12 advanced hours in Computer Science. (CIS 3335 may be used to partially satisfy this requirement.)

## Professional Education Courses 18 hours

Admission to Teacher Education is required prior to enrolling in the following courses.

EDCI 4301
EDCI 4302
EDCI 4307
EDCI 4308
EDCI 4641

Foundations of Education Educational Psychology Secondary Curriculum: Internship I Secondary Curriculum: Internship II Secondary Internship II

The Option I plan does not require a second teaching field; however, students are encouraged to seek a second field. The Option II certification in Computer Information Systems program is described in the section below under minors.

## - Minor in Computer Science with Teacher Certification in Computer Information Systems (Option II):

## Core Courses

15 hours
CSCI 1380
Computer Science I
CSCI 1381 Foundations of Computer Science
CSCI $2330 \quad$ C++ Programming
CSCI 2380 Computer Science II
CSCI 3333 Algorithms and Data Structures

## Designated Electives

9 hours
Select 9 advanced hours in Computer Science (up to 6 hours from CIS 3335, CIS 3338 and CIS 4308 may be used to partially satisfy this requirement).

## - Minor in Computer Science

Core Courses
12 hours
CSCI 1380
Computer Science I
CSCI 1381 Foundations of Computer Science
CSCI $2330 \quad$ C++ Programming
CSCI 2380 Computer Science II
Designated Electives 6 hours
Select 6 hours of advanced Computer Science courses.

## Course Descriptions

A listing of courses offered by the Department of Computer Science can be found on pages 205-207.

## ENCINAENTM

Dr. Edwin W. LeMaster, Department Chair Engineering Building<br>Room 1.29<br>Telephone: 956/381-3510<br>Fax: 956/381-2606<br>E-mail: elemaster@panam.edu

## Full-time Faculty

Electrical Engineering
Diong, Bill M., Assistant Professor
Foltz, Heinrich D., Assistant Professor
John, Eugene B., Assistant Professor
LeMaster, Edwin W., Professor
Thompson, Michael W., Associate Professor
Manufacturing Engineering
Bose, Subhash C., Professor
Hsieh, Sheng-Jen, Assistant Professor
Nambiar, Rajiv V., Associate Professor
Mechanical Engineering
Crown, Stephen W., Assistant Professor
Freeman, Robert A., Associate Professor
Jones, Robert E., Jr., Assistant Professor
Lumsdaine, Arnold, Assistant Professor
Mahdi, Hashim S., Associate Professor

## General Overview

UT Pan American offers Bachelor of Science degrees in electrical, manufacturing and mechanical engineering that are equivalent in scope to engineering programs at other institutions in Texas. All three BS degrees have accreditation from the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET) effective May 1996. These engineering curricula provide 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. 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 U.S. and Mexico.

## Mission

The University of Texas-Pan American Engineering Department will provide a quality engineering education to prepare students for the practice of engineering with sufficient depth to continue their education beyond the baccalaureate degree. A strong laboratory component in the curriculum, integrated with industrial internships or co-op experience, will provide engineering skills that enhance the understanding of the applications of engineering sciences. Engineering design with a strong emphasis on verbal and written communication will be stressed in all aspects of the curriculum.

## Degree Requirements

## Basic Engineering

## 36 hours

All students must complete a Basic Engineering requirement (35-36 hours) composed of the following courses:
CHEM 1301/1101 General Chemistry I*
CHEM 1302/1102 General Chemistry II*
CSCI 1380
CSCI 2325 Computer Science I or Survey of Elementary Scientific Programming*
(NOTE: CSCI 1380 is required for Electrical Engineering majors.)
ENG 1301 Composition*
ENG 1302 Rhetoric*
MATH 1401 Calculus I*
MATH 1402 Calculus II
PHYS 2301 Intermediate Physics
PHYS 2101 Intermediate Physics Laboratory
ENGR 1101 Introduction to Engineering
ENGR 1221 Engineering Graphics
MECE 2440 Engineering Materials (Manufacturing and Mechanical Engineering only) or
ELEE 2330 Digital Systems Engineering I
(Electrical Engineering only) and
ELEE 2130 Digital Systems Laboratory
(Electrical Engineering only)
> * This course also satisfies the university's General Education 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 and CHEM 1302/1102, HIST 2313 and modern language. Additional information

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about advanced standing credit is given on pages 48-49 of this catalog.

## General Education Requirements

40 hours
(20 hours of the General Education Requirements have been satisfied as part of the Basic Engineering Requirements above.) All students must complete the university's General Education requirements shown on pages 70-73 of this catalog EXCEPT for the Sections, Groups and Areas noted below which must be satisfied as shown.

## Section A. Humanities

Group 4. Other Humanities
Must select Area 2, Communication, and Area 3, Philosophy.
Area 2: COMM 1303
Area 3: PHIL 2390

## Section B. Science and Mathematics

Group 1. Natural Science
CHEM 1301/1101 and CHEM 1302/1102*

## Section C. Computer Literacy

Electrical Engineering Majors: CSCI 1380*
Manufacturing and Mechanical Engineering Majors: CSCI 1380 or CSCI 2325*

## Section E. Social Sciences

Group 3. Other Social Sciences
Must select Area 2: ECO 1301

* These courses satisfy the Basic Engineering requirements on page 157.

Other Non-Engineering Courses
11 hours
The following non-engineering courses are also required in all programs:
MATH 2401
MATH 3349 Differential Equations
PHYS 2302 Intermediate Physics
PHYS 2102 Intermediate Laboratory

## Electrical Engineering Program

Electrical Engineering is an extremely broad field that encompasses power generation and transmission, computer systems, control systems, telecommunications and electronic applications in such diverse areas as medicine, geophysics and aerospace. Because of the widespread need for electrical engineers, there are more graduates in this field than in any other in engineering.

The total course requirements for the Bachelor of Science in Electrical Engineering consist of the following:

Electrical Engineering Program
148 hours
Basic Engineering 36 hours
Other General Education Requirements 40 hours
Other Non-Engineering Requirements
Program Requirements
11 hours
61 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. Program requirements for this degree are shown below.

## Program Requirements

61 hours

Core Courses
55 hours
MECE 2405 Engineering Mechanics
ELEE 2420 Network Theory I
ELEE 2321 Network Theory II
ELEE 3301 Electronic Circuits I
ELEE 3302 Electronic Circuits II
ELEE 3315 Electromagnetic Engineering
ELEE 3225 Electrical Engineering Laboratory I
ELEE 3330 Electrical Engineering Laboratory II
ELEE 3340 Probability and Statistics for Electrical Engineers
ELEE 3435 Microprocessor Programming
ELEE 4303 Digital Systems II
ELEE 4308 Electromechanical Systems
ELEE 4321 Automatic Control
ELEE 4328 Solid State Electronics
ELEE 4351 Communication Theory
ENGR 4461 Senior Design Project I
ENGR 4462 Senior Design Project II

## Technical Electives

6 hours
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.

## - Manufacturing Engineering Program

Manufacturing Engineering is a new engineering specialty; UT Pan American offers the only 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 Bachelor of Science in Manufacturing Engineering consist of the following:

## Manufacturing Engineering Program <br> Basic Engineering <br> Other General Education Requirements <br> Other Non-Engineering Requirements Program Requirements <br> 149 hours <br> 36 hours <br> 40 hours <br> 11 hours 62 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 program requirements for this degree are shown below.

## Program Requirements

62 hours
ENGR 2101 Engineering Technology Laboratory
MECE 2405 Engineering Mechanics
ENGR 4461 Senior Design Project I
ENGR 4462 Senior Design Project II
ELEE 3305 Electrical Systems
ELEE 3306 Electronic Systems
MANE 2430 Manufacturing Processes or
MANE 2364 Manufacturing Processes and
MANE 2164 Manufacturing Processes Lab
MANE 2332 Engineering Statistics
MANE 2340 Fundamentals of Industrial Engineering
MANE 3331 Process and Product Design
MANE $3400 \quad$ Computer Aided Design or
MANE 3365 Computer Aided Design and
MANE 3165 Computer Aided Design Lab
MANE 3401 Computer Aided Manufacturing or
MANE 3343 Computer Aided Manufacturing and
MANE 3143 Computer Aided Manufacturing Lab
MANE 4311 Quality Control
MANE 4321 Automation Systems
MANE 4331 Manufacturing Planning and Control
MECE 2321 Mechanics of Solids
MECE 3437 Thermal and Fluid Sciences

## Technical Electives

6 hours
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.

## Mechanical Engineering Program

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 mechanical systems for energy conversion, power generation, environmental control and transportation, as well as materials handling and processing. Mechanical engineers usually work closely with engineers having other specializations.

The total course requirements for the Bachelor of Science in Mechanical Engineering consist of the following:

## Mechanical Engineering Program <br> Basic Engineering <br> Other General Education Requirements <br> Other Non-Engineering Requirements Program Requirements <br> 148 hours <br> 36 hours <br> 40 hours <br> 11 hours <br> 61 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.

Program requirements for this degree are shown below.

## Program Requirements

## 61 hours

Core Courses
55 hours
ENGR 2101
MECE 2303
MECE2304
ENGR 4461 Senior Design Project I
ENGR 4462 Senior Design Project II
ELEE 3305 Electrical Systems
ELEE 3306 Electronic Systems
MANE 2430 Manufacturing Processes
MECE 2321 Mechanics of Solids
MECE 2335 Thermodynamics I
MECE 3336 Thermodynamics II
MECE 3315
MECE 3115
MECE 3320
MECE 3350
MECE 3360
MECE 3160
MECE 3380
MECE 4140 Mechanical Systems Laboratory
MECE 4350 Machine Elements

## Technical Electives

6 hours
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.

## Minors in Engineering

## - Minor in Electrical Engineering

This minor provides a background in electrical engineering designed to allow the student to understand the basic operation of computers and other electronic devices. It is intended to support majors in Computer Science, Physics or other related fields. The minor requires a total of

18 hours of electrical engineering courses, of which 9 must be at the advanced level. The required courses include laboratories so that a student will have a strong hands-on experience with electronics and computer hardware. The minor requires certain support courses as prerequisites as shown below.

## Required Courses:

ELEE 2330 Digital Systems Engineering I
ELEE 2130 Digital Systems Laboratory
ELEE 2420 Network Theory I or
ELEE 3305 Electrical Systems
ELEE 3306 Electronic Systems
Approved advanced level Electrical Engineering Courses*
Prerequisites:
CSCI $1380 \quad$ Computer Science I
MATH 1401 Calculus I
MATH 1402 Calculus II
PHYS 1402 General Physics

* Total number of hours must meet the 18 hour minimum requirement. Advanced level courses selected with Electrical Engineering advisor's approval.


## - Minor in Mechanical Engineering/Thermal

This minor provides a background in thermal sciences, fluids and heat transfusion. It is intended to support majors in Chemistry, Physics and Mathematics. The minor requires a total of 18 hours of mechanical engineering courses, of which 6 must be at the advanced level. The minor requires certain support courses as prerequisites as shown below.

## Required Courses

MECE 2335 Thermodynamics I
MECE 2440 Engineering Materials
MECE 3315 Fluid Mechanics
MECE 3115 Fluid Mechanics Laboratory
MECE 3336 Thermodynamics II
MECE 3360 Heat Transfer
MECE 3160 Heat Transfer Laboratory

## Prerequisites

MATH 2401
Calculus III
MATH 3349 Differential Equations
PHYS 1401 General Physics

## - 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, 6 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

11 hours
MANE 2332 Engineering Statistics
MANE 2430 Manufacturing Processes or
MANE 2364 Manufacturing Processes and MANE 2164 Manufacturing Processes Lab
MECE 2440 Engineering Materials

## Designated Electives

7 hours
ENGR 3101 Engineering Projects Laboratory
MANE $3400 \quad$ Computer Aided Design or MANE 3365 Computer Aided Design and MANE 3165 Computer Aided Design Lab
MANE 3401 Computer Aided Manufacturing or MANE 3343 Computer Aided Manufacturing and
MANE 3143 Computer Aided Manufacturing Lab
MANE 3331 Process and Product Design
MANE 4311 Quality Control
MANE 4331 Manufacturing Planning and Control

## Course Descriptions

Courses offered by the Department of Engineering can be found under their respective headings in the Course Descriptions section beginning on page 179 .

MATHEMATHGS

Dr. Kichoon Yang, Department Chair Southwick Hall<br>Room 105<br>Telephone: 956/381-3452<br>Fax: 956/384-5091<br>E-Mail: kyang@math.panam.edu

## Full-time Faculty

Alvarado, Frances E. M., Lecturer
Alvarado, Jose F., Lecturer
Arnold, Sharon T., Lecturer
Bernard, John E., Associate Professor
Brazier, Gerald, Associate Professor
Chance, Joseph E., Professor
Ebaseh-Onofa, Benjamin O., Associate Professor
Fatehi, Mohammed, Lecturer
Gilpin, Jerry M., Lecturer

Gonzalez, Roberto, Lecturer
Heller, William, Assistant Professor
Hinthorn, Richard W., Lecturer
Jabs, David, Lecturer
Knobel, Roger, A., Jr., Associate Professor
Martinez, Guillermo, Lecturer
Neelley, Ben R., Lecturer
Olsen, Janet, Lecturer
Paredes, Miguel, Associate Professor
Pontius, Paul, Assistant Professor
Poorkarimi, Hushang, Associate Professor
Ramirez, Olga M., Associate Professor
Sifuentez, Cristela, Lecturer
Skow, Donald P., Senior Lecturer
Taylor, Monty B., Associate Professor
Torres, J. Rene, Lecturer
Von Kuster, Lee, Assistant Professor
Watkins, William, Professor
Wiener, Bella, Senior Lecturer
Wiener, Joseph, Professor
Yang, Kichoon, Professor

## Degree Programs

The Department of Mathematics offers a major in Mathematics leading to a Bachelor of Science degree and minors in mathematics, elementary mathematics and statistics. In addition, it offers courses for students seeking a second teaching field for teacher certification in mathematics.

The Mathematics major requires coursework in mathematics, computer science and statistics. In addition, Mathematics majors have options available for elective coursework both in and out of the department. Mathematics majors should work closely with their departmental advisor in order to choose these electives.

All students majoring in Mathematics must complete the General Education requirements, as well as requirements for a minor. Students are encouraged to consult with their academic advisors regarding their minor. In addition, students must complete the mathematics requirements with a 2.25 GPA and with at least 21 advanced-level mathematics hours excluding the following courses: MATH 3310, MATH 3312, MATH 3313, MATH 3315, MATH 3316 and MATH 3319.

Depending on their professional goals, students must complete MATH 3349 or the combination of MATH 3304 and MATH 3311 to meet their mathematics requirements. Students considering graduate work or work in industry are encouraged to take MATH 3349, MATH 3337 and MATH 3338.

Students may seek teacher certification in addition to completing the degree requirements. They should consult with the Teacher Certification Office regarding specific
requirements. For example, a student seeking teacher certification (Option I*) must complete MATH 3304, MATH 3311 and either COMM 1303 or COMM 1313 (as partial fulfillment of the General Education requirements), in addition to Professional Education requirements: EDCI 4301, EDCI 4302, EDCI 4307, EDCI 4308 and EDCI 4641 (which may partially fulfill advanced elective requirements).

* Option I as outlined in UT Pan American Secondary Education Program; see the College of Education Advisement Center for details.


## Degree Requirements

## ■ Major in Mathematics

## General Education Requirements <br> 60 hours

Complete the requirements shown in the General Education Requirements section shown on pages 70-73 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
At least one course in Physics is required.
Group 2. Mathematics
MATH 1401 is the recommended beginning course.

## Section C. Computer Literacy

A course from the Department of Computer Science above CSCI 1300 is required.

Students seeking teacher certification should consult the Teacher Certification Office for other General Education requirements.

## Major Course Requirements

36 hours
Core Courses:
24 hours
MATH $1401 \quad$ Calculus I
MATH 1402 Calculus II
MATH 2401 Calculus III
MATH 2345 Elementary Linear Algebra
MATH/STAT 4339 Probability and Statistics
MATH $4351 \quad$ Modern Algebra (grade of "C" or better)
MATH 4357 Real Analysis (grade of "C" or better)

## Designated Electives:

## 3-6 hours

MATH $3349 \quad$ Differential Equations or
MATH 3304 Geometry and
MATH 3311 The Organizational Structures and Processes of Mathematics
Other Electives
6-9 hours
Other advanced Mathematics electives (6 or 9 hours,
depending on which designated electives are taken). These electives cannot include MATH 3310, MATH 3312, MATH 3313, MATH 3315, MATH 3316 or MATH 3319. Students seeking teacher certification should consult with the Teacher Certification Office regarding Mathematics courses required for certification.

Other Requirements:

- Completion of the major course requirements with a 2.25 or better.
- Completion of at least 21 hours of advanced-level Mathematics excluding the following courses: MATH 3310, MATH 3312, MATH 3313, MATH 3315, MATH 3316 and MATH 3319.
- Completion of requirements for a minor.


## TOTAL

124 hours

## - Minor in Mathematics

Students may seek a minor in mathematics with or without teacher certification. A minor in mathematics for those students not seeking certification requires 24 semester hours of mathematics, of which 9 hours must be advanced, including MATH 1401, MATH 1402, MATH 2401, MATH 2345 , and 9 approved advanced semester hours of mathematics.

Students seeking teacher certification under Option II* must complete an additional 3 approved advanced semester hours of mathematics, and must include both MATH 3304 and MATH 3311 (for a total of 27 hours). For additional certification requirements, a student should consult with the Teacher Certification Program Office.

In either case, MATH 3310, MATH 3312, MATH 3313, MATH 3315, MATH 3316 and MATH 3319 are not appropriate or approved for the advanced-level mathematics requirements in this minor.

* Option II as outlined in UT Pan American Secondary Education Programs. See the College of Education Advisement Center for details.


## - Mathematics Specialization for the Bachelor in Interdisciplinary Studies (Minor in Elementary Mathematics)

A specialization in elementary mathematics requires 27 hours of which 18 must be advanced.

Required Courses
27 hours
MATH 1340 College Algebra
MATH 2306 Foundations of Mathematics I
MATH 2307 Foundations of Mathematics II
MATH 3310 Foundations of Mathematical Problem Solving
MATH 3312 Foundations of Measurement and Informal Geometry

MATH 3313
MATH 3315
MATH 3316

MATH 3319 Mathematical Foundations of Structures and Processes of Mathematics

## - Minor in Statistics

The minor in statistics is available for students in mathematics and science as well as for students in other disciplines needing statistics as a tool. The minor requires 18 approved hours of mathematics, statistics or computer science, of which 9 must be advanced. These 18 hours cannot be used simultaneously to fulfill requirements in the student's major. MATH 3310, MATH 3312, MATH 3313, MATH 3315, MATH 3316 and MATH 3319 are not appropriate or approved for the advanced-level math requirements in this minor. The degree plan must include the following courses:

| MATH/STAT 2330 | Survey of Elementary Statistics |
| :--- | :--- |
| MATH/STAT 3337 | Applied Statistics I |
| MATH 3338 | Applied Statistics II |
| MATH 4339 | Probability and Statistics |
| STAT 4336 | Sampling |

## Course Descriptions

A listing of courses offered by the Department of Mathematics can be found on pages 232-235.

> PHMSGG $\mathbb{X}$ C=OLogr

Dr. Samuel E. Giuoco, Department Chair Physical Science Building Room 123<br>Telephone: 956/381-3521<br>Fax: 956/381-2423<br>E-mail: edith@panam.edu

## Full-time Faculty

Bhatti, Mohammad Idrees, Assistant Professor
Giuoco, Samuel E., Assistant Professor
Glaser, Frederic M., Associate Professor
Mazariegos, Ruben A., Assistant Professor
Rieken, Eric R., Assistant Professor
Shockley, William C., Jr., Assistant Professor

## 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 and physics. The geology minor is compatible with major fields of study in physics, chemistry, education, biology, engineering and business.

There are secondary and elementary teaching fields in physics, physical science and earth science. The department also offers courses in subject areas of astronomy and geography.

Students are expected to furnish their own transportation and expenses on field trips.

## Degree Requirements

## Major in Physics

## General Education Requirements

60 hours
Complete the General Education requirements as shown on pages 70-73 of this catalog.

## Core Courses

28 hours
PHYS 1401 General Physics
PHYS 1402 General Physics
PHYS 2301 Intermediate Physics
PHYS 2101 Intermediate Laboratory
PHYS 2302 Intermediate Physics
PHYS 2102 Intermediate Laboratory
PHYS 3301 Electromagnetic Theory
PHYS 3303 Heat and Thermodynamics
PHYS 3304 Optics
PHYS 3305 Mechanics
Designated Electives
8 hours
PHYS 3402 Modern Physics or
PHYS 4301 Topics in Modern Physics and
PHYS 3101 Junior Laboratory
4 advanced hours of Physics

## TOTAL

124 hours

## - Minor in Physics

## Required Courses

PHYS 1401 General Physics (or equivalent)
PHYS 1402 General Physics (or equivalent)
PHYS 2301 Intermediate Physics
PHYS 2101 Intermediate Laboratory
PHYS 2302 Intermediate Physics
PHYS 2102 Intermediate Laboratory

## Designated Electives

PHYS 3402 Modern Physics or
$\begin{array}{ll}\text { PHYS 4301 } & \text { Topics in Modern Physics and } \\ \text { PHYS 3101 } & \text { Junior Laboratory }\end{array}$
2 additional advanced hours of physics

## TOTAL

## 22 hours

## - Minor in Geology

24 hours in Geology, of which 8 hours must be advanced

## Required Courses

GEOL 1401 Physical Geology
GEOL 1402 Historical Geology
GEOL 2402 Structural Geology
GEOL 3401 Mineralogy

## Designated Electives

8 additional hours of Geology

## TOTAL

24 hours

## - Minor in Physical Science (Option I)

22 hours in the physical sciences, of which 6 hours must be advanced

## Required Courses

| CHEM 1301/1101 | General Chemistry I |
| :--- | :--- |
| CHEM 1302/1102 | General Chemistry II |
| PHYS 1401 | General Physics |
| PHYS 1402 | General Physics |

## Designated Electives

6 advanced hours in any combination of advanced courses in Chemistry, Geology, Physical Science and Physics

## TOTAL <br> 22 hours

## - Minor in Physical Science (Option II)

25 hours in the physical sciences, of which 9 hours must be advanced

## Required Courses

PSCI 1421 Physical Science
PSCI $1422 \quad$ Physical Science
GEOL 1401 Physical Geology or
GEOL 1403 Environmental Geoscience I
GEOL 1402 Historical Geology or
GEOL 2401 Geomorphology
GEOL 3403 Oceanography
GEOL 3401 Mineralogy
PSCI 4311 Topics in Physical Science

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PHYS 3101 Junior Laboratory
PHYS 3102 Junior Laboratory

## TOTAL

## 25 hours

## - Teacher Certification with a Minor

 in Physics- Secondary Option II


## Required Courses

PHYS 1401 General Physics or equivalent
PHYS 1402 General Physics or equivalent
PHYS 2301 Intermediate Physics
PHYS 2101 Intermediate Laboratory
PHYS 2302 Intermediate Physics
PHYS 2102 Intermediate Laboratory

Designated Electives
12 advanced hours in physics

## TOTAL

## - Teacher Certification in Physical Science

## - Elementary Option III

24 hours in physical sciences, of which 8 must be advanced

## Required Courses

CHEM 1301/1101
CHEM 1302/1102
PHYS 1401 General Physics
PHYS 1402 General Physics

## Designated Electives

8 advanced hours in any combination of advanced courses in chemistry, physical science and physics

## TOTAL

## 24 hours

## - Secondary Option II

24 hours in the physical sciences, of which 8 must be advanced

## Required Courses

CHEM 1301/110
CHEM 1302/1102
PHYS 1401
PHYS 1402

Designated Electives
8 advanced hours in any combination of advanced courses in chemistry and physics

TOTAL

## - Teacher Certification in Earth Science

## - Secondary Option I

36 hours in geology, of which 20 hours must be advanced

## Required Courses

GEOL 1401 Physical Geology
GEOL 1402 Historical Geology
GEOL 2401 Geomorphology
GEOL 2402 Structural Geology
GEOL 3401 Mineralogy
GEOL 3403 Oceanography
GEOL 3404 Stratigraphy-Sedimentation
GEOL 3405 Petrology
Designated Electives
4 additional advanced hours of geology

TOTAL
36 hours

## - Secondary Option II

24 hours in geology, of which 12 hours must be advanced

## Required Courses

GEOL 1401 Physical Geology
GEOL 1402 Historical Geology
GEOL 2401 Geomorphology or
GEOL 2402 Structural Geology
GEOL 3401 Mineralogy
GEOL 3403 Oceanography
GEOL 3405 Petrology

TOTAL
24 hours

Students in either certification option should take as recommended electives 4 hours of astronomy and 3 hours of physical geography in preparation for the ExCET test.

## Course Descriptions

A listing of courses offered by the Department of Physics and Geology can be found on pages 220-221 (GEOL) and 246-247 (PHYS).

# ColleydSECIAL8 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 70 of this catalog.

## Academic Programs

The college offers the Bachelor of Arts in Anthropology, Political Science and Psychology; the Bachelor of Science in Psychology and in Sociology; and the Bachelor of Science in Criminal Justice in two majors - Corrections and Police Administration.

Students may minor in anthropology, criminal justice, military science, political science, psychology or sociology. Secondary teacher certification is available in political science, psychology, social sciences and sociology.

At the graduate level, students can earn master's degrees in Criminal Justice, Psychology, Public Administration and Sociology. 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 General Education requirements for physical activity and social science courses (see pages 71-72) by taking classes within the college.

Additionally, the Department of Military Science provides Army Reserve Officers' Training Corps training that can lead to commissioning in the Army, Army Reserve or National Guard.


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On the Web: http://www.panam.edu/
colleges/cosbs.cfm

## Interdisciplinary programes

## Bachelor of Applied Arts \& Sciences (BAAS)

## Program Description

The Bachelor of Applied Arts and Sciences (BAAS) is an inverted degree program specifically designed to allow individuals who hold an Associate of Applied Arts and Sciences degree from an accredited institution to earn a degree with a major in a technical or an occupational area. The BAAS degree will be awarded to individuals who successfully complete (a) the liberal arts-based general education requirement ( 60 hours), (b) one of the professional development sequences (36 hours), and (c) the occupational or vocational emphasis (48-51 hours) completed in meeting the requirements for an Associate of Applied Arts and Sciences degree.

## Program Requirements

## Academic Foundations <br> 60 hours

Complete the General Education requirements as shown on pages 70-73 of this catalog.

## * BAAS Professional Development Sequences

Before entering the BAAS Program, the student is assigned a degree counselor. 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
ECO $3356 \quad$ Business Enterprise and Public Policy
MANA 3335 Organizational Communication
POLS 3323 Introduction to Public Administration
POLS 3324 Government Organizations and Administrative Theory or
POLS 3343 International Politics or
POLS 3360 American Minority Politics
SOC $3324 \quad$ Sociology of Health or
SOC 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 Personnel Management
Group B
MARK 3371 Principles of Marketing
MARK 3373 Industrial Marketing
Group C
FINA 3381 Money and Banking (prereq. ECO 2354)
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., 6 and 12).

## Other

MANA 3361 Principles of Management and Organizational Behavior
MANA 3362 Personnel Management

## Designated Electives

12 hours

## Business

3 hours of advanced electives in business
Political Science
Select at least 6 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 History
Select 3 hours from the following:
HIST 4313 20th Century America, 1917 to the Present
HIST 4325 The American Southwest after 1821
HIST $4353 \quad$ History of Mexican Culture
HIST 4354 Contemporary Mexico
HIST 4363 U.S.-Latin American Relations
HIST 4374 The Caribbean and Central America

## Free Electives

## 6-0 hours

6-0 advanced hours, to be selected in conference with academic advisor (hours required depend upon amount of language taken above)

- Occupational or Vocational

48-51 hours Emphasis
Occupational or vocational work completed as a part of BAAS degree

## Other Requirements

At least 45 hours must be at the advanced level.

## TOTAL

124 hours
Baccalaureate in General Studies (BGS)

## Program Description

Students taking the Baccalaureate in General Studies will complete a minimum of 124 hours with at least 45 hours of advanced coursework. Students will develop their academic programs in consultation with the Dean of the College of Social and Behavioral Sciences and the academic advisors for the department(s) involved.


## Program Requirements

## General Education requirements:

60 hours
Complete the General Education requirements as shown on pages 70-73 of this catalog

## Required Courses:

## 54 hours

Discipline \#1 18 hours (minimum of 12 adv. hours)
Discipline \#2 18 hours (minimum of 12 adv . hours)
Discipline \#3 18 hours (minimum of 12 adv . hours)
The disciplines selected must come from those taught in the Colleges of Arts and Humanities, Science and Engineering, and Social and Behavioral Sciences. The following is a list of departments along with some potential areas of study:

## Art

Anthropology
Biology
Chemistry
Communication
Journalism
Speech Communication
Theatre
Computer Science
Criminal Justice
Engineering
English
Modern Languages
French
Spanish
History
Mathematics
Music
Physics and Geology
Geology
Physical Science
Physics
Philosophy
Political Science
Psychology
Sociology

## Free Electives

10 hours, including a minimum of 9 advanced hours
Other Requirements
A minimum of 45 hours of advanced coursework
TOTAL
124 hours

## GEIMINAL JUSTAE

Dr. Daniel K. Dearth, Department Chair Social and Behavioral Sciences Building Room 321<br>Telephone: 956/381-3566<br>Fax: 956/381-2490<br>E-mail: dkd@panam.edu

Full-time Faculty

Dearth, Daniel K., Associate Professor
Ethridge, Philip, Associate Professor
O’Day, Patrick M., Assistant Professor
Sorensen, Jonathan R., Associate Professor

## General Overview

The Department of Criminal Justice prepares the student to enter such careers as law enforcement, probation, parole, institutional corrections, youth services and police management at all levels of government. The well-rounded academic experience provided by the Department of Criminal Justice serves as a strong foundation for those students interested in graduate study in the social sciences.

The Department of Criminal Justice is one of the largest in Texas and enjoys an excellent reputation. Graduates have been successfully placed in agencies at all levels of government, in addition to pursuing graduate work.

A criminal justice minor is also available to supplement the academic experience of students majoring in Political Science, Sociology, Psychology, Business and related disciplines.

Students interested in a criminal justice career may select a major in Criminal Justice with one of two concentrations - Police Administration or Corrections. For further information, please contact the department at 956/ 381-3566.

## Degree Requirements

## ■ Major in Criminal Justice

## - Corrections Concentration

The Bachelor of Science in Criminal Justice with a concentration in Corrections is designed to prepare students for a career in adult or juvenile corrections. Students will be
prepared for entry-level positions in correctional institutions, probation, parole and community-based correctional programs. The degree requires a minimum of 129 semester hours, including an 18 -hour minor and a minimum of 45 advanced hours (3000- or 4000-level courses).

As part of the degree, students will complete 30 semester hours in Criminal Justice, 15 hours in social science support courses, 3 hours of advanced elective, 3 hours of statistics and an 18-hour minor. All Criminal Justice majors must also complete 60 semester hours under the University College/General Education requirements of the university.

General Education Requirements 60 hours
Students will meet the University College and General Education requirements on pages 70-73 with the following deviations:

## Humanities

Students must select one course each from
Area 2
COMM 1303 Presentational Speaking or
COMM 1313 Fundamentals of Speech Communication and Area 3
PHIL 2390 Professional Ethics

## Social Sciences

Students must select two courses (no more than one course from each of the two areas selected) from
Area 1
ANTH 1323 Introduction to Anthropology or
ANTH 2323 Mexican-American Culture
Area 3
PSY 1310 Introduction to Psychology
or Area 4
SOC 1313 Introduction to Sociology or
SOC 1323 Current Social Issues or
SOC 2333 Marriage and Family
Criminal Justice Core Courses 9 hours
CRIJ 1301 Introduction to Criminal Justice
CRIJ 3303 Criminology
CRIJ 3304 Criminal Justice Research Methods
Corrections Concentration Courses 12 hours
CRIJ 2313 Correctional Systems and Practices
CRIJ 2335 Legal Aspects of Corrections
CRIJ 3345 Correctional Organization and Administration
CRIJ 4343 Current Issues in Corrections
Criminal Justice Elective Groups 9 hours
(A minimum of 6 hours must be advanced and a minimum of 3 hours must be taken from each group.)

- Criminal Justice:

| CRIJ 1306 | Court Systems and Practices |
| :--- | :--- |
| CRIJ 1307 | Crime in America |
| CRIJ 4361 | Comparative Criminal Justice Systems |
| CRIJ 4362 | Special Topics in Criminal Justice* |
| CRIJ 4363 | Independent Studies in Criminal Justice* |
| CRIJ 4464 | Field Internship Experience |

- Corrections:

CRIJ 1313 Juvenile Justice System
CRIJ 3341 Probation and Parole
CRIJ 3344 Techniques of Interviewing
CRIJ 4341 Correctional Casework and Counseling

- Police Administration:

CRIJ 1310 Fundamentals of Criminal Law
CRIJ 2314 Criminal Investigation
CRIJ 2323 Legal Aspects of Law Enforcement
CRIJ 2326 Police-Community Relations
CRIJ 2328 Police Systems and Practices
CRIJ 4311 Police Organization and Administration
CRIJ $4312 \quad$ Police Supervision
CRIJ 4313 Current Issues in Law Enforcement

* Can be taken only once for credit.


Social Science Support Courses
Political Science
(select one course from the following)
POLS 4321 American Constitutional Law: Civil Liberties
POLS 4367 American Judicial Processes
Group Two: 3 hours
(select one course from the following)
POLS 3314 American State and Local Government
POLS 3316 American Public Policy
POLS 3323 Introduction to Public Administration
POLS 3324 Government Organization and Administrative Theory
POLS 3325 Public Personnel Administration
POLS 4384 Seminar in Local Government

Psychology
Advanced elective
Sociology

Free Elective

Other Courses
Introductory Statistics
(select one course from the following)
SOC $2301 \quad$ Statistics for the Behavioral Sciences
PSY $2401 \quad$ Basic Statistics for Psychologists
QUMT 2341 Elementary Business and Economic Statistics
MATH 2330 Survey of Elementary Statistics.

## Minor

## 18 hours

Each student must complete a minor. The specific minor should be selected in consultation with the student's faculty advisor. Departments vary in the number of required total hours and number of required advanced hours in their minor. Criminal Justice majors must take a minimum of 9 advanced hours as part of their minor field. Some departments offer minors requiring only 6 advanced hours but allow additional advanced hours to be selected from electives. Criminal Justice majors cannot minor in Criminal Justice.

## Summary of Degree Requirements

Total hours for degree: 129
Total advanced hours: 45
Criminal Justice hours: 30 (18 advanced, 12 non-advanced)
Social science support course hours: 15 (15 advanced)
Free elective hours: 3 (3 advanced)
Other course hours: 3 (3 non-advanced)
University College/General Education hours: 60 (60 nonadvanced)
Minor hours: 18 (minimum 9 advanced)

## $\checkmark$ Police Administration Concentration

The Bachelor of Science in Criminal Justice with a concentration in Police Administration is designed to prepare students for a career in law enforcement at all levels of government. Students will be prepared for entry-level positions in federal, state, county and municipal law enforcement agencies. The degree requires a minimum of 129 semester hours, including an 18-hour minor and a minimum of 45 advanced hours (3000- or 4000-level courses).

As part of the degree, students will complete 30 semester hours in Criminal Justice, 15 hours in social science support courses, 3 hours of advanced elective, 3 hours of statistics and an 18 -hour minor. All Criminal Justice majors must also complete 60 semester hours under the University College/General Education requirements of the university.

## General Education Requirements 60 hours

Students will meet the University College and General Education requirements on pages 70-73 with the following deviations:

## Humanities

Students must select one course each from
Area 2
COMM 1303 Presentational Speaking or
COMM 1313 Fundamentals of Speech Communication
and Area 3
PHIL 2390 Professional Ethics

## Social Sciences

Students must select two courses (no more than one course
from each of the two areas selected) from
Area 1
ANTH 1323 Introduction to Anthropology or
ANTH 2323 Mexican-American Culture
Area 3
PSY 1310 Introduction to Psychology
or Area 4
SOC 1313 Introduction to Sociology or
SOC 1323 Current Social Issues or
SOC 2333 Marriage and Family
Criminal Justice Core Courses
9 hours
CRIJ 1301 Introduction to Criminal Justice
CRIJ 3303 Criminology
CRIJ 3304 Criminal Justice Research Methods
Police Administration Concentration Courses 12 hours
CRIJ 2323 Legal Aspects of Law Enforcement
CRIJ $2328 \quad$ Police Systems and Practices
CRIJ 4311 Police Organization and Administration
CRIJ 4313 Current Issues in Law Enforcement

## Criminal Justice Elective Groups 9 hours

(A minimum of 6 hours must be advanced and a minimum of 3 hours must be taken from each group.)

- Criminal Justice:

CRIJ 1306 Court Systems and Practices
CRIJ 1307 Crime in America
CRIJ 4361 Comparative Criminal Justice Systems
CRIJ 4362 Special Topics in Criminal Justice*
CRIJ 4363 Independent Studies in Criminal Justice*
CRIJ 4464 Field Internship Experience

* Can be taken once only for credit.
- Corrections:

CRIJ 1313 Juvenile Justice System
CRIJ 2313 Correctional Systems and Practices
CRIJ 2335 Legal Aspects of Corrections
CRIJ $3341 \quad$ Probation and Parole
CRIJ 3344 Techniques of Interviewing
CRIJ 3345 Correctional Organization and
Administration
CRIJ 4341 Correctional Casework and Counseling
CRIJ 4343 Current Issues in Corrections

- Police Administration

CRIJ 1310 Fundamentals of Criminal Law
CRIJ 2314 Criminal Investigation
CRIJ 2326 Police-Community Relations
CRIJ 4312 Police Supervision

## Social Science Support Courses <br> Political Science <br> 15 hours <br> Group One: <br> 6 hours <br> 3 hours

(select one course from the following)
POLS 4321 American Constitutional Law: Civil Liberties
POLS 4367 American Judicial Processes
Group Two: 3 hours
(select one course from the following)
POLS 3314 American State and Local Government
POLS 3316 American Public Policy
POLS 3323 Introduction to Public Administration
POLS 3324 Government Organization and Administrative Theory
POLS 3325 Public Personnel Administration
POLS 4384 Seminar in Local Government

## Psychology <br> 3 hours

Advanced elective

## Sociology

6 hours
Advanced electives

Free Elective
3 hours
Advanced elective

## Other Courses

3 hours
Introductory Statistics
(select one course from the following)
SOC 2301 Statistics for the Behavioral Sciences
PSY $2401 \quad$ Basic Statistics for Psychologists
QUMT 2341 Elementary Business and Economic Statistics
MATH 2330 Survey of Elementary Statistics.

## Minor

## 18 hours

Each student must complete a minor. The specific minor should be selected in consultation with the student's faculty advisor. Departments vary in the number of required total hours and number of required advanced hours in their minor. Criminal Justice majors must take a minimum of 9 advanced hours as part of their minor field. Some departments offer minors requiring only 6 advanced hours but allow additional advanced hours to be selected from electives. Criminal Justice majors cannot minor in Criminal Justice.

## Summary of Degree Requirements

Total hours for degree: 129
Total advanced hours: 45
Criminal Justice hours: 30 (18 advanced, 12 non-advanced)
Social science support course hours: 15 (15 advanced)
Free elective hours: 3 (3 advanced)
Other course hours: 3 (3 non-advanced)
University College/General Education hours: 60
(60 non-advanced)
Minor hours: 18 (minimum 9 advanced)

## - 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 |  |  |
| :--- | :---: | :--- |
| CRIJ | 1301 | Introduction to Criminal Justice |
| CRIJ | 1328 | Police Systems and Practices |
| CRIJ | 2313 | Correctional Systems and Practices |

Criminal Justice Electives 9 hours
(select three courses from the following)
CRIJ 3303 Criminology for Criminal Justice
CRIJ 3304 Criminal Justice Research Methods
CRIJ 3341 Probation and Parole
CRIJ 3344 Techniques and Interviewing
CRIJ 3345 Correctional Administration
CRIJ 4311 Police Organization and Administration
CRIJ 4312 Police Supervision
CRIJ 4313 Current Issues in Law Enforcement
CRIJ 4341 Correctional Casework and Counseling
CRIJ 4343 Current Issues in Corrections
CRIJ 4361 Comparative Criminal Justice Systems
CRIJ 4362 Special Topics in Criminal Justice*
CRIJ 4363 Independent Studies in Criminal Justice*
CRIJ 4464 Field Internship Experience

* Can be taken once only for credit.


## Course Descriptions

A listing of courses offered by the Department of Criminal Justice can be found on pages 204-205.

## millarit SGIFNGE <br> Army Reserve Officers' Training Corps (ROTC)

Lt. Col. Ronald Welch, Department Chair Southwick Hall<br>Room 207<br>Telephone: 956/381-3600<br>Fax: 956/381-3603<br>E-mail: rotc@panam.edu

Full-time Faculty
Miles, Michael G., Master Sergeant (R), Senior Military Instructor
Rutledge, David, Major (R), Assistant Professor of Military Science
Welch, Ronald W., Lieutenant Colonel, Professor of Military Science

## 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 Army Reserve Officers' Training Corps and service as a commissioned officer will benefit the student in civilian as well as in military science 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; and
4. develop a strong sense of personal honor, integrity and individual responsibility.

## ROTC Faculty Advisory Committee

The Reserve Officers' Training Corps (ROTC) Faculty Advisory Committee, composed of 9 advisors from different departments, serves as liaison with the Department of Military Science and helps provide guidance on career opportunities with the Army or Reserve/National Guard for students of other departments at The University of Texas-
Pan American.
Advisors are:
Dr. Carl R. Carlan - School Administration and Supervision

Dr. Dean R. Canty - Music
Dr. Samuel E. Giuoco - Physics and Geology
Wil Martin - Art
James H. McKone - Sports Information
Gwendolynne Skinner - Nursing
Donald Skow - Mathematics
Dr. Mark Winkel - Psychology and Anthropology To be named

## Army Scholarship Program

Any student who meets 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 or the National Guard combined with College ROTC. In addition to Reserve or National Guard pay, the student receives ROTC pay. In the SMP, 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 Reserve Officers' Training Corps (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 General Education.

## 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 and 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 grade point average of 2.0.
6. Sign an Advanced ROTC and Commissioning Agreement.
7. Successfully complete four semesters of Advanced ROTC courses.
8. Successfully complete ROTC Advanced 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 Communications Skills, Human Behavior, Computer Literacy, Mathematics and Military History.

## Minor Requirements

18 hours: ROTC 3202 plus 16 hours of advanced Military Science courses.

## Course Descriptions

A listing of courses offered by the Department of Military Science can be found on page 255.

## POLHAGA SGIENGE

Dr. J. L. Polinard, Department Chair Social and Behavioral Sciences Building Room 208<br>Telephone: 956/381-3341<br>Fax: 956/381-2805<br>E-mail: polinard@panam.edu

## Full-time Faculty

Alianak, Sonia, Lecturer
Bokina, John, Professor
Freeman, Samuel, Associate Professor
Hinojosa, Jose R., Associate Professor
Lamare, James, Professor
Maloy, T. Edwin, Assistant Professor
Mendenhall, Kurt, Assistant Professor
Morgan, Glynn, Associate Professor
Mounce, Gary, Associate Professor
Polinard, J.L., Professor
Tschoepe, Gary J., Assistant Professor
Turk, William, Lecturer
Wrinkle, Robert, Professor

## General Overview

Political Science majors and minors take courses in five fields:

- American Government and Politics, including local, state and national
- Comparative Government and Politics
- International Relations
- Political Theory and Methodology, including scope and methods of political science, and
- Public Administration

The 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 956/3813341.

## Degree Requirements

## Major in Political Science

General Education Requirements 60 hours
Complete the General Education requirements as shown on pages 70-73 of this catalog.

## Core Courses <br> 6 hours

POLS 2313 United States and Texas Government and Politics
POLS 2314 United States and Texas Government and Politics

Designated Electives
30 hours
Complete the following ( 24 hours must be advanced):
6 hours in American Government and Politics
3 hours in Comparative Government
3 hours in International Relations
3 hours in Political Theory and Methodology
3 hours in Public Administration
6 hours from two of the following three areas:
a. Introduction to Political Science (POLS 1333);
b. Introduction to Political Economy (POLS 2334);
c. Economics (ECO 1301, ECO 2301 or ECO 2302)

6 hours of advanced Political Science electives

## Other Required Courses

3 hours of Introductory Statistics (MATH/STAT 2330 or PSY 2401 or SOC 2301 or QUMT 2341)

TOTAL
124 hours

## - Minor in Political Science

18 hours in Political Science, of which 9 hours must be advanced

## Required Courses

POLS 2313 United States and Texas Government and Politics
POLS $2314 \quad$ United States and Texas Government and Politics

## Designated Electives

POLS 1333 Introduction to Political Science or POLS 2334 Political Economy
9 advanced hours in Political Science

## Teacher Certification in Political Science

Secondary Plan I: The student must major in Political Science to be certified to teach political science. See major requirements.
Secondary Plan II: No certification plan is offered to political science minors.

## - Teacher Certification in Social Sciences:

Secondary Plan II: 48 hours in social sciences. Must include the courses shown below and 24 hours to be divided among advanced history and political science courses with not fewer than 9 hours in each field.

## Required Courses:

ECO 1301 Introduction to Economics or
ECO 2302 Principles of Economics II
GEOG 2313 Principles of Physical Geography
HIST 2313 American Heritage I
HIST 2314 American Heritage II
HIST 3330 A General Survey of the History of Texas
POLS 2313 United States and Texas Government and Politics
POLS 2314 United States and Texas Government and Politics
SOC 1313 Principles of Sociology

## Course Descriptions

A listing of courses offered by the Department of Political Science can be found on pages 247-250.


## PSTGHOLOのY \& ATHROPOLOGY

Dr. Gary T. Montgomery, Department Chair<br>Social and Behavioral Sciences Building Room 356<br>Telephone: 956/381-3329<br>Fax: 956/381-3333<br>E-mail: psyanthdept@panam.edu<br>On the Web: http://www.panam.edu/dept/ psych-anth

Dr. Shelia Pozorski, Anthropology Coordinator<br>Social and Behavioral Sciences Building<br>Room 329<br>Telephone: 956/381-2572<br>Fax: 956/381-3333<br>E-mail: psyanthdept@panam.edu<br>On the Web: http://www.panam.edu/dept/ psych-anth/anthindex.html

## PSYCHOLOCY

## Full-time Faculty

Alamia, Alfonso J., Assistant Professor
Aldridge, James W. Jr., Professor
Arnold, Bill R., Professor
Cain, Roy E., Associate Professor
Cuellar, Israel, Associate Professor
Gonzalez, Genaro, Professor
Heslet, Lynette, Assistant Professor
James-Aldridge, Valerie G., Associate Professor
Jou, Jerwen, Associate Professor
Kendrick, Sherrill, Assistant Professor
Montgomery, Gary T., 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 BS 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, community, social and developmental psychology. Students pursuing the BS 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.

## 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. The department also provides instruction leading toward teacher certification in 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 Catalog.) The department 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 Department of Psychology and Anthropology recognizes that its faculty have 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 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. 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 largely serves.

## Degree Requirements

## - Major in Psychology (BA Degree)

## General Education Requirements <br> 60 hours

Complete the General Education requirements as shown on pages 70-73 of this catalog.

## Core Courses

## 16 hours

PSY 1310 Introduction to Psychology
PSY $2401 \quad$ Basic Statistics for Psychologists
PSY 2325 Experimental Psychology
PSY 3343 Tests and Measurements in Psychology
PSY 4313 Abnormal Psychology

## Electives

## 15 hours

Select 15 hours of psychology courses, 9 of which must be advanced.

## Other Requirements

Completion of 15 hours of advanced coursework in psychology as a part of the requirements noted above

TOTAL 124 hours

## 176 - The College of Social \& Behavioral Sciences

## Major in Psychology (BS Degree)

## General Education Requirements

60 hours
Complete the General Education requirements as shown on pages 70-73 of this catalog.

## Core Courses

## 13 hours

PSY 1310
PSY 2401
PSY 2325
PSY 3343 Tests and Measurements in Psychology

## Designated Electives

18 hours
Select one course from each of the following sets: 12 hours
PSY 4313 Abnormal Psychology or
PSY 4333
PSY 3353
PSY 3373
PSY 4319
PSY 4320
PSY 4318
PSY 4363
Theories of Personality
Physiological Psychology or
Sensation and Perception
Cognitive Processes or Memory
Theories of Learning or
Systems and Theories in Psychology
Select one course from the following: 3 hours
PSY 3324 Social Psychology
PSY 2336 Developmental Psychology: Adolescence
PSY 3337 Developmental Psychology: Lifespan
PSY 3332 Developmental Psychology: Infancy and Childhood
PSY 3333 Psychology of Adulthood: Maturity and Old Age
Select one course from the following: 3-4 hours
PSY $2331 \quad$ Psychology of Disability
PSY $3340 \quad$ Stress Management
PSY $3345 \quad$ Psychology of Learning
PSY 3405 Behavior Modification

## Electives 6 hours

Select 6 hours of Psychology courses.

## Other Requirements

11-20 hours
Select two sequences from the following:
BIOL $1401 \quad$ General Biology and
BIOL 1402 General Biology
CHEM 1301/1101 General Chemistry/General Chemistry Lab and
CHEM 1302/1102 General Chemistry/General Chemistry Lab
PHYS 1401 General Physics and
PHYS 1402 General Physics
NOTE: One of the sequences may be taken as a part of the
General Education requirements above.
Select one additional course from the following:
A biology, chemistry or physics course which is sophomore (2000) level or higher, or a computer science course above CSCI 1300.

## - Minor in Psychology

18 hours in Psychology, of which 6 must be advanced

## Required Course

PSY 1310 Introduction to Psychology

## ■ Teacher Certification in Psychology

## Secondary Option II

24 hours in psychology, of which 12 must be advanced

## Required Course

PSY 1310 Introduction to Psychology

## Course Descriptions

A listing of Psychology courses can be found on pages 250252.

## ANTHROPOLOGY

Full-time Faculty<br>Glazer, Mark, Professor<br>Pozorski, Shelia, Professor<br>Pozorski, Thomas, Professor<br>Schaefer, Stacy, Associate Professor

## 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 topics 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 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 Anthropology Program recognizes that its faculty have 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 largely serves.

## Degree Requirements

The department offers a major in Anthropology leading to the Bachelor of Arts degree.

## Major in Anthropology

## General Education Requirements 60 hours

Complete the General Education requirements as shown on pages 70-73 of this catalog.

Core Courses
15 hours
ANTH 1323
ANTH 1324
ANTH 1342 Introduction to Archaeology
ANTH 1353 Introduction to Folklore
ANTH 4345 Anthropological Theory and Methodology

## Designated Electives

## 21 hours

Select 21 hours from Anthropology; a substitution for one 3hour course may be chosen from the following list of related courses.
Related courses:
ENG 3319 Descriptive Linguistics
ENG 3321 Language and Culture
Other Requirements
A minimum of 18 hours in Anthropology must be at the advanced level.

## TOTAL

## 124 hours

## - Minor in Anthropology

18 hours in Anthropology, of which 6 hours must be advanced

## Required Courses

ANTH 1323 Introduction to Cultural Anthropology
ANTH 1324 Human Evolution
ANTH 4345 Anthropological Theory and Methodology

## Course Descriptions

A listing of Anthropology courses can be found on pages 183-185.

## SOClOLOCY

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## Full-time Faculty

Bastida, Elena, Professor
Guerra, Ramon S., Assistant Professor
Himmel, Kelly F., Assistant Professor
Liebowitz, Stephen W., Associate Professor
Raajpoot, Uzzer A., Associate Professor
Richardson, D. Chad, Professor
Torres, Cruz C., Associate 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. In addition, it offers sociology courses for students seeking a second teaching field for teacher certification in secondary education.

NOTE: Students seeking teacher certification in sociology must have a second teaching field, excluding psychology. Please see the department chair for details.

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

## Major in Sociology

## General Education Requirements

60 hours
Complete the General Education Requirements as shown on pages 70-73 of this catalog.

Core Courses
15 hours
SOC 1313
SOC 2301
SOC 3301
SOC 4333
SOC 4352
Principles of Sociology Statistics for the Behavioral Sciences Methods of Social Research
Social Theory Social Inequality

15 hours
Designated Electives
Select 15 hours of Sociology, of which at least 9 hours must be advanced.

## Electives

34 hours

TOTAL
124 hours

## - Minor in Sociology

18 hours in Sociology, of which 9 hours must be advanced; must include the following:
SOC 1313 Principles of Sociology
SOC 4333 Social Theory or
SOC 4352 Social Inequality

## - Minor in Sociology with Teacher Certification

Secondary Option II: 24 hours in Sociology.
Required:
SOC 1313 Principles of Sociology
SOC 1323 Current Social Issues
SOC $4310 \quad$ Sex Roles in Contemporary America
SOC 4323 The Mexican-American People
SOC 4360 Sociology of Education
Select 9 hours from the following:
SOC 2301 Statistics for the Behavioral Sciences
SOC $2324 \quad$ Social Psychology
SOC 2333 Marriage and Family
SOC 3324 Sociology of Health
SOC 3326 Contemporary Issues in Social Psychology
SOC 3333 Urban Sociology
SOC 3343 Social Issues in Japan
SOC 3393 Sociology of Aging
SOC $4310 \quad$ Sex Roles in Contemporary America
SOC 4313 American Minorities
SOC 4333 Social Theory
SOC 4373 Latin American Society
SOC $4380 \quad$ Social Protest and Social Movements
SOC 4383 Independent Studies

## Course Descriptions

A listing of courses offered by the Department of Sociology can be found on pages 256-257.

## Accalmic Course Descriptions



## Gourse Gocies

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 of 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 page 35.

The subject codes listed below correspond to the following subjects and departments:

| Subject |  |  |  |
| :---: | :---: | :---: | :---: |
| Code | Subject | Department, College or Program | Page |
| ACC | Accounting | Accounting and Business Law | 182 |
| ANTH | Anthropology | Psychology and Anthropology | 183 |
| ART | Art | Art | 185 |
| ASTR | Astronomy | Physics and Geology | 188 |
| BIBL | Bible | History and Philosophy | 188 |
| BIOL | Biology | Biology | 188 |
| BLAW | Business Law | Accounting and Business Law | 191 |
| CHEM | Chemistry | Chemistry | 192 |
| CHIN | Chinese | Modern Languages and Literature | 193 |
| CIS | Computer Information Systems | Computer Information Systems and Quantitative Methods | 194 |
| CLSC | Clinical Lab Sciences | Clinical Laboratory Sciences | 195 |
| COMD | Communication Disorders | Communication Sciences and Disorders | 196 |
| COMM | Communication | Communication | 197 |
| CRIJ | Criminal Justice | Criminal Justice | 204 |
| CSCI | Computer Science | Computer Science | 205 |
| DIET | Dietetics | Dietetics | 207 |
| ECO | Economics | Economics, Finance and General Business | 208 |
| ED | Education | Educational Psychology | 210 |
| EDAC | Education: Alternative Certification Program | Curriculum and Instruction | 210 |
| EDBE | Education: Bilingual Education | Curriculum and Instruction | 211 |
| EDCI | Education: Curriculum and Instruction | Curriculum and Instruction | 211 |
| EDEC | Education: Early Childhood | Curriculum and Instruction | 213 |
| EDUK | Kinesiology Education | Health and Kinesiology | 213 |
| ELEE | Electrical Engineering | Engineering | 213 |
| ENG | English | English | 215 |


| Subject |  |  |  |
| :---: | :---: | :---: | :---: |
| Code | Subject | Department, College or Program | Page |
| ENGR | General Engineering | Engineering | 218 |
| FINA | Finance | Economics, Finance and General Business | 218 |
| FREN | French | Modern Languages and Literature | 219 |
| GEOG | Geography | Physics and Geology | 220 |
| GEOL | Geology | Physics and Geology | 220 |
| GERM | German | Modern Languages and Literature | 221 |
| HIST | History | History and Philosophy | 221 |
| HLTH | Health | Health and Kinesiology | 224 |
| HONR | Honors | Honors Studies Program | 224 |
| HRP | Health-Related Programs | College of Health Sciences and Human Services | 225 |
| INTB | International Business | Management, Marketing and International Business | 225 |
| JAPN | Japanese | Modern Languages and Literature | 226 |
| KIN | Kinesiology | Health and Kinesiology | 226 |
| MANA | Management | Management, Marketing and International Business | 228 |
| MANE | Manufacturing Engineering | Engineering | 229 |
| MARK | Marketing | Management, Marketing and International Business | 231 |
| MATH | Mathematics | Mathematics | 232 |
| MECE | Mechanical Engineering | Engineering | 235 |
| MUS | Music | Music | 236 |
| NURS | Nursing | Nursing | 239 |
| OCCT | Occupational Therapy* | Occupational Therapy | 241 |
| PHAS | Physician Assistant Studies | Physician Assistant Studies | 242 |
| PHIL | Philosophy | History and Philosophy | 245 |
| PHYS | Physics | Physics and Geology | 246 |
| POLS | Political Science | Political Science | 247 |
| PSCI | Physical Science | Physics and Geology | 250 |
| PSY | Psychology | Psychology and Anthropology | 250 |
| QUMT | Quantitative Methods | Computer Information Systems and |  |
|  |  | Quantitative Methods | 252 |
| READ | Reading | Curriculum and Instruction | 253 |
| REHS | Rehabilitative Services | Rehabilitative Services | 253 |
| ROTC | Reserve Officers' Training Corps | Military Science | 255 |
| RUSS | Russian | Modern Languages and Literature | 255 |
| SOC | Sociology | Sociology | 256 |
| SOCW | Social Work | Social Work | 257 |
| SPAN | Spanish | Modern Languages and Literature | 259 |
| SPED | Special Education | Educational Psychology | 261 |
| STAT | Statistics | Mathematics | 262 |

*Other UT Health Science Center-San Antonio course codes in Occupational Therapy include CSBL, INTD, MEDI, PATH and PHYS.

## Accounting

## ACC $2329 \quad$ Fundamentals of Managerial Accounting

(Texas Common Course Number is ACCT 2301.)
Fall, Spring, Summer
Introduction to financial statements and product costing for manufacturing concerns, organizational planning and budgeting, cost control and responsibility accounting. Prerequisite: ACC 2421 with a grade of "C" or better.

ACC 2421 Introduction to Financial Accounting [4-0] (Texas Common Course Number is ACCT 2401.)
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. Mandatory lab, two hours per week. Prerequisite: MATH 1340 or MATH 1321 with a grade of " C " or better.

ACC 3300 Internship in Accounting

## 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
Basic cost accounting concepts and techniques, with an emphasis on providing information for management decision making. Topics include job and process costing, cost-volume-profit analysis, budgeting, standard costs and variance analysis, direct costing, cost behavior, discretionary costs and relevant costs. Prerequisite: ACC 2329 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 2329 with a grade of "C" or better.

## ACC 3322 Intermediate Accounting II

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 Income Tax Procedure
Fall, Spring, Summer
Analysis of federal tax laws, emphasis being placed on the determination of net taxable income and the preparation of income tax returns for individuals. Prerequisite: ACC 2329 with a grade of "C" or better.

ACC 3325 Fund Accounting
Fall, Spring or Summer
The special features of fund accounting as applied to not-for-profit entities, municipalities, school districts and other governmental units. Prerequisite: ACC 2421 with a grade of "C" or better.

ACC 3326 Accounting Information Systems
Fall, Spring, Summer
Basic concepts and techniques associated with the analysis, design and installation of manual and computerized accounting information systems. Prerequisites: ACC 3321 and CIS 1301.

## ACC 3327 Fundamentals of Auditing

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. Prerequisites: ACC 3322 with a grade of "C" or better and credit or concurrent enrollment in QMT 3342.

ACC 3328 Advanced Cost Accounting
Fall or Spring
A continuation of ACC 3320. 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.
Prerequisite: ACC 3320 with a grade of "C" or better.
ACC 3329 Intermediate Accounting III
Fall, Spring
Continuation of the examination of the accounting process with emphasis upon equity accounts of corporations and partnerships; introduction to corporate taxation, nonprofit accounting and other special topics. Prerequisite: ACC 3322 with a grade of "C" or better.

ACC 3350 Introduction to International Accounting

## Fall, Spring

Examines similarities and differences between accounting in the United States and those of other countries. Considers accounting for foreign currency translation, inflation, consolidation of foreign subsidiaries and taxation. Considers the impact of the local environment on accounting-related activities and the analysis of financial statements. Prerequisites: ACC 2329 and INTB 3330.

NOTE: All 4000-level Accounting courses are limited primarily to students who are in conformity with Accounting major admission standards and receive permission of department chair.

ACC 4323 Contemporary Accounting Theory [3-0]
Fall or Summer
Contemporary advanced accounting and auditing theory, including controversial issues, with emphasis on income determination and asset valuation; particular attention is given to current publications of professional and governmental agencies. Prerequisite: ACC 3322 with a grade of "C" or better.

ACC 4327 Advanced Auditing (Auditing II)
[3-0]
Fall, Spring
An advanced study of selected standards of auditing. The course emphasizes new topics in auditing, cases, readings and problems used to illustrate applications of auditing. Included are such topics as statistical sampling, auditing effects of EDP, internal auditing functions, operational auditing and work paper techniques.
Prerequisite: ACC 3327 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 or consent of department.

ACC 4330 Advanced Accounting I
Fall, Spring
A study of the theory and techniques of accounting for partnerships and consolidated financial statements. Prerequisite: ACC 3322 with a grade of "C" or better.

ACC 4331 Advanced Accounting II
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

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 or consent of department.

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 or consent of department.

## Anthropology

## ANTH 1323 Introduction to Cultural Anthropology

Fall, Spring, and As Scheduled
An introduction to cultural anthropology. Major aspects of culture (social organization, economics, religion, etc.), cultural patterns and socio-cultural change are emphasized.

ANTH 1324 Human Evolution
Fall, Spring
An introduction to human evolution, hominid morphology, human variation and prehistoric development. A survey of the biological and cultural evolution of human beings to the present.

ANTH 1342 Introduction to Archaeology
Fall, Spring
General introduction to the field of archaeology. Emphasis on methods of data collection, analysis and a world review of major events in the development of past human civilizations. Previous Course Number: ANTH 2342. Credit may be received for only one course.

ANTH 1353 Introduction to Folklore
[3-0]
Fall and As Scheduled
General introduction into the field of folklore data including collection, preservation, analysis and interpretation according to the main social science theories of folklore. Emphasis on folk music, narrative, drama, art, medicine and material culture.
Previous Course Number: ANTH 2353. Credit may be received for only one course.

ANTH 2323 Mexican-American Culture
Fall and As Scheduled
An introduction to the culture and tradition of Mexican Americans.
The cultural history, organization of the family, traditions, lifestyle, kinship patterns, values, and social organization of Chicano culture will be emphasized.

ANTH 2401 Basic Statistics for Anthropologists [3-0]
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 6 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: 3 hours from any of these areas: anthropology, economics, psychology or sociology, or consent of instructor.

## ANTH 3343 Museum Studies

Fall, Spring
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 6 hours credit.
Prerequisite: 6 hours of anthropology and consent of instructor.

## ANTH 3344 Archive Studies

Fall, Spring
Students 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 6 hours credit. Prerequisites: 6 hours of anthropology and consent of instructor.

ANTH 3363 Archaeological Method and Theory [3-0] Spring, even years
Reviews major theoretical orientations from an 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

Spring, even years
A 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
Spring, even years
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, even years
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. Prerequisite: 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 4345 Anthropological Theory and Methodology
Spring, odd years
Instruction in the methodology (interviewing, participant observation, network analysis, etc.) and theoretical perspectives of anthropology. Prerequisite: 6 hours of anthropology.

## ANTH 4348 Peoples and Cultures of Mexico

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: 6 hours of anthropology or consent of instructor.

## ANTH 4353 Folklore of the Lower Rio

 Grande ValleyFall, 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 Psychology and Mythology
Fall, odd years
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 or ANTH 1353 or PSY 1310 or consent of instructor.

## ANTH 4365 Archaeology of South America

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 Archaeology of Mexico and Central America

## 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 4374 Archaeology of North America

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 U.S. will be emphasized. Prerequisite: ANTH 1342 or consent of instructor.

## ANTH 4385 Topics in Anthropology

[3-0]
As Arranged
Topics are varied according to availability of faculty and student interest. Course can be repeated as topics change. Prerequisites: 6 hours of anthropology and consent of instructor.

## ANTH 4395 Fieldwork in Anthropology

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 9 hours credit as topics change. Prerequisites: 6 hours of anthropology and consent of instructor.

## - Are

## ART 1301 Art Appreciation

(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 I

[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 3 hours of outside assignments per week is required. \$4 laboratory fee.

## ART 1331 Design I

[3-0]
(Texas Common Course Number is ARTS 1311.) Fall, Spring, Summer
Principles of design and development of design structures on twodimensional surfaces. A minimum of 3 hours of outside
assignments per week is required. \$4 laboratory fee.
ART 1332 Lettering/Typography
Fall, Spring
Introduction to lettering and type. Basic typefaces are studied with emphasis on contemporary printing reproduction. Typeface design and type layout is pursued via computer. A minimum of 3 hours of outside assignments per week is required. \$4 laboratory fee.

## 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 3 hours of outside assignments per week is required. \$4 laboratory fee.

ART 2312 Drawing II
(Texas Common Course Number is ARTS 2380.)
Fall, Spring
The human figure as expressive subject matter in drawing. A minimum of 3 hours of outside assignments per week is required.
Prerequisite: ART 1311. \$4 laboratory fee.

## ART 2321 Painting I

[3-0]
(Texas Common Course Number is ARTS 2316.)
Fall, Spring
Introduction to water painting media involving individual development and invention. A minimum of 3 hours of outside assignments per week is required. Prerequisites: ART 1311 and ART 1331. \$4 laboratory fee.

## ART 2322 Painting II

(Texas Common Course Number is ARTS 2317.) Spring and As Scheduled
An introduction to oil and/or acrylic painting techniques working from nature and the living model. Observation and interpretation are stressed. A minimum of 3 hours of outside assignments per week is required. Prerequisites: ART 1311 and ART 1331. $\$ 4$ laboratory fee.

ART 2332 Design II
(Texas Common Course Number is ARTS 1312.) Spring, Summer II
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 3 hours of outside assignments per week is required. Prerequisite: ART 1331. \$4 laboratory fee.

## ART 2341 Sculpture I

(Texas Common Course Number is ARTS 2326.)
Fall
Introductory course in sculptural concepts through basic sculptural media. A minimum of 3 hours of outside assignments per week is required. Prerequisite: ART 2332. \$4 laboratory fee.

ART 2351 Art Survey I
[3-0]
(Texas Common Course Number is ARTS 1303.)
Fall
Historical survey of art from Paleolithic through the Middle Ages.
ART 2352 Art Survey II
(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 Ceramics I
[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 3 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 3 hours of outside assignments per week is required. Prerequisite: ART 2303. \$4 laboratory fee.

ART 3303 Jewelry/Metalworking III
Fall, Spring
Introduction of techniques in silversmithing such as raising, fabricating, smithing and casting. These are pursued in the production of expressive hollowware. Additional materials are considered. A minimum of 3 hours of outside assignments per week is required. Prerequisite: ART 3302. \$4 laboratory fee.

ART 3311 Drawing III
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 3 hours of outside assignments per week is required. Prerequisites: ART 1311 and ART 1331. \$4 laboratory fee.

## ART 3330 Illustration

[3-0]
Spring
Introduction to creative illustration for mass duplication. This course emphasizes individual solutions to illustration problems on a broad scale. Development of concept, content and execution is stressed. A minimum of 3 hours of outside assignments per week is required. Prerequisites: ART 1311, ART 1331 and ART 3311. $\$ 4$ laboratory fee.

ART 3331 Visual Communications I
[3-0]
Fall
The translation of verbal language into visual language through a variety of media. A minimum of 3 hours of outside assignments per week is required. Prerequisite: ART 3333. \$4 laboratory fee.

ART 3332 Design III
Fall
Advanced creative problem solving. A minimum of 3 hours of outside class assignments per week is required. Prerequisites: ART 1331 and ART 2332, or permission of instructor.

ART 3333 Design and Production
[3-0]
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 3 hours of outside assignments per week is required. Prerequisites: ART 1331 and ART 1332. \$4 laboratory fee.

## ART 3334 Photography as an Art Form

## 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 3 hours outside work per week is required.
Prerequisite: ART 1331. \$4 laboratory fee.
ART 3335 Computer Graphics
Fall, Spring
A study of the basic technology necessary for the use of the graphic computer for processing visual elements. Students will produce hands-on computer graphics in an interactive creative environment. A minimum of 3 hours of outside assignments per week is required. Prerequisite: ART 1331 or permission 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
Fall, Spring
Emphasis on individual development. Consideration of additional mediums for sculptural expression. A minimum of 3 hours per week of outside class work. Prerequisite: ART 2341. \$4 laboratory fee.

ART 3352 Contemporary Art [3-0] Spring
Art history from the 19th Century in Europe until modern times. Development and growth of today's arts and aesthetics.
Prerequisites: ART 2351 and ART 2352.
ART 3353 Art of the Ancient World
Alternate years
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

## Alternate Years

This 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 which 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. A minimum of 3 hours outside work per week is required. Prerequisite: ART 2361. \$4 laboratory fee.

## ART 3362 Printmaking III

[3-0]
Fall, Spring
Introduction to intaglio processes. A minimum of 3 hours outside work per week is required. Prerequisite: ART 2361. $\$ 4$ laboratory fee.

## ART 3371 Ceramics II

(Texas Common Course Number is ARTS 2347.)
Fall, Spring, Summer
Emphasis on basic wheel-thrown shapes and introduction to glaze calculation. A minimum of 3 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 3 hours of outside assignments per week is required. Prerequisite: ART 3371. \$4 laboratory fee.
$\begin{array}{lll} & \text { ART } 3381 \text { Perception and Expression in Art I [3-0] }\end{array}$ 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 studio development in depth. Prerequisite: ART 3381 or permission of instructor. Recommended for certification requirements.

ART 3383 Fundamentals of Creative and Critical Thinking
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-workshops dealing 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 4301 Philosophies of Art

## As Scheduled

A study of the relationship of art to philosophy. A study of the various theories of art and of the philosophical presuppositions regarding being, knowledge and value inherent in these theories. Prerequisite: Junior standing.

## ART 4303 Jewelry/Metalworking IV

[3-0]
As Scheduled
Personal development in metals/jewelry. A minimum of 3 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 3 hours of outside assignments per week is required. Prerequisites: ART 1311 and ART 2312, or consent of instructor. \$4 laboratory fee.

ART 4312 Advanced Drawing-Biological Illustration

## Fall, Spring

Course specializing in biological illustration. A minimum of 3 hours of outside work per week is required. Prerequisites: ART 1311, ART 2312 and ART 3311. \$4 laboratory fee.

## ART 4321 Painting IV

[3-0]
As Scheduled
Advanced study in painting. A minimum of 3 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

## Spring

A systematic approach to design problem solving, with a series of studio assignments and critiques relating directly to two- and threedimensional graphic design. The course offers the opportunity to develop creative and technical ability by the production of professional assignments. A minimum of 3 hours of outside assignments per week is required. Prerequisite: ART 3333. \$4 laboratory fee.

## ART 4334 Graphic Design II

Fall
A series of advanced problems and intensive critiques relating to graphic design to condition students to think in terms of "clientdesigner" relationships in simulated working conditions.
Assignments criticized by professional standards will ideally result in portfolio pieces. A minimum of 3 hours of outside assignments per week is required. Prerequisite: ART 4333. \$4 laboratory fee.

ART 4337 Digital Photography
[3-0]
Fall, Spring
The electronic manipulation of the photographic image. Emphasis will be on the manipulation of the photograph for the purpose of illustration and photographic enhancement for publication.
Prerequisites: ART 3334 and ART 3335.
ART 4341 Sculpture III
Fall, Spring
Continuation of the student's personal direction in sculpture. A minimum of 3 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 [3-0]
Fall
An in-depth historical study of the arts of Mexico, Central America and South America prior to the Spanish Conquest. Prerequisite: Junior standing.
$\begin{array}{ll}\text { ART } 4352 & \begin{array}{l}\text { Latin American Art: } \\ \text { Post-Conquest }\end{array}\end{array}$
Spring
Mexican art under the Spanish influence is discussed from the Colonial period to the present. Prerequisite: Junior standing.

## ART 4353 American Art

[3-0]
Fall and As Scheduled
History of the visual arts in the United States, 17th Century to the present, including the art of the American Indian. Prerequisites: ART 2351 and ART 2352.

ART 4361 Printmaking IV
[3-0]
Fall, Spring
In-depth study in printmaking; the student may pursue previous printmaking interests, or move toward experimental goals. May be repeated for 12 hours credit. A minimum of 3 hours outside work is required. Prerequisite: ART 3361 or ART 3362. \$4 laboratory fee.

ART 4371 Ceramics IV
[3-0]
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 3 hours of outside assignments per week is required. Prerequisite: ART 3372. \$4 laboratory fee.

## ART 4383 Career Aspects of the Visual Arts

## Spring

This course offers information about earning a living in the studio art field. Preparation of contracts regarding gallery agreements, studio administration and the acceptance of terms of sale for art goods are explained. Procedures involved in gallery exhibitions, teaching institutions and private businesses are discussed, along with wholesaling vs. retailing art work and tax laws relating to artists. Prerequisite: Junior standing.

## ART 4391 Individual Problems/Internship/Co-op

 Fall, Spring, SummerAdvanced 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/Co-Op); 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.

## Astronomy

## 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 General 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.

## Bilble

## 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 which 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.

## BIBL 1312 Bible and Everyday Living

As Scheduled
A study of some aspects of the nature of man and of his relationship to Christ as studied in related Bible readings.

BIBL 1314 Acts of the Apostles As Scheduled
An historical study of the beginning and extension of Christianity, based on the Book of Acts.

BIBL 2302 The Life and Letters of John
As Scheduled
A study of the life and works of John. A special emphasis is given to his gospel and epistles with a brief review of Revelation.

## ■ Biology

BIOL 1401 General Biology
(Texas Common Course Number is BIOL 1411.)
Fall, Spring, Summer
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, evolution and the structure and function of bacteria, viruses, protozoa, algae, fungi and plants. Credit Restriction: Credit may be received in only one of BIOL 1401 or BIOL 1487. \$3 laboratory fee.

BIOL 1402 General Biology
(Texas Common Course Number is BIOL 2401.)
Fall, Spring, Summer
A continuation of Biology 1401. Topics include evolution and diversity of 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 my be received in only one of BIOL 1402 or BIOL 1488. Prerequisite: BIOL 1401. \$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, microbial genetics and a survey of the diversity of organisms. Open to students enrolled in the Honors Studies Program or by permission of the instructor. Credit Restriction: Credit may be received in only one of BIOL 1401 or BIOL 1487. \$3 laboratory fee.

## BIOL 1488 Honors Biology

[3-3]
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 permission of the 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
As Scheduled
Study of special topics in biology for freshman- and sophomorelevel 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

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

(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
(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 2408 A Survey of Biology

## As Scheduled

A one-semester survey course designed to introduce the basic biologic concepts in the following areas: the chemistry of life, cell structure, function and reproduction, the kingdoms of life, interactions within ecosystems and basic anatomy and physiology of the major systems of the human body. Will not count toward a major or minor in Biology. Prerequisites: PSCI 1421 and PSCI 1422. \$4 laboratory fee.

BIOL 3301 Biological Evolution

## 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 permission of instructor.

## 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: 12 hours of biology including 4 hours from BIOL 2401, BIOL 2402 or BIOL 2403. \$4 laboratory fee.

BIOL 3407 Comparative Embryology
As Scheduled
Developmental studies from the zygote through embryological stages (chiefly concerned with amphibians, birds and mammals). Prerequisites: 9 hours of biology, including 4 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: 9 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. Field work. Prerequisite: 12 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: 12 hours of Biology, including 4 hours from BIOL 2401, BIOL 2402 or BIOL 2403 and 8 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: 6 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

## 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. Problem is chosen by the student with the approval of the instructor prior to registration. Prerequisite: Major in biology with at least junior standing. $\$ 4$ laboratory fee.

## BIOL 4202 Biology Problems

As Scheduled
A continuation of BIOL 4201. Prerequisite: BIOL 4201. \$4
laboratory fee.
BIOL 4303 Mammalogy
Spring
A study of anatomy, evolution, distribution, systematics, ecology and physiology of mammals of North America, with special emphasis on local forms. Prerequisite: 9 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: 9 hours of biology. $\$ 4$ laboratory fee.

BIOL 4305 Plant Physiology
As Scheduled
An introduction of the basic principles of the physiology, growth and development of plants. Prerequisite: 6 hours of biology. $\$ 5$ laboratory fee.

BIOL 4309 Herpetology
[2-3]
Fall
A study of the anatomy, evolution, distribution, systematics, ecology and physiology of amphibians and reptiles; primarily of North American species, with special emphasis on local forms. Prerequisites: 8 hours of introductory biology ( 1400 -level) and BIOL 2401 or BIOL 2402. \$4 laboratory fee.

## BIOL 4311 Ecological Physiology

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: 12 hours of biology, including BIOL 2401 or BIOL 2402. \$4 laboratory fee.

## BIOL 4314 Plant Taxonomy

As Scheduled
Identification of vascular plants, with emphasis on native flowering plants. Prerequisite: 9 hours of biology, including BIOL 1402. \$4 laboratory fee.

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: 9 hours of biology (BIOL 3414 recommended) and junior standing. $\$ 4$ laboratory fee.

BIOL 4407 Animal Parasitology
Spring
Introduction to study of parasitic protozoa and worms (especially trematodes, cestodes, nematodes and acanthocephala).
Prerequisites: 9 hours of biology, including 4 hours from BIOL 2401, BIOL 2402, BIOL 2403 or BIOL 3414, and junior standing. \$4 laboratory fee.

BIOL 4408 Plant Pathology
[3-3]
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: 6 hours of biology. $\$ 4$ laboratory fee.

## BIOL 4410 Marine Botany

As Scheduled
A study of the common local marine flora with emphasis on macroscopic algae, sea grasses and terrestrial angiosperms.
Students are expected to furnish their own transportation to field laboratory sessions at South Padre Island. Prerequisite: 9 hours of biology, including BIOL 1402. \$4 laboratory fee.

BIOL 4412 Ornithology
[3-3]
As Scheduled
Principles of avian classification, morphology and ecology, including migration, distribution and relationships to man. Field work. Prerequisite: 9 hours of biology, including 4 hours from BIOL 2401, BIOL 2402 or BIOL 2403. \$4 laboratory fee.

BIOL 4414 Freshwater Macroinvertebrates
As Scheduled
A study of the systematics, evolution and ecology of freshwater insects, crustaceans and mollusks. Emphasis will be on local aquatic habitats. Laboratories will consist of field trips and identification of specimens. Prerequisite: 9 hours of biology. $\$ 4$ 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
Fall
A survey of interaction of environmental pollutants with living systems. Laboratory consists of toxicological evaluation of selected environmental chemicals. Prerequisites: BIOL 3412 and 6 hours of organic chemistry or biochemistry. $\$ 5$ laboratory fee.

## ■ Business Law

BLAW 3337 Business Law I
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

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, bankruptcy. Prerequisite: BLAW 3337.

BLAW 3339 Consumer Law
Spring of alternate years
Study of federal and state consumer product laws with focus on both the consumers' rights and the responsibilities of the seller/ manufacturer; regulation of advertising and marketing of consumer products; credit financing of consumer transactions. Prerequisite: BLAW 3337 or consent of instructor.

## - Chemistry

## CHEM 1101 General Chemistry Lab I

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

Fall, Spring, Summer
A 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

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

(Texas Common Course Number is CHEM 1411.)
Fall, Spring, Summer
Fundamentals of atomic structure, electric structure and periodic table, nomenclature, the stoichiometry reactions, gas laws, chemical thermodynamics, chemical bonding, and structure and geometry of molecules. Prerequisite: CHEM 1300 or one year of high school chemistry.

## CHEM 1302 General Chemistry II

(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, electrochemistry, nuclear chemistry and representative organic compounds.
Prerequisite: CHEM 1301.

## CHEM 2102 Organic Chemistry Lab I

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
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 2201 Analytical Chemistry Lab

[0-6]
Fall
This course is designed to focus on volumetric and gravimetric analysis, identification and separation techniques using
spectrophotometric and other methods. Prerequisite: CHEM 2202; can be taken concurrently with CHEM 2202. \$4 laboratory fee.

CHEM 2202 Analytical Chemistry
[2-0]
Fall
Introduction to the theories and techniques of analytical chemistry including gravimetric and volumetric analysis and an introduction to spectrophotometric 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

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

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

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

## 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
[3-0]
Spring
A descriptive study of modern topics in inorganic chemistry that includes periodicity, acid-base theories, structure, bonding and reactivity of inorganic and coordination compounds, and a survey of chemistry of transition elements. (Writing intensive.)
Prerequisite: 12 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

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 and MATH 1402 , and 12 hours of chemistry.

## CHEM 3305 Physical Chemistry II <br> 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 [3-0] Fall
A general introduction to the theories and industrial practices for polymeric materials. The course includes synthesis, physical characterization and structure-property relationships of polymers. Emphasis is given to industrially important polymers as materials. Prerequisite: CHEM 1302.

## CHEM 4101 Chemistry Seminar <br> Fall

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 which will serve as a basis for a presentation in a seminar. Required of all chemistry majors. Prerequisite: Chemistry major with senior standing or permission of the instructor.

## CHEM 4201 Chemistry Problems I

Fall, Spring, Summer
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 permission of the instructor. \$4 laboratory fee.

CHEM 4202 Chemistry Problems II
Fall, Spring, Summer
A continuation of CHEM 4201. Prerequisite: CHEM 4201. $\$ 4$ laboratory fee.

CHEM 4203 Instrumental Analysis Lab

## Spring

The course offers practical experience of versatility of analytical instruments such as GC/MS, HPLC, AAS, IR, NMR, UV-Vis in detection, separation and measurement techniques. Experiments are designed to provide in-depth training in the operation of various analytical instruments and analysis of experimental data.
Prerequisite: CHEM 4204; can be taken concurrently with CHEM 4204. \$4 laboratory fee.

CHEM 4204 Instrumental Analysis
Spring
Study of principles and practices of analytical instrumentation. The course includes theories of chromatographic, spectrometric, spectrophotometric and electrochemical methods and their applications to quantitative chemical analysis. Prerequisites: CHEM 2201 and CHEM 2202.

## CHEM 4302 Advanced Biochemistry

## 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 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 4 credit hours is applicable to the degree requirement. Prerequisite: Chemistry major with junior standing.

## - Chinese

## CHIN 1391 Beginning Chinese

As Scheduled
An introductory course in Chinese designed to teach basic
knowledge of the Chinese language, including speaking, writing, listening and reading.

## CHIN 1392 Beginning Chinese

## As Scheduled

Continuation of CHIN 1391. An introductory course in Chinese designed to teach basic knowledge of the Chinese language, including speaking, writing, listening and reading.

## Computer Information Systems

## CIS 1301 Computer Information Systems

(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. Prerequisite: College mathematics or permission of department chair.

## CIS 2308 Introduction to Program and Development Design

Fall, Spring
This course focuses on the phases of program design including problem clarification, design, coding, debugging and documentation. Structural program design considerations will be stressed. Prerequisites: MATH 1321 or MATH 1340 and computer literacy skills.

## CIS 2310 COBOL Programming

(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 which include COBOL syntax, data and file structures, input and output devices, and operating systems facilities for support of batch programs. Prerequisite: CIS 2308 or PASCAL programming.

CIS 2311 Advanced Programming Techniques [3-0] 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 an introduction to the basics of data structures needed for on-line retrieval, which include ordered lists, file structures, pointers and linkages, directories, memory management and data access methods. Prerequisite: CIS 2310.

## CIS

2312 Microcomputer Software and Hardware Concepts with Business Applications
Fall, Spring
A survey of technical topics related to microcomputer systems with emphasis on the relationship between hardware architecture, systems software and application software. Prerequisite: Computer literacy.

CIS 2320 Business Computer Systems
Spring
Introduction to current development tools and programming languages utilized by business to accommodate information needs such as payroll, accounts receivable, inventory, point of sale, and online purchases. Prerequisite: CIS 2310.

## CIS $3300 \quad$ Internship in CIS

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 3335 Database Management

Fall, Spring
This course is an introduction of 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: 6 hours of CIS or CSCI above computer literacy and COBOL programming knowledge.
$\begin{array}{lll}\text { CIS } & 3336 & \text { Systems Analysis }\end{array}$
Fall
This course is concerned with the critical analysis of data processing systems and their redesign vis-à-vis business computer applications. Prerequisites: 6 hours of CIS or CSCI (excluding CIS 1301 or CSCI 1300).

CIS 3338 Networking
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: 6 hours of CIS or CSCI above computer literacy or consent of department chair.

CIS $3380 \quad$ Small Business Technology
Fall, Spring
The purpose of this course is to study technology to efficiently manage a small business. Students will learn about faxes, microcomputers, printers, copiers, modems, and small business networks. Students will also learn about small business accounting packages, including payroll, accounts receivable, and accounts payable. Additional topics include desktop publishing and use of the Internet in small business. Each student will be required to complete a term project on an application or technology. Prerequisites: ACC 2421, ECO 1301 (or 3 hours of Economics), and MANA 3361.

## CIS 3390 Computer Decision Support Systems and Expert Systems

Fall, Spring, Summer
A study of computer decision support systems, expert system and neural networks for enhancing management and decision making. These systems use computer hardware, software, decision models, data and knowledge bases, organizational management and telecommunication for solving complex business problems. Prerequisite: MANA 3361.

CIS 4308 Information Resource Management [3-0]
Fall, Spring
Introduces the concept of resource management in information processing systems. The student is introduced to issues related to the management of an information system such as planning, organizing, controlling, evaluating and staffing an Information Center. Societal and technological issues related to managing an Information Center are discussed. Prerequisites: MANA 3361 and 6 hours of CIS or CSCI above computer literacy.

CIS 4333 Information Systems
Spring
A practical course that applies previous courses of study in computer information systems to the design of information systems that are capable of handling ad-hoc reporting requests.
Prerequisites: CIS 3335 and CIS 3336.

## ■ Clinical Laboratory sciemees

## CLSC 2429 Clinical Microbiology in Health Care [3-3] 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 acquire skills in the use of universal precautions and infection control techniques. Recommended for preprofessional students interested in health professions. Prerequisite: 8 hours of biology.

CLSC 3301 Introduction to Clinical Laboratory Science
Spring
An introduction to the basic skills utilized in the clinical laboratory including specimen collection and processing, professional ethics, laboratory safety and routine examination of urine. Regulatory requirements for laboratories will also be introduced.
Prerequisites: 8 hours of biology and 8 hours of chemistry.
CLSC 3410 Hematology I
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 with concentration on the physiology of normal and abnormal metabolism as they relate to those techniques commonly performed in general clinical chemistry laboratories. Basic clinical chemistry instrumentation, quality control and methodology will be emphasized along with a discussion of diagnostic applications. Prerequisite: Admission into the Clinical Laboratory Sciences Program or special approval.

CLSC 3513 Clinical Immunology and Immunohematology

## 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 Clinical Microbiology I
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 4112 Advanced Hematology
Fall
Specialized procedures in hematology with an emphasis on body fluid analysis. Prerequisites: Admission into Clinical Laboratory Sciences Program and successful completion of CLSC 3410 and CLSC 4311.

CLSC 4115 Advanced Clinical Immunology
Fall
Advanced concepts in clinical immunology with an emphasis on specialized tests including the HLA system. Abnormalities of the immune system will be emphasized. Prerequisites: Admission into the Clinical Laboratory Sciences Program and CLSC 3513.

CLSC 4144 Clinical Practicum V
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 4311 Clinical Hematology II [2-5] Spring
Continuation of Hematology I with an emphasis on abnormal morphology and related disease states. Coagulation abnormalities and associated clinical conditions will also be covered as well as the more specialized techniques in hematology and coagulation. Prerequisites: Admission into the Clinical Laboratory Sciences Program and CLSC 3410.

## CLSC 4314 Advanced Immunohematology

Spring
Lecture and laboratory stress the detection, identification and characterization of rarer and atypical antigens and antibodies, compatibility testing, blood component therapy and problemsolving techniques. Prerequisites: Admission into the Clinical Laboratory Sciences Program and CLSC 3513.

## CLSC 4322 Advanced Clinical Chemistry

## Summer

Discussion of special procedures and instrumentation in the clinical chemistry laboratory including toxicology, therapeutic drug monitoring and clinical correlation of biochemical results as well as problem-solving strategies. Prerequisites: Admission into the Clinical Laboratory Sciences Program and CLSC 4421.

CLSC 4340 Clinical Practicum I
[1-0-12]
Summer I
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 II

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

[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 4421 Clinical Chemistry II

## Spring

Continuation of Clinical Chemistry I with an emphasis on more advanced concepts in quality control, method evaluation and instrumentation as well as the associated normal and abnormal physiology and the appropriate clinical correlation of results. Prerequisites: Admission into the Clinical Laboratory Sciences Program and CLSC 3420.

CLSC 4631 Clinical Microbiology II
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.

## - Commmumication 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 Sign Language I (Beginning)
Fall, Spring, Summer
Basic manual communication skills including the American Manual Alphabet; approximately 550 basic signs, and the history and place of manual communication in society.

COMD 1320 Sign Language II (Intermediate)
Fall, Spring, Summer
Conventional manual communication introduced in the beginning course. Introduction to the more esoteric ideographic signs reflecting usage among different regional dialects; maximum skills for communicating with severely hearing impaired individuals. Prerequisite: COMD 1310.

## COMD 2310 Introduction to Speech-Language Pathology

## Fall, Spring

Designed to acquaint the prospective communication disorders, education, public services majors with the five types of communication disorders and their etiologies, identification and basic intervention procedures. Also introduces acoustic, physiological, production and perceptual processes underlying human communication.
ASHA: Basic human communication processes

## COMD 2320 Voice and Phonetics

Fall
Introduction to speech science basics and the characteristics of proper voice and diction. The International Phonetic Alphabet is used to present the speech sounds of American English. Students are offered the opportunity to learn to recognize and analyze the production of speech sounds and to modify speech production. This course is designed for Communication Disorders majors and prospective elementary teachers. Prerequisite: COMD 2310. ASHA: Basic human communication processes

## COMD 3310 Normal Language Development

Fall
A study of the theories of language development and language sampling. A description of language, sensory and motor development is presented. Prerequisites: COMD 2310, COMD 2320 and junior standing. ASHA: Basic human communication processes

## COMD 3315 Anatomy and Physiology of the

 Speech and Hearing Mechanism[3-0]
Fall, Spring
A detailed study of the anatomical and physiological structure and function of the speech and hearing mechanism. Prerequisites: COMD 2310 and COMD 2320; junior standing. ASHA: Basic human communication processes

## COMD 3320 Methods for Clinical Practice

Fall, Spring
In preparation for the supervised clinical practice, the course includes information on clinical procedures specific to client management, clinic forms, Speech and Hearing Center policies and procedures and intervention materials. Prerequisites: COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330 and junior standing. ASHA: Speech disorders

## COMD 3330 Articulation Development and Disorders

Fall
A study of the theories of normal and abnormal articulation development with emphasis on the practical applications of theory. Identification, evaluation and management of articulation disorders and delays will be addressed. Prerequisites: COMD 2310, COMD 2320, COMD 3310, COMD 3315 and junior standing. ASHA: Speech disorders

COMD 3340 Audiology I

## Fall

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: COMD 2310, COMD 2320 and junior standing. ASHA: Hearing disorders and hearing evaluation

## COMD 4310 Behavior Modification in SpeechLanguage Pathology

## Spring

Detailed study of the theories of behavior as they relate to and underlie speech and hearing intervention procedures. Prerequisites: COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330 and junior standing. ASHA: Speech disorders

COMD 4330 Aural Rehabilitation
Spring
Methods and techniques utilized in the aural habilitation and rehabilitation of hearing impaired individuals. Prerequisites: COMD 2310, COMD 2320,COMD 3310, COMD 3330, COMD 3340 and junior standing. ASHA: Audiology habilitative and rehabilitative procedures

COMD 4340 Neuro-Anatomy and Physiology for Speech, Language and Hearing [3-0]
Fall
A study of the structure and function of neuroanatomical parts that contribute to the production, perception and processing of speech and language. Prerequisites: COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3420 and junior standing. ASHA: Basic human communication processes

COMD 4350 Clinical Experience I
Fall, Spring
A first clinical experience which may include observation, volunteer work in schools or health care settings, or assisting in the therapy process. Clinical experiences are typically assigned in The University of Texas-Pan American Speech and Hearing Clinic but may include experience at external sites. Clinical experience hours do not meet the ASHA supervised clock hour requirements.
Prerequisites: Minimum GPA 3.0 in communication disorders. Submission of clinical experience application by announced deadline. COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3320, COMD 3330, and COMD 4310 (or concurrent enrollment in COMD 4310.) ASHA: Speech disorders.

## COMD 4355 Clinical Experience II

Fall, Spring
A second clinical experience which may include observation, volunteer work in schools or health care settings, or assisting in the therapy process. Clinical experiences are typically assigned in external sites but may include experience at The University of Texas-Pan American Speech and Hearing Clinic. Clinical experience hours do not meet the ASHA supervised clock hour requirements. Prerequisite: Minimum GPA 3.0 in communication disorders. Submission of clinical experience application by announced deadline. COMD 2310, COMD, 2320, COMD 3310, COMD 3315, COMD 3320, COMD 3330, COMD 4310 and COMD 4350. ASHA: Speech disorders.

## COMD 4360 Abnormal Language Development and

 Introduction to Clinical Management [3-0]
## Spring

A study of the characteristics of language development in children at risk. A sampling of three to five special populations will be presented. These may include, but are not limited to, language development in twins, mentally handicapped, hearing impaired, genetic syndromes and attention deficit disorders. Students will be introduced to basic techniques for the clinical management of abnormal language development. Prerequisites: COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3330, COMD 4310 and junior standing. ASHA: Language disorders

COMD 4390 Diagnostic Procedures
Fall
A study of diagnostic techniques and specific testing instruments utilized in the evaluation of language disorders. Prerequisites: COMD 2310, COMD 2320, COMD 3310, COMD 3315, COMD 3320, COMD 3330 and COMD 4310 or concurrent enrollment in COMD 3320; junior standing. ASHA: Language disorders

## - Commmumication

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:
$C O=$ Communication Core
$S P=$ Speech Communication

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\begin{aligned}
& T H=\text { Theatre } \\
& J O=\text { Journalism } \\
& G E=\text { General Education }
\end{aligned}
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## 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 (SP) (GE)

## 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 )

As Scheduled
Improvisational acting techniques and the application of these principles to stage, television and film.

## COMM 1310 Oral Interpretation (SP) (TH)

## 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 1313 Fundamentals of Speech Communication (SP) (GE)

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 Radio/TV Broadcast/Cable (JO) (TH)

(Texas Common Course Number is COMM 1335.) As Scheduled
An overview of broadcasting and cablecasting; history, programming, regulations and financial structures. Commercial, educational and public radio and TV, both in the U.S. and around the world, will be covered with an emphasis on helping the student be a better-informed and more critical consumer.

## COMM 1387 Speech Communication <br> (Honors Plan) (SP) (GE)

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. Course substitutes for General Education option in Speech
Communication. Credit Restriction: Credit may not be received for both COMM 1387 and COMM 1313.

COMM 1408 Photography (JO)
As Scheduled
An introduction to the techniques of taking photographs and the processes of developing, printing, enlarging, cropping and dodging. Journalism students cannot count these hours toward their major.

COMM 1411 Technical Production I (TH) As Scheduled
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. Arranged lab.

COMM 1412 Technical Production II (TH)

## As Scheduled

A continuation of COMM 1411. Instruction and practical experience in production problems, including light and sound. Arranged lab.

## COMM 1615 Summer Theatre Workshop (TH)

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 Workshop (JO) (TH) An intensive workshop course in which students are responsible for all aspects of the production of a major dramatic work which will be produced for television and which will embody the principles of dramatic production in television form.

## COMM 2101 Practicum - Theatre-TV-Film

(TH)
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 2105 Practicum — Radio-TV-Film (JO)

Participation in radio-TV-film programs sponsored by the department. One hour 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 2306 Acting II (TH)
As Scheduled
Intensive study of the techniques of building and developing a characterization.

COMM 2312 Theatre Appreciation (TH) (GE)
As Scheduled
An introduction to the theatre, how to enjoy and understand plays, an appreciation and understanding of the various factors which 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 (SP) [3-0] As Scheduled
Instruction and activities in the principles of human communication and interaction. Includes self-concept, selfdisclosure 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 2350 Writing for the Mass Media (JO)
Fall, Spring
Development of fundamental writing and fact-gathering skills for printing and electronic media. Students must pass skill tests of computer word processing, grammar, spelling and punctuation. Writing projects aid students in their understanding of the requirements of different fields of communication. Successful completion of this course with a grade of a "C" or better is a prerequisite for all journalism courses.

## COMM 2387 Theatre Appreciation

 (Honors Plan) (TH)As Scheduled
An introduction to the theatre. Students are offered the opportunity to learn how to enjoy and understand plays, and are given the opportunity to gain an appreciation and understanding of the various factors which make up a live theatre performance. Designed for non-majors. Credit Restriction: Credit may be received for only one of COMM 2312 or COMM 2387.
Prerequisite: Admission to Honors Program or by permission of instructor.

## COMM 2404 Television Production (JO) (TH)

Fall, Spring
Introduction to television studio operation with emphasis on television production. Covers cameras, microphones, lights, setting and performers.

## COMM 2411 Make-Up (TH)

As Scheduled
A study of make-up for stage, film and television camera. Includes the study of make-up design and application and special effects make-up. Students must provide their own make-up for the course.

## COMM 2412 Costuming (TH)

As Scheduled
A study of costume design and construction with emphasis on problems encountered in designing clothes for theatre, television and dance.

COMM 3301 Rhetoric of Television (SP) (JO)
As Scheduled
A consideration of television and its pervasive influence upon contemporary social, political and cultural institutions. Course explores the forms of persuasion embedded in television and methods by which these rhetorical structures affect human perceptual systems and resulting human behavior.

COMM 3302 Speech for Stage and Screen

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\begin{equation*}
(\mathrm{TH})(\mathrm{JO}) \tag{3-0}
\end{equation*}
$$

## 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 3304 Advertising (JO)
Fall, Spring
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 Editing (JO)
Fall
A study of copy editing, headline writing and graphic designing for newspapers. Layout and design will be included in the course. Much of the coursework will be completed in the computer lab.

COMM 3306 Feature Writing (JO)
Spring
Interpreting trends in reader appeal; analyzing feature story structure; finding ideas for gathering materials; writing and selling feature articles.

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 Advanced Technical Production and Design (TH)
As Scheduled
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, screen and television.

COMM 3311 Contemporary Drama (TH) 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: 12 hours of English.

COMM 3314 Persuasive Communication (SP) (JO) [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 Relations (SP)

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, supervisory communication. May be repeated once for credit. Prerequisite: COMM 2315 or by permission of instructor.

COMM 3316 Intercultural Communication (SP) (JO)
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 (SP)

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 (SP)
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)

## 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: 12 hours of English.

COMM 3324 Cinematography/Videography (JO) (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 (JO) (TH)
As Scheduled
Historical survey of motion pictures from 1890s 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 I (JO)

Fall
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.

## COMM 3328 Writing for Publication (JO)

## Spring

This course stresses writing for a variety of publications, both print and electronic, with emphasis on in-depth research and writing.

## COMM 3330 Argumentation and Debate (SP)

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 (SP) (JO) [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.

COMM 3332 Organizational Communication (SP)[3-0] 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 Rhetorical and Communication Theory (SP)

## As Scheduled

Comprehensive overview and analysis of the various significant theories of rhetoric and communication, with an historical grounding but emphasizing modern themes and perspectives. Previous Course Number: COMM 2320; a student may receive credit for only one course.

## COMM 3334 Communication through

 Group Process (SP)
## 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 (SP)
[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-centered approach are central issues. Prerequisite: COMM 1313 or COMM 1303.

COMM 3350 Research in Communication (CO) [3-0] As Scheduled
Major methods of research used in the concentration areas of communication: speech communication, theatre arts 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 4303, COMM 4324 and COMM 4325; a student may receive credit for only one course.

## COMM 3401 Broadcast News Writing (JO)

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)

[4-0]
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 3409 Acting III (TH)

## As Scheduled

Study of work with partners in scenes. Techniques of working in large and small group scenes, working for specificity of character and developing responsive and responsible rehearsal techniques.

## COMM 3410 Acting IV (TH)

As Scheduled
Working with particular acting problems, such as characterization in the musical, individuation in group scenes, commercials, supporting partners, etc.

COMM 3412 Arts Management and Publicity (TH) (JO)
As Scheduled
Basic principles of managing arts events or arts centers. Practical experience in publicity, release writing, box office management, program and poster production and public relations.

COMM 3413 Literature in Performance (SP)
[4-0] As Scheduled
An advanced course in the theory and practice of the oral interpretation of literature stressing methods of assembling materials of various genres and individual and group performance. A rehearsal lab is required. Prerequisites: COMM 1310 and/or permission of instructor.

## 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)

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 (SP)
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 4105 Practicum - Radio-TV-Film (JO) (TH)

Participation in the Radio-TV-Film program of the university or any other Radio-TV-Film program 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 4301 Directing I (TH)

## 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 4304 Scriptwriting for Stage and Screen

 (TH)As Scheduled
Advanced-level course in the arts and crafts 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 4307 Contemporary Rhetoric of Social

 and Political Movements (SP) (JO)As Scheduled
Rhetoric 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.

## COMM 4308 Special Problems in Rhetorical

 Criticism (SP) (JO)
## 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 4313 Mass Media Law (JO)
Fall
A thorough study of freedom of the press, libel, invasion of privacy and the conflict between free press and fair trial.

COMM 4314 Advanced Television/Film Production (JO) (TH)
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. Course will alternate years between theatre-television (even years) and journalism (odd years).

COMM 4315 History of the Theatre I (TH)
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)
As Scheduled
A thorough study of the history of theatre from the Restoration until the present.

COMM 4321 Public Relations (JO)
Fall
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 4326 Photojournalism (JO)

Fall, Spring
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 permission of instructor.

## COMM 4327 Mass Communication and Society (JO)

Fall
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 4328 Ethics (JO)
Spring
A thorough study of media cases as they relate to questions of ethics, as well as the historical development of ethical philosophies of Western Civilization, will be examined.

COMM 4329 Media Presentation (JO)
Fall
This course will introduce students to the theoretical and practical applications of multimedia presentations and will help students in their preparation of portfolios and resumes.

## COMM 4330 Communication Consulting and Training (SP)

As Scheduled
Study of the consultant's role in planning and implementing organizational communication diagnosis and change. Factors affecting the consultant-client relationship as well as ethical considerations will be highlighted. In addition, methods, techniques and practice in communication training programs and workshops will be addressed.

## COMM 4331 Senior Synthesis Seminar in

 Speech Communication (SP)
## 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 9 advanced hours.

COMM 4333 Communication for the Secondary Teacher (CO)
As Scheduled
Methods of teaching speech communication, journalism and theatre in high school. Materials for intramural and interschool speech, theatre and journalism activities in both junior and senior high schools. Particular attention is given to the UIL one-act play and the student newspaper and yearbook. Methods of training participants in these activities are emphasized. (Replaces all courses designated as Communication for the Secondary Teacher for specific disciplines, i.e. Speech, Drama, Journalism.)

COMM 4332 Media Publishing (JO)
Spring
Computer production of a variety of print media publishing, including layout, design and writing.

COMM 4334 Advanced Public Relations (JO) Spring
A continuation of the initial course in public relations.
Considerable class time will be devoted to public relations research, target audiences, laws affecting public relations practice and communication channels. Assignments will include an indepth study of a public relations campaign. Prerequisite: COMM 4321.

COMM 4335 Advanced Advertising (JO)
Spring
A continuation of advertising procedures. The study of various forms of advertising research techniques and retail advertising. Assignments include an in-depth study of an advertising campaign. Prerequisite: COMM 3304.

COMM 4336 Applied Organizational Communication (SP)
As Scheduled
Application of organizational communication theories and concepts within organizational contexts. Prerequisite: COMM 3332.

## COMM 4337 Professional Internship-Cooperative Education - Speech Communication (SP)

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 4414 Children's Theatre Workshop (TH)

An intensive workshop course in which students are responsible for all aspects of the production of a major dramatic work which will be produced for children and which will embody the principles of dramatic production in form suitable for elementary school audiences.

COMM 4417 Radio and Television Advertising Production (JO)
As Scheduled
Application of principles of advertising to production of radio and television commercials. Prerequisites: COMM 2404 and COMM 3304.

COMM 4418 Theory and Styles of Acting (TH)

## As Scheduled

Techniques of period acting and exploration of major theories of acting techniques.

## COMM 4419 Problems in Acting (TH)

As Scheduled
Acting techniques to adapt performance to varying situations such as large and small proscenium, film and television. Preparation of audition material and problems in developing range of characterization.

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, 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 Television Workshop (JO) (TH)

For the advanced undergraduate, an intensive workshop in which students are responsible for the production of a major dramatic work which will be produced for television and which 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 - Speech Communication 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 Introduction to the Criminal Justice System

(Texas Common Course Number is CRIJ 1301.)
Fall, Spring, Summer
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
(Texas Common Course Number is CRIJ 1306.) Spring
The judiciary in the criminal justice system; right to counsel; pretrial 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 Crime in America

(Texas Common Course Number is CRIJ 1307.)

## Fall, Summer

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 Fundamentals of Criminal Law

(Texas Common Course Number is CRIJ 1310.)
Fall
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

(Texas Common Course Number is CRIJ 1313.) Spring
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 Correctional Systems and Practices [3-0]

(Texas Common Course Number is CRIJ 2313.)
Spring, Summer
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 CRIJ 2314.)

## Fall, Summer

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 [3-0] (Texas Common Course Number is CRIJ 2323.)
Spring, Summer
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 CRIJ 2326.)

## Spring

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
(Texas Common Course Number is CRIJ 2328.)
Fall, Spring
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

Fall
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: CRIJ 3331; a student may receive credit in only one course.

## CRIJ 3303 Criminology

Fall, Spring
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.

## CRIJ 3304 Criminal Justice Research Methods [3-0]

Fall, Spring
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

Spring
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 Techniques of Interviewing

## Spring

Addresses techniques and interaction involved in the face-to-face interview; knowledge of behavioral reactions; development of an awareness of likely responses to the behavior of the interviewer; and interview techniques for pre-sentence investigations, classification, supervision and related correctional tasks.

## CRIJ 3345 Correctional Administration

## As Scheduled

Fundamental concepts of management, organization and administration as specifically applicable to correctional institutions, field services and community-based corrections.

## CRIJ 4311 Police Organization and Administration

Fall
In-depth discussion of organizational and administrative theory; comparative discussion of philosophies utilized in business and public administration with potential relationships to police organizations; methodology of societal trends affecting criminal justice administration.

## CRIJ 4312 Principles of Law Enforcement

 Supervision
## Spring

An examination of the principles involved in law enforcement supervision; principles of leadership in dealing with people; psychology involved in handling grievances and in building morale; duties and responsibilities of command-level personnel; law enforcement budgeting procedures, supervisory problems and responsibilities relating to discipline and internal affairs investigations.

## CRIJ 4313 Current Issues in Law Enforcement [3-0]

## Fall

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 4341 Correctional Casework and Counseling

## As Scheduled

Examines the role and techniques of casework in corrections with emphasis on the integration of casework and counseling
responsibilities and procedures. Includes examination of therapeutic techniques and processes in various correctional settings and the study of service delivery programs tailored to the specific needs of correctional clients. Previous Course Number: CRIJ 4441; a student may receive credit in only one course.

## CRIJ 4343 Current Issues in Corrections

## As Scheduled

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 4361 Comparative Criminal Justice

 SystemsAs Scheduled
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 <br> [3-0]

As Scheduled
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
## As Scheduled

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 4464 Field Internship Experience

Fall, Spring
Three hours per week learning job interview techniques and resumé writing. 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; a student may receive credit in only one course.

## - Computer science

## CSCI 1300 Computers and Society

Fall, Spring, Summer
A computer literacy course to develop awareness of the expanding role of computer technology and to provide rudimentary knowledge and skills related to personal and social uses of computers. Topics include applications of computers, societal ethical issues involving computers, history, algorithms and elementary programming in a high-level language, usage of packaged software, and hardware and software terminology.

Prerequisite: Composite ACT of 16 or above or grade of "C" or better in ENG 1301 or MATH 1334 or consent of instructor.

CSCI 1380 Computer Science I
[3-0]
Fall, Spring, Summer
An introduction to computer science and computer programming.
The fundamentals of a high-level programming language will be introduced. Methods of problem solving, techniques of algorithmic development and concepts of structured programming will be emphasized. Prerequisites: CSCI 1300 or equivalent experience and grade of "C" or better in MATH 1340 or MATH 1321.

CSCI 1381 Foundations of Computer Science [3-0] Fall, Spring
A breadth-first examination of computer science that continues the introduction to the field of computer science first begun in CSCI 1380. Includes an introduction to the mathematical foundations of computing, computer architecture, binary representations, software engineering, social and ethical issues of a computerized society, and an overview of various computer science fields and topics. Prerequisite: CSCI 1380 or departmental permission.

## CSCI 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 or CSCI 2325 or consent of instructor.

## CSCI 2325 Survey of Elementary Scientific

 Programming
## As Scheduled

An introduction to computer programming and problem solving in the Fortran language with special emphasis on problems from science and mathematics. Prerequisites: Concurrent enrollment in or grade of "C" or better in MATH 1340 or MATH 1321 and CSCI 1300 or equivalent experience.

## CSCI $2330 \quad$ C++ Programming

Fall, Spring, Summer
Introduction to the programming language $\mathrm{C}++$, covering the syntax and semantics of the language. Application areas include linked structures, file structures, text handling, and object-oriented technology. Primary emphasis is on the PC environment, with secondary emphasis on Unix and other operating system environments. This course introduces C++ as a second programming language, and assumes that the student has already had exposure to at least one other programming language.
Prerequisite: CSCI 1380 or CSCI 2325 or CIS 2310 or consent of instructor.

CSCI 2333 Computer Organization and Assembly Language
Fall, Spring
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: CSCI 2380 or consent of instructor.

## CSCI 2380 Computer Science II

Fall, Spring
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. Prerequisites: CSCI 1381 and CSCI 2330 with a grade of "C" or better.

## CSCI 3333 Algorithms and Data Structures <br> [3-0]

Fall, Spring
Continuation of data structures topics covered in CSCI 2380 along with advanced algorithms and algorithmic complexity. Topics covered include advanced searching and sorting algorithms, recursive algorithms, and implementations of structures and related algorithms pertaining to advanced trees (including 2-3, 2-3-4, redblack and B-trees), graphs and networks. Prerequisite: CSCI 2380.

CSCI 3334 Systems Programming
Fall, Spring
An introduction to the organization and structure of the major hardware components of computers, the design of assemblers, linkers and loaders, and the fundamental concepts of operating systems. Prerequisites: CSCI 2333 and CSCI 2380.

## CSCI 3336 Organization of Programming Languages

## As Scheduled

Introduction to the specification analysis and implementation of programming languages, including the runtime behavior, desirable features and limitations of various languages. Prerequisites: CSCI 2380 and programming experience in two high-level languages.

## $\begin{array}{lll}\text { CSCI } & 3340 \text { Software Design and Development } \\ \text { [3-0] }\end{array}$

## As Scheduled

A formal approach to the state-of-the-art techniques in software design and development. Provides the student with the opportunity to work on large projects in a group situation. Prerequisite: CSCI 2380.

## CSCI 3350 Numerical Methods

## 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: MATH 3368; a student may receive credit in only one course.
Prerequisites: MATH 1401; CSCI 1380 or CSCI 2325 or consent of the instructor.

CSCI 3390 Practicum in Computer Science
As Scheduled
Practical experience in management of computer laboratories and administration of computer systems. Students will assist in the operation of computing facilities. Course will include a 1 -hour
seminar and 8 hours of practicum experience per week. May be taken once for credit toward computer science major or minor. May be repeated once. Prerequisites: Junior standing and 12 hours of computer science.

## CSCI 4333 Database Design and Implementation

## As Scheduled

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.

## CSCI 4334 Operating Systems

## As Scheduled

Detailed study of operating system principles, including procedure activation, memory management, process management, resource allocation and protection. Prerequisites: CSCI 3333 and CSCI 3334.

## CSCI 4335 Computer Architecture

## As Scheduled

Computer organization and architecture of computer systems, basic logic design, coding and micro-programming. Prerequisites: CSCI 2333 and CSCI 3333.

## CSCI 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.

## CSCI 4345 Computer Networks

As Scheduled
An introduction to data communication topics, including data transmission, encoding, data link control, switching, network topologies, protocols, internetworking and data security. Examples of existing networks and network architectures are studied.
Prerequisite: CSCI 4334 or CSCI 4335 or consent of instructor.

## CSCI 4350 Artificial Intelligence

[3-0]
As Scheduled
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.

## CSCI 4360 Computer Graphics and Interactive

 SystemsAs Scheduled
A study of the representation and display of graphical information including the design and analysis of interactive systems.
Prerequisite: CSCI 3333 or consent of instructor.

## CSCI 4390 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: CSCI 3340 and consent of instructor.

## - Dietetics

## DIET 2351 Introduction to Clinical Nutrition [3]

Fall, Spring
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
[3-0]
Fall
Study of biological, physiological, sociological and environmental aspects of nutrition science. Controversial issues in nutrition are examined. Medical terminology is stressed. Prerequisites: CHEM 3403 or concurrent enrollment, HRP 2351, BIOL 2403 and admission to the Coordinated Program in Dietetics.

## DIET 3354 Food Systems Management <br> 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, each with a minimum grade of "C."

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 Nutritional Assessment and Introduction to Diet and Disease

## Spring

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 3452, DIET 3353 and DIET 3356, each with a minimum grade of "C."

## 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. 8 hours clinical experience per week. Prerequisites: DIET 2352, BIOL 3401, concurrent enrollment in DIET 3353 and DIET 3356, and admission to the Coordinated Program in Dietetics.

## DIET 3655 Food Systems Management Practicum

[0-18]

## Spring

Selected problems and clinical experiences directly correlated to DIET 3354. 18 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
Introduction to interpretation and evaluation of nutrition literature. Study of research methods and applications to dietetic practice. Students will critique research papers and present seminars focusing on dietetic research in management, clinical nutrition and community nutrition areas. Prerequisites: DIET 4852 and DIET 4258 , each with a minimum grade of "C."

DIET 4258 Communication Skills in Dietetics
[2-0] 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 4351, each with a minimum grade of "C."

## DIET 4259 Community and Life

 Cycle NutritionSpring
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 4258 and DIET 4852, each with a minimum grade of "C," and concurrent enrollment in DIET 4455.

## DIET 4351 Diet and Disease

[3-0]
Summer
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. Prerequisites: DIET 3354, DIET 3655 and DIET 3357, each with a minimum grade of "C."

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 Mexican-American culture. Techniques for teaching effective nutrition to groups. Clinical experience includes observation and participation with selected community agencies and schools. 16 hours clinical experience per
week for 11 weeks. Prerequisites: DIET 4852 and DIET 4351, each with a minimum grade of "C," 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. 32 hours clinical experience per week for four weeks. Prerequisites: DIET 4258 and DIET 4852, each with a minimum grade of "C."

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 4351. 24 hours clinical experience per week. Prerequisites: DIET 3354, DIET 3655, DIET 3357 and DIET 4351, each with a minimum grade of "C."

## - Economics

ECO 1301 Introduction to Economics
(Texas Common Course Number is ECON 1301.)
Fall, Spring, Summer
Economics for students who have active interests in fields other than business administration or economics. Primary emphasis is given to the study of man in relation to his economic environment. Students will have the opportunity to gain an understanding of the capitalistic system.

## ECO 1387 Introduction to Economics (Honors Plan)

## As Scheduled

The principles of economics are studied with primary emphasis on man in relation to his economic environment. Students will have the opportunity to gain knowledge of the purpose, functions and results of a market system, as well as an understanding of current economic problems. Credit Restriction: Credit may be received in only one of ECO 1301 or ECO 1387. Prerequisites: MATH 1334 or satisfactory ACT placement, admission to Honors Studies or by invitation.

## ECO $2301 \quad$ Principles of Economics I

(Texas Common Course Number is ECON 2301.)
Fall, Spring, Summer
This course provides an introduction to the basic macroeconomic concepts of aggregate supply and aggregate demand, as well as income determination. Topics covered include: money and banking, unemployment, inflation, international economics and comparative economic systems. Previous course numbers: ECO 2351 and ECO 2354; credit may be received for only one course.

## ECO 2302 Principles of Economics II

[3-0]
(Texas Common Course Number is 2302. .)
Fall, Spring, Summer
This course studies the basic microeconomic concepts of consumer demand and firm supply and provides an analysis of factor markets
and market structures. Topics covered include: problems of resource allocation and economic efficiency in the market economy. Previous course numbers: ECO 2352 and ECO 2353; credit may be received for only one course.

## ECO 3300 Internship in Economics

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.

## ECO 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: ECO 2301 and ECO 2302.

ECO 3351 Macroeconomic Theory
[3-0]
Fall, Spring
This course provides an analysis of the construction, character and operational uses of the macroeconomic models of classical,
Keynesian, monetarist and Neo-Classical schools. Applications of the foregoing models to problems of inflation, unemployment, interest rates and investment in the United States economy are emphasized. Prerequisites: ECO 2301 and ECO 2302.

## ECO 3352 Microeconomic Theory

## Fall, Spring

This course provides an in-depth study of the theory of consumer demand and the theory of the firm. Supply and demand analysis, distribution theory and imperfect competition models are also covered. Prerequisites: ECO 2301 and ECO 2302.

## ECO 3353 International Trade

## As Scheduled

The mechanism of international trade and its effects on a national economy are studied in this course. Particular emphasis will be placed on the study of foreign investments, cartels, international output and price controls. Prerequisites: ECO 2301 and ECO 2302.

## ECO 3355 Economic Development <br> <br> As Scheduled

 <br> <br> As Scheduled}This course provides a study of the multidimensional factors/forces influencing material development and the eradication of poverty. Topics include: theories of economic growth and development, investment and capital development, market efficiency and growth, technology and technological transfers, international trade and development. Prerequisites: ECO 2301 and ECO 2302.

ECO 3356 Business Enterprise and Public Policy

## As Scheduled

The purpose of this course is to study the nature, scope and effects on the business community of governmental involvement and regulation. Emphasis is placed on the impact of federal legislation as it pertains to antitrust enforcement and the maintenance of competition, the regulation of public utilities and interregional transport, agricultural adjustment, labor relations and public ownership. This course is designed to give a broad understanding of the many ways in which business and economic life are shaped and influenced by government. Previous course number: GENB 3356; credit may be received for only one course.

## ECO 3357 Economics of Poverty

As Scheduled
The causes and social consequences of poverty, as well as the natures and effectiveness of income transfer programs, are studied in this course; it also includes topics such as welfare reform, social security, pension plans, Medicare, national health and negative income tax programs. Prerequisites: ECO 2301 and ECO 2302.

## ECO 3358 Labor Economics

As Scheduled
This course provides an in-depth analysis of labor market structures and processes, patterns and determinants of work and wages, labor force participation, unemployment, discrimination and human capital. Prerequisites: ECO 2301 and ECO 2302.

## ECO 3359 Family and the Small Business <br> Fall

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.

## ECO 4359 History of Economic Thought

As Scheduled
This course provides a survey of the entire 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: ECO 2301 and ECO 2302.

## ECO 4361 Studies in Economics

As Scheduled
A special topic selected by the instructor will be assigned. Total course content will be established a priori. This course will have variable content and may be repeated for credit with consent of instructor. Prerequisites: ECO 2301 and ECO 2302.

## ECO 4362 Global Entrepreneurship <br> Fall

This course will provide students with a global entrepreneurship experience. It will feature the study of successful entrepreneurs from around the world and will entail the art of doing business in
different countries. A focal point of the course will be to learn how to evaluate global opportunities for new ventures and how to gather resources to take advantage of these opportunities. The student will be required to complete a project where he or she will contrast local, national and global strategies for business development. Prerequisites: ECO 2301 and ECO 2302.

## Education

## ED 3350 Information Technology

## 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 (TEAaccredited) 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.

## Alternative Gertification Program

## EDAC 4340 Introduction to the Teaching Profession

## 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 Introduction to Early Childhood Education

## As Scheduled

Teachers of young children (birth to age 8) 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 which are developmentally appropriate for young children.

EDAC 4343 The Process of Reading
As Scheduled
The reading process and its correlates as it pertains to emergent literacy through the acquisition of comprehension processes; focus on the directed reading process for grades 1 through 3 and the directed reading-thinking process for grades 3 through 6; connections among the processes of language, writing and reading; basic diagnosis techniques and assessment procedures as they relate to the reading/writing process.

EDAC 4344 First and Second Language
Acquisition: Theory and
Methodology
As Scheduled
A study of the teaching-learning process in a dual language classroom, focusing on research and methodology of first and second language acquisition by the elementary and secondary Hispanic student.

EDAC 4345 Theory and Methodology of Instruction Planning in the Elementary Schools
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

## As Scheduled

This course focuses on the practical application of Texas curriculum requirements incorporating the lesson cycle for planning, implementing and evaluating the teaching-learning 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, 4621
Internship
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.

## Bilingual Education

$\begin{array}{lll}\text { EDBE } & 3315 & \begin{array}{l}\text { The Bilingual Curriculum in the } \\ \text { Content Areas }\end{array}\end{array}$
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

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

## 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

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.

## EDBE 4304 The Development of Bilingualism

[3-0]
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.)

## - Eumpriculum cmed mastruetion

## EDCI 3305 Foundations of Multicultural Education

## Fall, Spring

A review of the concept of culture, its components and dimensions, and its implications for the education of students in a multicultural society. Consideration will be given to the value and importance of cultural pluralism as reflected in a multicultural world. These concepts will be integrated into instructional strategies and curriculum that will enable the teacher to respond appropriately to diverse groups of learners. (Field-Based Approved Course.)

## EDCI 4301 Foundations of Education

Fall, Spring, Summer
This course is designed for the student who is preparing to teach in middle school or secondary school. 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 and shaped the current state of schools will also be studied. Research, issues and trends in these areas with regard to middle schools and high schools will be examined through classroom instruction, print and non-print resources, online news services, and field-based experiences (e.g., attendance at school board meetings, professional teachers' association meetings, interviews with educators, interviews with persons of diverse educational backgrounds). These field-based experiences will be examined critically in seminars, larger group discussions, through the writing of reaction papers and through investigating case studies. The importance of professional ethics and personal integrity will be examined, and each student will be expected to write a statement of his or her philosophy of education as a course completion requirement. For secondary education students only.

## EDCI 4302 Educational Psychology

[3-0]
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 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
## 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

## Fall, Spring

This course focuses on instructional methods that emphasize practical applications of a learner-centered curriculum and
classroom organization and management. Teaching strategies for delivering learner-centered instruction will be stressed. (FieldBased Approved Course.)

## EDCI 4307 Secondary Curriculum: Internship I

Fall, Spring, Summer
This course is designed for students preparing to teach in middle and secondary schools. In this course the prospective teacher will identify needs; will plan, implement and assess instruction using technology and other resources. Ability to demonstrate lessons in the content area utilizing appropriate technology will be stressed. The course will be conducted, with EDCI 4308, for one-half day, primarily at school and technology center sites. EDCI 4307 MUST be taken as part of a block with EDCI 4308 with the exception of All-Level Certification students. Prerequisites: EDCI 4301 and EDCI 4302.

## EDCI 4308 Advanced Secondary Curriculum: Internship I

## Fall, Spring, Summer

This course is designed for students preparing to teach in middle schools and secondary schools. In this course, the prospective teacher examines and models teaching/learning styles which place the learner at the center of instruction. Integration of other disciplines, the learners' interests and technological resources will be stressed in considering central themes of subject matter from many different cultural and intellectual viewpoints. Strategies for classroom management will be examined. The course will be conducted, with EDCI 4307, for one-half day, primarily at school and technology center sites. EDCI 4308 MUST be taken as part of a block with EDCI 4307. Prerequisites: EDCI 4301 and EDCI 4302.

EDCI 4310 Directed Teaching - ESL - Internship II Fall, Spring
(Student must also be enrolled in EDCI 4311-Elementary or EDCI 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 language 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. Secondary prerequisites: EDCI 4301, EDCI 4302, EDCI 4307, EDCI 4308 and READ 4351.

## EDCI 4311 Directed Teaching - Elementary Internship II

## Fall, Spring

Course consists of observation, limited participation in teaching, then full teaching responsibility in an elementary public school (TEA-accredited) 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 dictated by TEA. The number of hours per day and the number of days per week are regulated by TEA, UT Pan American Student Teaching Manual and local school districts. Prerequisites: Meet requirements for student teaching and approval of UT Pan American Teacher Education Committee.

## EDCI 4312 Directed Teaching - Early Childhood Internship II

## Fall, Spring

Course consists of observation, limited participation in teaching, then full teaching responsibility in an elementary public school (TEA-accredited) pre-kindergarten or kindergarten 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 dictated by TEA, UT Pan American Student Teaching Manual and local school districts. Prerequisites: Meet requirements for student teaching and approval of UT Pan American Teacher Education Committee.

## 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 4318 Special Topics in Secondary Education

As Scheduled
An elective course for Secondary Certification candidates. Topics vary. Will be used primarily as a substitute for the 6 -hour student teaching course for students on emergency degree plans. Can be repeated for credit. Prerequisite: EDCI 4302 or consent of instructor.

## EDCI 4398 Secondary Special Education/English as a Secondary Language Internship II

## Fall, Spring

This course gives secondary students experience in responsible teaching at the secondary level under the guidance of public school supervising teachers (mentors) and university supervisors (mentors). The course is designed primarily for secondary students who have a special education minor or who are seeking an ESL endorsement. Prerequisites: EDCI 4301, EDCI 4302, EDCI 4307, EDCI 4308, READ 4351 and approval of UT Pan American Teacher Education Committee.

## EDCI 4399 Secondary All-Level Internship II

Fall, Spring
This course is designed for students in kinesiology, art or music who need both elementary and secondary grade level placement plus an additional teaching field certification. The course requires classroom observations, classroom instruction, assumption of
professional duties, and attendance at university seminars. The intern will be placed in a state-accredited school under the guidance of an experience classroom teacher (mentor) and a university supervisor (mentor). Prerequisites: EDCI 4301, EDCI 4302, EDCI 4307, EDCI 4308, READ 4351 and approval of UT Pan American Teacher Education Committee.

EDCI 4611 Directed Teaching - Elementary Internship II

## Fall, Spring

Course consists of observation, limited participation in teaching, then full teaching responsibility in an elementary public school (TEA-accredited) 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 classroom for a minimum number of hours as dictated by TEA. The number of hours per day and the number of days per week are regulated by TEA, UT Pan American Student Teaching Manual and local school districts. Prerequisites: EDCI 4305 and EDCI 4306 and approval of UT Pan American Teacher Education Committee.

## EDCI 4641 Secondary Internship II

## Fall, Spring

Internship for all options. One 36-hour teaching field, two 24-hour teaching fields or one 48-hour teaching field in approved subject would require a 12 -week program which includes instruction on the university campus and full day internship in an approved school with weekly seminars which reemphasize previous course content and its application to the classroom. Prerequisites: EDCI 4301, EDCI 4302, EDCI 4307 and EDCI 4308 and approval of UT Pan American Teacher Education Committee.

## EDCI 4699 Internship - All Levels

## Fall, Spring

This course is designed for students in kinesiology, art or music who need both elementary and secondary grade-level placement plus an additional teaching field certification. Course requires classroom observations, classroom instruction, professional duties and university seminars. The intern will be placed in a stateaccredited school under the guidance of an experienced classroom teacher (mentor) and a university supervisor (mentor). Prerequisites: EDCI 4301, EDCI 4302, EDCI 4307 and EDCI 4308 and approval of UT Pan American Teacher Education Committee.

## Early Childhood

## EDEC 4314 Research in Early Childhood

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.

EDEC 4390 Developmentally Appropriate Practices in Early Childhood Education [3-0]

## Fall, Spring (and Summer for endorsement only)

This course will address child development at the early childhood level. Developmentally appropriate practices in a learner-centered curriculum for early childhood education will be emphasized.
(Field-Based Approved Course.)

## EDEC 4391 Foundations of Early Childhood Education

Fall, Spring (and Summer for endorsement only)
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.
EDEC 4392 Acquisition and Conceptualization Processes in Early Childhood
Fall, Spring (and Summer for endorsement only)
Analysis of processes of acquisition and conceptualization of Piagetian concepts, socialization, wellness and fitness. (FieldBased Approved Course.) Prerequisite: EDEC 4390.

## EDEC 4393 Cultural Dimensions Related to Early Childhood <br> 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

## As Scheduled

Theories of 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.)

## Kinesiology Education

EDUK 4354 Kinesiology in the Public Schools [3-0] A survey of activities for program planning in public high schools including unit instruction, lesson planning, class organization, special programs and sources of materials. Laboratory experience to be arranged. Field-based. Prerequisites: EDCI 4301 and EDCI 4302.

## - Electrical Engineering

## ELEE 2130 Digital Systems Laboratory

[0-3]
Fall, Spring
Basics of digital logic and hardware; combinational circuits, flipflops, resistors, sequential circuits and state-machines.
Prerequisite: Enrollment in ELEE 2330. \$20 laboratory fee.

ELEE 2321 Network Theory 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
Boolean algebra; analysis and synthesis of combinational and sequential switching network; applications to computer design. Prerequisite: Sophomore standing recommended.

## ELEE 2420 Network Theory I

Fall, Spring
Basic network principles; steady-state response to signals; simple transient response; nodal and loop analysis. Prerequisite: Credit for or concurrent enrollment in MATH 2401. \$10 laboratory fee.

ELEE 3225 Electrical Engineering Laboratory I [0-6] Fall
Basic experimental methods; theory and practice of measurements; limitations of theoretical models; reporting of technical results.
Prerequisites: ELEE 2330, ELEE 2130 and credit for or concurrent enrollment in ELEE 2321 and ELEE 3301. \$30 laboratory fee.

ELEE 3301 Electronic Circuits I
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: Credit for or enrollment in ELEE 2321.

## ELEE 3302 Electronic Circuits 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.

## ELEE 3305 Electrical Systems <br> Fall

Introduction to electric circuits and machines; circuit elements, voltage, current and power, DC circuits, AC circuits in the steady state, elementary transients, poly-phase circuits; types and characteristics of DC motors, transformers and AC motors. Prerequisite: MATH 1402. \$15 laboratory fee.

## ELEE 3306 Electronic Systems <br> 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. $\$ 15$ laboratory fee.

ELEE 3315 Electromagnetic Engineering
Fall
Introduction to electrostatics and magnetostatics; properties of conductive, dielectric and magnetic materials; solutions of Maxwell's equations; transmission lines; uniform plane wave applications. Prerequisites: ELEE 2420 and credit for or concurrent enrollment in MATH 2401.

## ELEE 3330 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; credit for or enrollment in ELEE 3302 and ELEE 3315. \$30 laboratory fee.

## ELEE 3340 Probability and Statistics for

 Electrical Engineers
## Spring

Probability, random variables, distribution and density functions, limit theorems, random processes, correlation functions, power spectra, response of random inputs. Prerequisite: ELEE 2321.

## 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. \$10 laboratory fee.

## ELEE 4303 Digital Systems II

Fall
Hardware implementation of arithmetic and other algorithmic processes; organization, design and simulation of digital systems; asynchronous sequential switching networks. Prerequisites:
ELEE 2330 and CSCI 1380.
ELEE 4308 Electromechanical Systems
Spring
Magnetic circuits and transformers; principles of electromechanical energy conversion, rotating AC and DC electric machinery. Prerequisite: ELEE 2321 or ELEE 3305.

## ELEE 4321 Automatic Control

Fall
Dynamic system modeling; system stability; time-domain analysis; root-locus technique; frequency-domain analysis; control system design. Prerequisites: ELEE 2321 and MATH 3349.

ELEE 4328 Solid State Electronic Devices
Fall
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.

ELEE 4351 Communication Theory [3-0]
Fall
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.

## ELEE 4360 Microwave Systems Engineering

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. \$5 laboratory fee.

## ELEE 4365 Digital Signal Processing

## As Scheduled

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 and credit for or concurrent enrollment in MATH 3349.

## ELEE 4375 Introduction to VLSI Design

Fall, Spring
This course is aimed at providing a broad exposure to the area of CMOS VLSI design and the experience of designing VLSI circuits. The course will be suitable for any electrical engineering, computer engineering and computer science undergraduate student. Prerequisites: ELEE 2130, at least junior standing or consent of instructor. \$10 laboratory fee.

## - Englisln

## ENG 1301 Composition

(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

[3-0]
(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 General Education requirements.

## ENG 1320 Basic Writing

## As Scheduled

Intensive 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 <br> (Honors Plan)

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

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 6 hours of required freshman English.

## ENG 2303 Readings in American Literature

As Scheduled
(Texas Common Course Number is ENGL 2326.)
A study of several masterpieces of American literature, with emphasis on careful reading and on writing critical essays about individual works. Prerequisite: Minimum grade of "C" in 6 hours of required freshman English.

## ENG 2305 Readings in English Literature

(Texas Common Course Number is ENGL 2322.)
As Scheduled
A study of several masterpieces of English literature, with emphasis on careful reading and on writing critical essays about individual works. Prerequisite: Minimum grade of " C " in 6 hours of required freshman English.

ENG 2307 Readings in World Literature
[3-0]
(Texas Common Course Number is ENGL 2331.) As Scheduled
A study of several masterpieces of world literature in translation, with emphasis on careful reading and on writing critical essays about individual works. Prerequisite: Minimum grade of " C " in 6 hours of required freshman English.

## ENG 2308 Readings in Special Topics <br> 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 General Education requirements but may be repeated for elective credit when the topic varies. Prerequisite: Minimum grade of " C " in 6 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 6 hours of required freshman English.

ENG 2387 Readings in World Literature (Honors Plan)
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 (Honors Plan)
As Scheduled
A study of selected works of western literature from Renaissance through modern writers. Prerequisite: Admission to Honors Studies or by invitation.

## ENG 3301 Medieval Literature

## As Scheduled

A study of various types of medieval literature, including the epic, the romance and the allegory, with special attention to Middle English writers. Prerequisite: 12 hours of English.

## ENG 3304 The Eighteenth Century

## As Scheduled

A study of the major works of English writers of the Neo-classical period, including Dryden, Congreve, Pope, Swift, Sterne and Samuel Johnson. Prerequisite: 12 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: 12 hours of English.

ENG 3306 The English Novel to 1850
As Scheduled
A study of the origins and development of the English novel with emphasis on the major novelists. Prerequisite: 12 hours of English.

ENG 3307
The English Novel from 1850 to Present [3-0]
As Scheduled
A study of the continuing development and techniques of the English novel with emphasis on the major novelists. Prerequisite: 12 hours of English.

## ENG 3309 Development of the American Novel [3-0]

As Scheduled
A study of the American novel from its beginnings to the present, with emphasis on the major novelists. Prerequisite: 12 hours of English.

ENG $3310 \quad$ Twentieth Century English and American
As Scheduled
A study of the trends and movements in contemporary poetry, with emphasis on the works of the major writers. Prerequisite: 12 hours of English.

## ENG 3311 Contemporary Drama

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: COMM 3311; may be counted as English or Communication in satisfying degree requirements. Credit may be received for only one course. Prerequisite: 12 hours of English.

## ENG 3312 Survey of American Literature

As Scheduled
A chronological study of the principal authors, works and trends in American literature from the Colonial period through the Civil War. Prerequisite: 12 hours of English.

## ENG 3313 Survey of American Literature

As Scheduled
A chronological study of the principal authors, works and trends in American literature from the Civil War to the present.
Prerequisite: 12 hours of English.
ENG 3317 The Short Story and the Novella

## As Scheduled

A study of the development and technique of the short story and novella with emphasis on literary analysis. Prerequisite: 12 hours of English.

ENG 3319 Introduction to Descriptive Linguistics
As Scheduled
An introduction to the methods of linguistic science with emphasis on problem-solving techniques and their application to specific problems. Prerequisite: 12 hours of English.

ENG 3320 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: 12 hours of English.

## ENG 3321 Language and Culture

[3-0]
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: 12 hours of English.

## ENG 3322 Poetry

## As Scheduled

An in-depth study of the art and nature of poetry, with emphasis on sounds, forms, language and modes of poetry. Prerequisite: 12 hours of English.

## ENG 3323 World Drama <br> 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: 12 hours of English.

## ENG 3324 The Victorian Period

## As Scheduled

A study of the literature of Victorian England, from 1832 to the end of the 19th Century. Prerequisite: 12 hours of English.

## ENG 3330 English Grammar

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

[3-0]
As Scheduled
A chronological study of the principal authors, works and trends in English literature from the Anglo-Saxon period to the beginning of the Romantic movement. Prerequisite: 12 hours of English.

## ENG 3332 Survey of English Literature

## As Scheduled

A chronological study of the principal authors, works and trends in English literature from pre-Romantic poetry to the 20th Century. Prerequisite: 12 hours of English.

## ENG 3333 Technical Report Writing

## As Scheduled

Training in writing and presentation of special types of reports often used in engineering, science and business. Prerequisite: 12 hours of English.

ENG 4301 Shakespeare
As Scheduled
A study of representative comedies, histories, romances and tragedies. Prerequisite: 12 hours of English.

## ENG 4302 Modern English Syntax

## As Scheduled

Studies in modern English syntax with attention given to investigative methods and findings of contemporary linguistic analysis. Prerequisite: ENG 3319.

ENG 4308 History of the English Language
As Scheduled
A history of the English language from the Anglo-Saxon period to the present. Prerequisite: 12 hours of English.

## ENG 4309 Chaucer

As Scheduled
A study of selected works of the 14th Century English poet.
Prerequisite: 12 hours of English.

## ENG 4310 American Literature of the South

As Scheduled
A study of the works of representative writers of the South.
Prerequisite: 12 hours of English.
ENG 4312 Milton
As Scheduled
A study of the major poems and selected prose and minor poetry. Prerequisite: 12 hours of English.

## ENG 4314 Contrastive Grammar

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

As Scheduled
A study of the literature by and about Mexican Americans, with emphasis on the literary techniques and the cultural reflections in this literature. Prerequisite: 12 hours of English.

## ENG 4318 Approaches to Literature

As Scheduled
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: 12 hours of English.

## ENG 4321 Fundamentals of Language

 DevelopmentAs 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 4322 Creative Writing I

As Scheduled
A study of literary forms, techniques and values, with practice in writing poetry and prose. Prerequisite: 12 hours of English or permission of instructor.

ENG 4325 Composition Techniques
As Scheduled
A study of advanced composition techniques, including theories and methods of teaching composition skills. Prerequisite: 12 hours of English.

ENG 4326 Language Acquisition
Spring of 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.
$\begin{array}{lll}\text { ENG } & 4328 & \begin{array}{l}\text { Introduction to English as } \\ \text { a Second Language }\end{array}\end{array}$
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 4331 Problems in Grammar, Dialects and Language Performance

## As Scheduled

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. Prerequisite: SPAN 2308. Prerequisites for bilingual certification students: ENG 3319; ENG 3330 or SPAN 3330 or consent of instructor.

## ■ General Engineering

## ENGR 1101 Introduction to Engineering

[1-0]
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.

## ENGR 1221 Engineering Graphics

Fall, Spring, Summer
This course provides an introduction to computer-aided 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.

ENGR 2101 Engineering Technology Laboratory
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 the instructor. \$4 laboratory fee.

## ENGR 3333 Topics in Engineering

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 4461 Senior Design Project I

Fall, Spring
Preparation for a capstone design experience drawing from all previous coursework. Discussion of engineering methods, problem definition, assumptions, methods of analysis, testing and reporting results. Project to be undertaken in Senior Design Project II will be selected. Prerequisite: Senior standing in engineering. $\$ 30$ laboratory fee.

## ENGR 4462 Senior Design Project II

Fall, Spring
Continuation of Senior Design Project I. 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. Classroom discussions will consider professional responsibility, ethics, technology and society; entrepreneurship. Prerequisite: ENGR 4461. \$30 laboratory fee.

## - Finance

## FINA 1381 Personal Finance

(Texas Common Course Number BUSI 1307.)

## Fall, Spring, Summer

This course studies personal income, budgeting and consumer credit problems, development of plans for purchasing insurance, real estate and securities. Taxation as it affects the individual's income, assets and estate are also studied. (Not an advanced finance elective.)

FINA 3381 Money and Banking
Fall
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.

## FINA 3382 Investment Principles

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.

## FINA 3383 Managerial Finance

[3-0]
Fall, Spring, Summer
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. Prerequisite: One course in accounting. (It is recommended that students be currently enrolled in, or have already completed, the first statistics class.)

## FINA 3384 Fundamentals of Real Estate

## Fall, Summer

This course studies the physical and economic characteristics of real estate, particularly as they relate to law, taxation, appraisal, marketing and finance.

## FINA 3385 Principles of Insurance

## Spring

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 <br> [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. Prerequisites: 6 hours each of accounting and economics; FINA 3381.

## FINA 3387 Real Estate Finance

[3-0]
As Scheduled
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 which are used to solve the financial needs of various real estate activities. Prerequisite: FINA 3384 or consent of instructor.

## FINA 3390 Public Finance

## As Scheduled

This course will cover the following topics: public expenditures; their nature, changes and classifications; sources of public revenues; debt management; and an introduction of fiscal theory and policy. Prerequisites: 6 hours each of accounting and economics.

## FINA 3391 Small Business Financial Management <br> \section*{Spring}

This course is intended to provide the student with three important aspects of financial management for the small business: 1) sources of financing, especially venture capital; 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 to a real business situation. Prerequisite: FINA 3383.

FINA 3392 Internship
As Scheduled
A practicum with financial institutions or related service entities with a view to relate classroom theories with actual practice.

## 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. Prerequisite: 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. Prerequisites: FINA 3383 and 6 additional hours of advanced courses in finance.

## 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

As Scheduled
This course considers the commitment of funds to asset purchases and the measuring and influencing of cost of capital. It emphasizes the development of tools and techniques using quantitative methods for the analytical study of financial administration and its applications in the major problem areas of corporate finance.
Prerequisite: FINA 3383.

## FINA 4389 Commercial Banking

## 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. Previous course number: FINA 3389; credit may be received for only one course. Prerequisites: FINA 3381 and FINA 3386 or consent of instructor.

## French

## FREN 1321 Beginning French I

(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
[3-0]
(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 1387 Beginning French (Honors Plan)
[3-0]
As Scheduled
A beginning French course designed to meet the needs of Honors students interested in learning to read, write and speak French fluently at an accelerated pace. French culture and appropriate reading will be introduced. Open to students needing accelerated introduction to the French language. Credit Restriction: A student may receive credit for only one of FREN 1321 or FREN 1387. Prerequisite: Admission to the Honors Studies Program or by invitation.

## FREN 1388 Beginning French (Honors Plan)

As Scheduled
A beginning French course designed to meet the needs of Honors students interested in learning to read, write and speak French fluently at an accelerated pace. Elements of French culture and literature and appropriate reading will be introduced. Open to students needing accelerated introduction to the French language. Credit Restriction: A student may receive credit for only one of FREN 1322 or FREN 1388. Prerequisite: FREN 1387 or by invitation.

FREN 2321 Intermediate French I
(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
(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

As Scheduled
Practice in writing expository, narrative and descriptive prose.
Prerequisite: FREN 2322.
FREN 3322 French Composition II
As Scheduled
Practice in writing critical appreciations of selected literary works. Prerequisite: FREN 3321.

FREN 4324 French Civilization I
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 4339 Special Topics

As Scheduled
Special topics from the field of French language and literature.
Prerequisite: FREN 3321.

## - Geograplay

GEOG 2313 Principles of Physical Geography
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.

## - Ceology

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.

GEOL 1403 Environmental Geoscience I

## 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.

GEOL 2401 Geomorphology

## As Scheduled

A course designed for sophomores interested in geology and teachers of earth science. An analysis of land forms of the earth and processes by which they are formed. Also, comparative studies of lunar-earth land forms. Emphasis will be placed on mapping and interpretation of local geomorphology. Field trips. Prerequisite: GEOL 1401. \$4 laboratory fee.

GEOL 2402 Structural Geology
As Scheduled
A course designed for geology minors and teachers of earth science. A study of the architecture of the earth, including the
causes of deformation, resulting structures and their interrelationships. Field trips. Prerequisites: GEOL 1401 and GEOL 1402. \$4 laboratory fee.

## GEOL 3401 Mineralogy

As Scheduled
A course designed for geology minors, chemistry majors or minors, or teachers of earth science. A study of the major mineral groups, their atomic structure, chemical composition, external forms, properties and geologic interpretation. Field trips.
Prerequisites: GEOL 1401; or CHEM 1401 and CHEM 1402. \$4 laboratory fee.

## GEOL 3403 Oceanography

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 the instructor. \$4 laboratory fee.

GEOL 3404 Stratigraphy-Sedimentation
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, GEOL 1402, GEOL 2402 and GEOL 3401. \$4 laboratory fee.

GEOL 3405 Petrology
As Scheduled
A course designed for geology minors or teachers of earth science. A study of the major rock groups, their origin, classification and chemical and physical properties. Both megascopic and petrographic techniques will be emphasized. Field trips. Prerequisite: GEOL 3401. \$4 laboratory fee.

GEOL 3408 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 data bases will be examined. The spatial analysis potential of a GIS will be compared with traditional manual (cartographic) methods.

## GEOL 4408 Applications of Geographic

 Information Systems
## As Scheduled

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.

## a Germacm

## GERM 1331 Beginning German

(Texas Common Course Number is GERM 1311.)
Fall
A study of the essentials of German grammar, pronunciation, elementary conversation and prose reading.

GERM 1332 Beginning German
(Texas Common Course Number is GERM 1312.) Spring
A continuation of GERM 1331. Prerequisite: GERM 1331.
GERM 2331 Intermediate German
As Scheduled
Grammar review, conversation, composition and readings from modern classics. Prerequisite: GERM 1332 or the equivalent.

GERM 2332 Intermediate German
As Scheduled
Continuation of GERM 2331. Prerequisite: GERM 2331.

## ■ History

HIST 2313 American Heritage I
(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 which 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

(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 which 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.

HIST 2331 Civilization through the Centuries [3-0] 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. Credit Restriction: Credit may be received in only one of HIST 2331 and HONR 2387.

HIST 2332 Civilization through the Centuries [3-0]
Fall, Spring, Summer
A continuation of History 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. Credit Restriction: Credit may be received in only one of HIST 2332 and HONR 2388.

HIST 2335 The American Military Experience [3-0] 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 the causes and consequences of war and the role of the military in American society.

HIST 2363 Mexican-American Heritage
[3-0]
(Texas Common Course Number is HIST 2380.)
Fall, Spring, Summer
An interpretation of the historical heritage of the Mexican American in the United States. Prerequisite: 6 hours of History.

HIST 2387 American Heritage I (Honors Plan) [3-0] 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) [3-0]

## Spring

An integration of social, economic and political history of the United States with attention to the geographical influences. The approach is by problems which 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

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: 6 hours of History.

## HIST 3302 World History Studies

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: 6 hours of History with HIST 2331 recommended.

## 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: 6 hours of History.

HIST 3324 Formative Period of the American Nation, 1783-1840
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: 6 hours of History.

## HIST 3330 A General Survey of the History of Texas

## 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: 6 hours of History.

## 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: 6 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: 6 hours of History.

## HIST 3341 History of England I, to 1686

As Scheduled
English history from earliest times through the period of the Stuart kings. Emphasis will be given to the factors which have influenced the development of British and American institutions. Prerequisite: 6 hours of History.

## HIST 3342 History of England II, after 1686

As Scheduled
The period of the Glorious Revolution to the British Empire and commonwealth of nations. Prerequisite: 6 hours of History.

HIST 4303 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: 6 hours of History.

HIST 4313 Twentieth Century America, 1917 to the Present
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: 6 hours of History.

HIST 4322 The Spanish Southwest to 1821
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: 6 hours of History.

HIST 4325 The American Southwest after 1821 [3-0] 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: 6 hours of History.

## HIST 4343 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: 6 hours of History.

## HIST 4345 Mexico's First Century as an Independent Republic

As Scheduled
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: 6 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: 6 hours of History.

## HIST 4353 History of Mexican Culture

As Scheduled
A study of the Mexican people, including development of their social institutions, thinking, concepts, attitudes, values, reactions and sensitivities. Prerequisite: 6 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 19101917; greatest emphasis on the contemporary factors that have made Mexico's experience unique. Prerequisite: 6 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: 6 hours of History with HIST 3333 recommended.

HIST 4363 United States-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: 6 hours of History.
HIST 4370 The Renaissance and the Reformation, 1300 to 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. Prerequisite: 6 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. Prerequisite: 6 hours of History with HIST 2332 recommended.

HIST 4374 The Caribbean and Central America

## 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: 6 hours of History with HIST 3333 recommended.

## HIST 4375 Absolutism and Enlightenment

 in Europe, 1650-1789
## As Scheduled

Traces the development of the Absolutist State, benevolent despotism and the intellectual and scientific trends of the
Enlightenment. Prerequisite: 6 hours of History with HIST 2332 recommended.

## HIST 4376 Revolutionary Europe, 1789-1850

As Scheduled
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: 6 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: 6 hours of History with HIST 2332 recommended.

## HIST 4393 Contemporary Europe, 1919

 to Present
## As Scheduled

A study of the causes of World War II, its resulting problems and current trends. Prerequisite: 6 hours of History with HIST 2332 recommended.

HIST 4395 Special Topics in Historical Study [3-0] As Scheduled
A study of selected topics in history, including comparative history and philosophies of history. Topics are varied according to availability of faculty and student interest. Course can be repeated for credit as topics change. Prerequisite: 6 hours of History.

## Mealth

## HLTH 1352 Community and Environmental

 Health
## As Scheduled

Basic community health problems with emphasis upon communicable disease, waste disposal, safe water, food and drug control and the improvement of community health.

## HLTH 1354 Safety and First Aid

## 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 Cardio-Pulmonary 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
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.

## HLTH 2371 Health Problems in the Use of <br> Alcohol, Tobacco and Narcotics

As Scheduled
Examination of the psychological, physiological and social effects of the misuse of drugs and other harmful agents. Legal and ethical implications for the individual and society.

## HLTH 2372 Nutrition and Health

As Scheduled
Study of food constituents relating to human nutritive needs and sources through the span of life, infancy through later adulthood.

HLTH 2373 Growth, Development and Fitness [3-0]
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 3373 Human Sexuality
As Scheduled
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
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, cardio-vascular anomalies, neurological disorders, mental retardation and genetic disorders. Emphasis is upon providing sufficient and usable information which will provide the basis for responsible action in matters of personal health.

## HLTH 3375 Consumer Health

As Scheduled
Selection, evaluation and understanding of health information, medical services, health product and advertising and socio-cultural factors in consumer health protection.

HLTH 4350 Organization of the Health Program [3-0]
As Scheduled
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.

## 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.

## - Monors

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 prospectus.

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

[309]
Supervised completion of research and writing of thesis, with periodic meetings for coordination, instruction in methodology and discussion.

## Departmental Courses, Honors

(See Course Listings for course descriptions.)
Biology: BIOL 1487, 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, 2388 Readings in World Literature
French: FREN 1387, 1388 Beginning French
History: HIST 2387, 2388 American Heritage
Mathematics: MATH 1387 Algebra MATH 1388 Precalculus
Philosophy: PHIL 1387 Introduction to Philosophy PHIL 1388 Introduction to Logic
Political Science: POLS 2387, 2388 U.S. and Texas Government and Politics
Sociology: SOCI 1387 Principles of Sociology
Spanish: SPAN 1387, 1388 Beginning Spanish

## Mealth-Related programes

## - Interdisciplinary Courses

HRP 1301 Introduction to Health Careers
Fall, Spring
This course will survey careers in the health and health-related professions. Specific topics related to health careers will include health care organizations, history and trends, ethics, legal aspects, terminology, relevant professional affiliations and vocational trends. Employment options and educational requirements will be covered in some depth.

## HRP 2303 Medical Terminology

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 [3-0] As Scheduled
The topics will vary according to current issues in the provisions of health care and prevention. Offering, of course, will be contingent on student demand. May be repeated once for credit as topics vary. Prerequisite: Approval of department.

## International Business

INTB 3310 Entering International Trade
Fall, Spring
Introduction to import and export procedures and processes.
Sources of data and the acquisition of information concerning the country, its culture, business practices and businesses. Accessing markets in, and sources of supply from, foreign countries.
Prerequisite: INTB 3330.

## INTB 3330 International Business

Fall, Spring, Summer
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. Previous course number: GENB 4330; credit may be received for only one course. Prerequisites: MANA 3361, MARK 3371 and FINA 3383.

## INTB 3340 Legal Considerations of International Business

## Fall, Spring

U.S. laws governing international business. The impact of foreign laws on business within the host country, including U.S. companies in that country. Prerequisites: BLAW 3337 and INTB 3330.

## INTB 4364 Management Environment in International Business

## 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

Fall, Spring
International dimensions of competition for global markets, with emphasis on manufacturing, production and operations management as tools of international competitive strategy. Prerequisite: MANA 4363.

INTB 4379 Topics in International Business [3-0]
As Scheduled
Special topics in international business as selected by the instructor. Additional topics to be added. Course can be repeated as topics change. Prerequisite: INTB 3330.

## Japanese

JAPN 1351 Beginning Japanese
[3-0]
As Scheduled
An introductory course in Japanese designed to teach basic knowledge of the Japanese language, including speaking, writing, listening and reading.

JAPN 1352 Beginning Japanese
As Scheduled
A continuation of JAPN 1351. Designed to teach basic knowledge of the Japanese language, including speaking, writing, listening and reading.

■ Kinesiology

- Activity Courses

There is a $\$ 6$ activity fee for each class unless otherwise indicated.
KIN 1160 Dance Performance - Folkloric [1-0]
As Scheduled
An organization open to all college students who possess sufficient interest and skills in the area of dance. Membership is determined by audition. The course includes rehearsals and performance designed to promote individual growth in a particular dance form appropriate for public performances. Credit may not be used to satisfy kinesiology requirement. May be repeated for credit. Prerequisite: Permission of instructor.
$\begin{array}{lll}\text { KIN } 1161 & \begin{array}{l}\text { Dance Performance - Dance } \\ \text { Ensemble }\end{array} \\ \text { [1-0] }\end{array}$
As Scheduled
An organization open to all college students who possess sufficient interest and skills in the area of dance. Membership is determined by audition. The course includes rehearsals and performance designed to promote individual growth in a particular dance form appropriate for public performances. Credit may not be used to satisfy Kinesiology requirement. May be repeated for credit. Prerequisite: Permission of instructor.

| KIN | 1200 | Swimming I |
| :--- | :--- | :--- |
| KIN | 1201 | Fitness and Motor Development |
| KIN | 1210 | Basic Karate |
| KIN | 1211 | Intermediate Karate |
| KIN | 1220 | Backpacking |
| KIN | 1221 | Camping and Hiking |
| KIN | 1230 | Wrestling |
| KIN | 1250 | Speedball-Soccer |
| KIN | 1255 | Softball |


| KIN | 2201 | Flag Football | [2-0] |
| :---: | :---: | :---: | :---: |
| KIN | 2202 | Volleyball | [2-0] |
| KIN | 2203 | Badminton I | [2-0] |
| KIN | 2204 | Tennis I | [2-0] |
| KIN | 2206 | Weight Training I | [2-0] |
| KIN | 2207 | Track and Field | [2-0] |
| KIN | 2208 | Gymnastics I | [2-0] |
| KIN | 2213 | Badminton II | [2-0] |
| KIN | 2216 | Weight Training II | [2-0] |
| KIN | 2221 | Basketball | [2-0] |
| KIN | 2223 | Spanish Dance | [2-0] |
| KIN | 2225 | Folk and Square Dance | [2-0] |
| KIN | 2226 | Modern Dance | [2-0] |
| KIN | 2230 | Jazz Dance | [2-0] |
| KIN | 2232 | Aerobic Dance | [2-0] |
| KIN | 2233 | Aerobic Dance II | [2-0] |
| KIN | 2235 | Mexican Folkloric Dance | [2-0] |
| KIN | 2236 | Ballet | [2-0] |
| KIN | 2241 | Racquetball I | [2-0] |
| KIN | 2242 | Racquetball II | [2-0] |
| KIN | 2252 | Swimming II | [2-0] |
| KIN | 2256 | Tennis II | [2-0] |
| KIN | 2257 | Golf | [2-0] |

Fee must be paid directly to the golf course for the use of nonuniversity facilities. At the time of publication of this catalog, the fee was $\$ 10$. (Subject to change)

| KIN | $\mathbf{2 2 5 8}$ | Archery |
| :--- | :--- | :--- |
| KIN | $\mathbf{2 2 5 9}$ | Bowling |
| Fee must be paid directly to the bowling alley for the use of non- |  |  |
| university facilities. At the time of publication of this catalog, the |  |  |
| fee was $\$ 75$. (Subject to change) |  |  |


| KIN | 2264 | Fencing | $[2-0]$ |
| :--- | :--- | :--- | :---: |
| KIN | 2273 | Gymnastics II | $[2-0]$ |

## KIN 2280 Lifeguard Training

Prerequisite: KIN 2252 or current emergency water safety training.

KIN 2281 Water Safety Instruction
Prerequisite: KIN 2280 or current lifeguard training or emergency water safety training.

## KIN 2282 Scuba Diving

Fee must be paid to outside vendor. At the time of publication of this catalog, the fee was $\$ 200$. (Subject to change)

## - Theory Courses

KIN 1351 Introduction to Kinesiology
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

## 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 Cardio-Pulmonary 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
## 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 4 hours of required Kinesiology activities. Fulfills General Education Requirements; see page 70 for details.)

KIN 2323 Dance Appreciation
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 General Education Requirements for Fine Arts; see page 70 for details.)

KIN 2354 Biomechanics
As Scheduled
A study of the structural and mechanical factors which interact with human movement. Prerequisites: BIOL 2403 and BIOL 2404.

## KIN $3300 \quad$ Theory of Football

## As Scheduled

A study of and participation in the fundamentals and techniques, rules and strategies of football.

KIN 3302 Teaching Individual Sports
As Scheduled
The current theories of teaching selected individual/dual sports.

## KIN 3303 Theory of Basketball

As Scheduled
A study of and participation in the fundamentals, techniques, rules and strategies of basketball.

## KIN 3304 Theory of Baseball

## As Scheduled

A study involving the use of theory in the analysis and interpretation of coaching techniques and fundamentals in baseball.

## KIN 3305 Theory of Track and Field

As Scheduled
A study involving the use of theory in the analysis and interpretation of coaching techniques and fundamentals in track and field.

KIN $3310 \quad$ Modified Team and Individual Sports
As Scheduled
Analysis and presentation of sports in a modified form appropriate for the elementary school.

KIN 3312 Dance Activities for Adolescents
As Scheduled
Analysis of skill and techniques in teaching social, folk and square dance.

## KIN 3313 Dance for Children

As Scheduled
Analysis of skills and techniques in teaching creative dance and folk dance for the elementary school.

KIN 3317 Theory and Performance of Gymnastics
As Scheduled
Development of the basic techniques and performance skills of tumbling and gymnastic apparatus.

## KIN 3319 Tumbling and Gymnastics

## As Scheduled

Analysis of skills and techniques in teaching basic tumbling and gymnastics.

## KIN 3320 Theory of Volleyball

As Scheduled
A study involving the use of theory in the analysis and interpretation of coaching techniques and fundamentals of volleyball.

KIN 3333 Theory of Soccer
As Scheduled
A study of the use of theory in the analysis and interpretation of coaching techniques and fundamentals in soccer.

## KIN 3352 Care, Treatment and Prevention

 of Athletic Injuries
## 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. Prerequisite: KIN 2354.

KIN 3356 Movement Exploration

## As Scheduled

A course structured to acquaint students with the essential elements of kinesiology. The underlying techniques of movement exploration are presented.

## 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 4313 Workshop in Kinesiology

As Scheduled
Analysis of the cause and effect of handicapping conditions most frequently encountered and the formation of activity programs designed to improve physical, mental and emotional functional levels to the greatest extent possible. Prerequisite: Permission of the Department Chair.

## KIN 4351 Adapted Kinesiology

## 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. Laboratory experience to be arranged. Field-based.

## ■ Management

## MANA 1331 Introduction to Business

Fall, Spring, Summer
A survey of the field of business and industry in our economic system. Basic principles of business organization and the information and operation of the several divisions of a business concern: finance, production, marketing and personnel. Designed to acquaint the beginning student with the problems, procedures and practices of modern business. Recommended only for freshmen and sophomores. (Students with a composite ACT of 19 or more are exempt from the Introduction to Business course and may take an upper-level business course in its place.)

MANA 2346 Cooperative Programs in Business Administration

## As Scheduled

A planned program of full-time work (minimum of one semester or two continuous five-week summer sessions) related to the student's major field. Credit will be determined by a satisfactory employer's evaluation, interviews between the student and a supervising professor, and a supervised written report by the student. This course counts only as elective hours, and may be repeated once for credit. Students enroll on a credit/no credit basis.

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 division standing and approval by both department chair and employer providing internship experience.

MANA 3332 Human Relations in Management
Fall, Spring, Summer
The theory and application of behavioral sciences to the human element in organizations. Individual behavior and motivation, as well as small group interaction in organizations, is emphasized. The human resource is portrayed as a vital, complex factor in management. Prerequisite: MANA 3361 or consent of department.

MANA 3335 Communication Policy and Strategy

## Fall, Spring, Summer

Course focuses on communication policy and practice as contributor to the effectiveness and efficiency of organizational operation 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. Prerequisite: Satisfaction of general requirements for freshman English.

MANA 3361 Principles of Management and Organizational Behavior
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.

MANA 3362 Personnel Management
Fall, Spring, Summer
Current developments within the field of personnel administration. A study of concepts, principles, policies and organizational procedures utilized by business institutions in the management of personnel: selection, placement, compensation, morale, labor turnover, collective bargaining, employee service and supervisory activities. Prerequisite: MANA 3361 or consent of department.

MANA 3364 Organizational Theory and Design [3-0] Fall, Spring
A study of the theory and process of designing, utilizing and evaluating organizational structures. Includes designing and fitting jobs into the organizational structure and adapting the organizational design to the operational and environmental demands of the organization. Prerequisite: MANA 3361.

MANA 3365 Wage and Salary Administration [3-0]
Fall, Spring
Principles and practices of the determination of relative values for jobs and their application to basic wage and salary structure. The formulation in class of a job evaluation plan and wage structure. Prerequisites: MANA 3361 and MANA 3362 or consent of department.

## MANA 4300 Topics in Management

## On Demand

A course of supervised independent study and research into management theory and practice. Prerequisite: 9 semester hours of Management courses with at least a 3.0 GPA in these courses.

MANA 4361 Human Behavior in Organizations [3-0] Fall, Spring
Study of management theory with emphasis on the investigation of individual and group behavior in organizations. Prerequisite: MANA 3361 or consent of department.

MANA 4362 Small Business Venture
Fall, Spring
This course explores ways to own a business, including starting a new business, and acquiring a franchise or existing business. The student will also study the various federal, state and local institutions that cater to the needs of small business development. Students will be required to complete a term project involving the steps required to start or buy a small business.

## MANA 4363 Production Management

## Fall, Spring, Summer

The concept of the production function and its applicability to all types of business firms, problems which 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 and MANA 3361.

MANA 4364 Societal Problems in Business
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.

MANA 4366 Small Business Management
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. Prerequisite: Senior standing in Business.

MANA 4368 Industrial Relations
Fall, Spring
An examination of current issues and problem areas facing management and unions in their relationship with employees, government and the community. Emphasis is placed on the role of union and management in the process, on the relationship of this process to contemporary labor legislation, contract negotiations and daily administration of company and union relations.
Prerequisites: MANA 3361 and MANA 3362 or consent of the department.

MANA 4369 Strategic Management
Fall, Spring, Summer
This capstone course integrates knowledge in functional areas and covers strategy formulation, implementation and evaluation.
Different types of organizations in all kinds of environments and industries are studied. Technology, culture and ethics are important environmental variables considered. Prerequisites: MANA 3361, MANA 4363, MARK 3371 and FINA 3383 and INTB 3330.

MANA 4399 Business Practicum
Fall, Spring
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. Prerequisites: Senior standing and consent of department.

## Mamufacturing Engineering

## MANE 2164 Manufacturing Processes Lab

 Spring and SummerProvides hands-on experience in various manufacturing processes. Equivalent Course Number: MANE 2364/MANE 2164 is equivalent to MANE 2430. Prerequisite: Credit for or enrollment in MANE 2364. \$30 laboratory fee.

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 1340.

MANE $2340 \quad \begin{aligned} & \text { Fundamentals of Industrial } \\ & \text { Engineering }\end{aligned}$

## Summer

Introduction to engineering economic analysis, industrial and project management, ergonomics, human factors, work recording techniques, time and motion study and line balancing.

MANE 2364 Manufacturing Processes
Spring
An introduction to manufacturing processes including metal cutting, nontraditional machining, force analysis, casting, deformation and joining processes, plastics, composites, manufacturing of ceramics and electronics devices. Equivalent Course Number: MANE 2364/MANE 2164 is equivalent to MANE 2430. Credit may not be received for both. Prerequisite: MECE 2440

MANE 2430 Manufacturing Processes
Spring
An introduction to manufacturing processes including metal cutting, nontraditional machining, force analysis, casting,
deformation and joining processes, plastics, composites, manufacturing of ceramics and electronics devices. Prerequisite: MECE 2440. $\$ 30$ laboratory fee.

MANE 3143 Computer Aided Manufacturing Lab [0-3] Spring and Summer
Application of programmable logic controller, sensors, CNC programming, robotics for integration and automation of manufacturing processes. Equivalent Course Number: MANE 3343/MANE 3143 is equivalent to MANE 3401. Credit may not be received in both. Prerequisite: Credit for or enrollment in MANE 3343. \$30 laboratory fee.

MANE 3165 Computer Aided Design Lab

## Fall and Summer

Application of Pro-Engineer software for computer aided design and solid modeling. Prerequisite: Credit for or enrollment in MANE 3365.

MANE 3331 Process and Product Design Spring
Introduction to the engineering design process and methods, machine elements selection and tool design for products and manufacturing processes. Concepts of product life cycle, reliability, repairability, QFD, DFM, DFA, ergonomics, cost estimation and economic analysis. Prerequisite: MANE 2430 or MANE 2364.

MANE 3343 Computer Aided Manufacturing [3-0] Spring
Introduction to CAM based on microcomputers, programmable logic controllers, sensors, CNC programming, computer control of manufacturing processes and integration. Equivalent Course Number: MANE 3343/MANE 3143 is equivalent to MANE 3401. Credit may not be received in both. Prerequisite: Credit for or enrollment in MANE 2430 or MANE 2364.

MANE 3365 Computer Aided Design
Fall
Curve and surface definition, geometric transformation and solid modeling, projections and visualization and numerical analysis. Equivalent Course Number: MANE 3365/MANE 3165 is equivalent to MANE 3400. Credit may not be received in both. Prerequisite: ENGR 1221.

MANE 3400 Computer Aided Design
Fall
Curve and surface definition, geometric transformations and solid modeling, projections and visualization, numerical analysis, introduction to finite element analysis. Prerequisite: ENGR 1221. $\$ 10$ laboratory fee.

MANE 3401 Computer Aided Manufacturing Spring
Introduction to CAD/CAM based on microcomputers, programmable logic controllers, sensors and their applications, CNC programming, computer control of manufacturing processes, CAD/CAM integration. Prerequisite: Credit for or enrollment in MANE 2430 or MANE 2364. $\$ 30$ laboratory fee.

MANE 4176 Robotics Lab
As Scheduled
Application of kinematics, trajectory planning, dynamics and control of robots for automation, assembly and materials handling. Prerequisite: Credit for or enrollment in MANE 4376. $\$ 25$ laboratory fee.

MANE 4187 Computer Integrated Manufacturing Lab

## As Scheduled

Integration of programmable logic controller, CNC machines, sensors, robots, vision system, CAD/CAM and data networking. Prerequisite: Credit for or enrollment in MANE 4387.

## MANE 4311 Quality Control

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 2430 or MANE 2364.

MANE 4321 Automation Systems
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. Prerequisites: ELEE 3305 and MATH 3349.

## MANE 4331 Manufacturing Planning and Control

Fall
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 4340 Operations Research
As Scheduled
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: Consent of Instructor.

MANE 4346 Introduction to Plastics Engineering [3-0] 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

## As Scheduled

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
[3-0]
As Scheduled
Covers topics on tool design methods, locating and clamping methods, design of jigs and fixture, gauges and gauge design, die design and mold design. Prerequisites: MANE 2430 or MANE 2364 and MANE 3400 or MANE 3365 and MANE 3165.

MANE 4376 Robotics
As Scheduled
Introduction to matrix transformation. Study of kinematics, trajectory planning, dynamics and control of robotics. Application of robots for automated manufacturing, assembly and materials handling. Equivalent Course Number: MANE 4376/MANE 4176 is equivalent to MANE 4401. Credit may not be received in both. Prerequisite: Consent of instructor.

## MANE 4387 Computer Integrated Manufacturing

## As Scheduled

Study of CAD/CAM/CIM in a modern manufacturing plant. The process of justifying, implementing and managing a CIM program is developed. Concepts of data networking and structured analysis tools are introduced. MANE 4387/MANE 4187 is equivalent to MANE 4450. Prerequisites: MANE 3401 or MANE 3343 and MANE 3143.

MANE 4401 Robotics
As Scheduled
Study of reprogrammable, computer-controlled devices for automated manufacturing processes, assembly and materials handling. Robot classification, dynamics, control and programming. Prerequisite: Consent of instructor. $\$ 25$ laboratory fee.

## Marketing

## MARK 3371 Principles of Marketing

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.

MARK 3372 Consumer Behavior
Fall
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 or consent of instructor.

MARK 3373 Industrial Marketing
As Scheduled
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 behavior.

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 or consent of instructor.

MARK 3376 Professional Salesmanship
Fall, Spring
Professional salesmanship, the product, the buyer, planning the presentation, meeting the prospect, the interview, overcoming resistance, closing the sale and building goodwill. Practical applications of selling in the form of structured class presentations with an emphasis on consultative selling. Prerequisite: MARK 3371 or consent of instructor.

MARK 4330 International Marketing
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. Prerequisites: MARK 3371 and INTB 3310.

## MARK 4372 Promotions Management

As Scheduled
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 or consent of instructor.

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 4377 Marketing Management <br> Spring

Emphasis on acquiring a knowledge of various 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 application of techniques emphasized. Prerequisite: MARK 3371.

MARK 4378 Marketing Research
Fall, Spring
Quantitative research procedures and techniques used in business today. Problem definition, sources of research data, survey methods, questionnaire design and sampling techniques. Practical application of procedures and techniques is emphasized through class research projects. Prerequisites: QMT 3342 and MARK 3371.

MARK 4379 Special Problems in Marketing
As Scheduled
In-depth study of specific problems in marketing. A weekly conference is scheduled with the supervising faculty member.
Prerequisites: 12 hours in Marketing and consent of instructor.
■ Mathematics
MATH 1300 Elementary Algebra
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, elementary inequalities, exponent properties, introduction to radicals, 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 general university graduation requirements.

MATH 1321 Business Algebra
As Scheduled
This course is designed for students who plan to major within the College of Business Administration. 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 electronic calculators and microcomputers to perform numerical computations is emphasized. Previous Course Number: MATH 2316. A student may use MATH 1321 to replace a grade received in MATH 2316; however, one may receive credit for only one of MATH 1321, MATH 2316 or MATH 1340. Prerequisite: MATH 1334 with a grade of "C" or better or satisfactory score on ACT or placement exam.

## MATH 1322 Business Calculus

## As Scheduled

This course is designed for students who plan to major within the College of Business Administration. Topics include differential calculus with business optimization applications, multivariable calculus including optimization techniques and applications and an introduction to integral calculus. Prerequisite: MATH 1321 or MATH 2316 with a grade of " C " or better.

## 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 functions; systems of linear equations in two unknowns; quadratric, rational and radical equations with applications. Previous Course Number: MATH 1335. Prerequisite: MATH 1300 with a grade of "C" or better or satisfactory score on the ACT. This course does not count toward a student's hours for graduation or in the determination of hours attempted or earned.

MATH 1340 College Algebra
As Scheduled
Topics include nonlinear and absolute value inequalities, functions, complex numbers, polynomial and rational functions, exponential and logarithmic functions, systems of linear and nonlinear equations, and matrices. Grade Replacement and Credit Restrictions: This course replaces a grade received in MATH 1304, MATH 2316 or MATH 1321; however, one may receive credit for only one of the following: MATH 1304, MATH 1340, MATH 1387, MATH 2316 or MATH 1321. Prerequisite: MATH 1334 with a grade of "C" or better or satisfactory score on ACT or placement exam.

## MATH 1356 Trigonometry

As Scheduled
Topics include circular functions, identities, special angles, trigonometric equations and graphs. Previous Course Number: MATH 1305; credit may be received for only one course.
Prerequisite: MATH 1340 or its equivalent with a grade of "C" or better or satisfactory score on ACT or placement exam.

MATH 1357 Precalculus Mathematics
As Scheduled
Topics include transcendental functions, analytic geometry, conic sections, sequences and series. Prerequisite: MATH 1356 with a grade of "C" or better or appropriate high school background and/ or placement scores.

MATH 1387 Algebra (Honors Studies)
As Scheduled
An enriched algebra course for honors students with topics selected from those normally covered in College Algebra and Business Algebra. Special emphasis will be given to problem solving using computer software such as spreadsheets and computer algebra systems. Credit Restrictions: Credit may be received for only one of MATH 1340 and MATH 1387.
Prerequisites: Admission to Honors Studies Program or by permission, and MATH 1334 (or equivalent) or by permission.

## MATH 1388 Precalculus (Honors Studies)

As Scheduled
A precalculus course designed for honors students interested in an accelerated introduction to the calculus sequence. This course will combine the most important parts of trigonometry and analytic geometry and some essential topics of differential calculus. Credit Restrictions: Credit may only be received for MATH 1388 or for the sequence of MATH 1356 and MATH 1357. Prerequisites: Admission to Honors Studies Program or by permission, and MATH 1340 (or equivalent) or permission.

## MATH 1401 Calculus I

As Scheduled
Topics include limits, the derivative and its applications, antiderivatives, definite integrals, and the derivatives and integrals of transcendental functions. Credit Restriction: A student may not receive credit for both MATH 1360 and MATH 1401.
Prerequisite: MATH 1357 with a grade of "C" or better or appropriate high school background and placement scores.

MATH 1402 Calculus II
As Scheduled
Topics include methods and applications of integration, parametrized curves, integration in polar coordinates, and infinite sequences and series. Credit Restriction: A student may not receive credit for both MATH 2342 and MATH 1402. Prerequisite: MATH 1401 with a grade of "C" or better or appropriate high school background and placement scores.

MATH 2306 Foundations of Mathematics I

## As Scheduled

Students study the mathematical background for 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 1314; a student may use MATH 2306 to replace a grade recorded in MATH 1314; however, one may not receive credit for both MATH 1314 and MATH 2306. Prerequisite: MATH 1340 with grade of "C" or better or satisfactory score on ACT or placement exam.

MATH 2307 Foundations of Mathematics II

## As Scheduled

This course is a continuation of MATH 2306. Topics include measurement, geometry, probability, statistics, elementary algebra and problem solving. Previous Course Number: MATH 1315. A student may use MATH 2307 to replace a grade received in MATH 1315; however, one may not receive credit for both MATH 1315 and MATH 2307. Prerequisite: MATH 1340 with a grade of "C" or better and MATH 2306 with a grade of "C" or better.

## MATH 2330 Survey of Elementary Statistics

## As Scheduled

This course is intended to provide the student with an elementary overview of the mathematical nature and uses of descriptive 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 1401 with a grade of "C" or better.

## MATH 2401 Calculus III

As Scheduled
Topics include vectors, calculus of several variables, partial
derivatives, multiple integrals and vector calculus including the Divergence Theorem and Stoke's Theorem. Credit Restriction: A student may not receive credit for both MATH 3347 and MATH 2401. Prerequisite: MATH 1402 with a grade of "C" or better.

MATH 3303 History of Mathematics
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 1402.

MATH 3304 Geometry
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 3310 Foundations of Mathematical

 Problem Solving
## As Scheduled

This course studies the cognitive and affective aspects of problem solving models, heuristics and strategies. Applications are drawn from many fields including but not limited to arithmetic, algebra, geometry and number theory. Discovering how to get the most out of one's mathematical knowledge and reasoning ability when transferring to new and/or difficult problematic situations is a fundamental aim of this course. Prerequisite: MATH 2307 with a grade of "C" or better.

## MATH 3311 The Organizational Structures

 and Processes of Mathematics
## 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 1402.
MATH 3312 Foundations of Measurement and Informal Geometry
As Scheduled
An in-depth study of measurement and informal geometry. Topics will include length, area, volume, the metric system, transformations, symmetry, congruency, similarity and coordinate systems. Prerequisite: MATH 2307 with a grade of "C" or better.

## MATH 3313 Foundations of Algebraic

 StructuresAs Scheduled
Algebraic concepts and structures will be examined with an emphasis on the group and field properties. Prerequisite: MATH 2307 with a grade of "C" or better.

MATH 3315 Foundations of Probability and Statistics
As Scheduled
An in-depth study of probability and statistics. Topics include constructing and interpreting tables, graphs and charts; descriptive measures; and elementary concepts of probability. Prerequisite: MATH 2307 with a grade of "C" or better.

## MATH 3316 Foundations of Mathematics in a Computer Environment

As Scheduled
This course studies mathematics that can be developed and explored in an environment that includes the computer as the primary investigative tool. Topics include algebraic and geometric patterns, functions, iterative and recursive processes, and probabilistic and statistical models. Prerequisite: MATH 2307 with a grade of "C" or better.

MATH 3319 Mathematical Foundations of Structures 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 structures and processes of mathematics. Prerequisite: MATH 2307 with a "C" or better.

MATH 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 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 1321. It is highly recommended that the student have some knowledge of statistics such as is offered in MATH 2330.

MATH 3338 Applied Statistics II
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
As Scheduled
A study of ordinary differential equations and applications.
Prerequisite: MATH 1402 with a grade of "C" or better.
MATH 3368 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:

CSCI 3350; a student may receive credit for only one course. Prerequisites: MATH 1401; CSCI 1380 or CSCI 2325 or consent of instructor.

MATH 3373 Discrete Structures
As Scheduled
This course is an introduction to discrete mathematics, studying enumeration, lattices, graphs and other topics in combinatories. Particular emphasis is given to those structures applicable in computer science. Previous Course Number: MATH 4373. A student may use MATH 3373 to replace a grade received in MATH 4373; however, credit may be received for only one course.
Prerequisite: MATH 1401 or MATH 1322.
MATH 4302 Theory of Numbers
As Scheduled
This course includes the binomial theorem, the division algorithm, the Euclidean algorithm, diophantine equations, primes and their distribution, congruencies, and number-theoretic functions.
Prerequisite: MATH 2345.

## MATH 4317 Complex Analysis

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.

## MATH 4318 Boundary Value Problems

## 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.

## 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.

## MATH 4339 Probability and Statistics

## 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 1402 with a grade of "C" or better.

MATH 4351 Modern Algebra
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 2401.

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 2401.

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 Scheduled
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.

## Mechanical Engineering

MECE 2303 Statics
(Texas Common Course Number is ENGR 2301.)
Fall, Spring
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 1401 and credit for or enrollment in MATH 1402.

MECE 2304 Dynamics
Fall, Spring
Kinematics, dynamics, work-energy and impulse-momentum methods applied to engineering problems involving particles and rigid bodies. Prerequisite: MECE 2303.

MECE 2321 Mechanics of Solids
Fall, Spring
Internal forces and deformation in solids; stress and strain in elastic and plastic solids; applications to beams, columns, a variety of engineering problems and introduction to computer modeling. Prerequisites: MECE 2303 or MECE 2405 and credit for or enrollment in MATH 2401 and PHYS 2301. \$15 laboratory fee.

MECE 2335 Thermodynamics I

## Fall, Spring

Classical thermodynamics with primary emphasis on application of the first and second laws of thermal systems. Introduction to physical and chemical equilibria. Prerequisite: MATH 1402.

MECE 2405 Engineering Mechanics
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 1402.

MECE 2440 Engineering Materials
Fall, Spring
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. Prerequisite: CHEM 1301 and CHEM 1101. \$15 laboratory fee.

MECE 3115 Fluid Mechanics Laboratory

## Spring

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 Heat Transfer Laboratory
Fall
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 3315 Fluid Mechanics

## Spring

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 [2-3]
Fall
Fundamentals of measurement systems; standards; treatment of data; statistics; uncertainty analysis, data acquisition; transducers; strain; force, acceleration; pressure; temperature; fluid flow.
Prerequisites: PHYS 2302, MATH 3349 and credit for or enrollment in ELEE 3305. \$30 laboratory fee.

MECE 3336 Thermodynamics II
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] 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.
Prerequisite: CSCI 2335 or CSCI 1380, MATH 2401 and MATH 3349.

MECE 3360 Heat Transfer

## Fall

Steady and unsteady one- and two-dimensional heat conduction.
Forced and free convection, radiation, heat exchangers.
Prerequisites: MECE 2335, MECE 3315 and credit for or enrollment in MECE 3350.

MECE 3380 Kinematics and Dynamics of Machines
Spring
Kinematic and dynamic modeling and analysis of mechanisms and machines; study of machine components such as linkages, cams, gears, gear trains and differentials. Prerequisites: PHYS 2301 and MECE 2304.

MECE 3385 Mechanical Vibrations
As Scheduled
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-degree of freedom systems, continuous systems; transient response; numerical techniques used to analyze alternate designs and propose optimum solutions. Prerequisites: MATH 2401, MATH 3349, MECE 2321 and MECE 2304.

MECE 3437 Thermal and Fluid Sciences
Spring
First and second laws of thermodynamics, fluid properties, statics, conservation laws, conduction, convection and radiation heat transfer. Prerequisite: Credit for or enrollment in MATH 3349. \$25 laboratory fee.

MECE 4140 Mechanical Systems Laboratory
As Scheduled
A laboratory course to emphasize laboratory techniques, mechanical systems integration, computerized data acquisition and analysis, and general experimental techniques related to rotating machinery and vibration. Prerequisite: Credit for or enrollment in MECE 3380. $\$ 25$ laboratory fee.

## MECE 4345 Composite Material Design

As Scheduled
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. Prerequisites: MECE 2321 and MECE 2440.

## MECE 4350 Machine Elements

## Fall

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 2321.
MECE 4365 Heating, Air Conditioning and Refrigeration Design
As Scheduled
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.

## Music

## MUS 1101/3102 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 4 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 4 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 4 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 4 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 which 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 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.

MUS 1207/3208 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 1208/3210 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 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 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 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.

## MUS 1226 Beginning Guitar Class II

Fall, Spring
Continuation of MUS 1225. An acoustic instrument is required for this course. Prerequisite: MUS 1225.

## MUS 1227 Level-Two Class Guitar

Fall, Spring
Continuation of MUS 1226. An acoustic instrument is required for this course. Prerequisite: MUS 1226.

## MUS 1228 Level-Two Class Guitar

Fall, Spring
Continuation of MUS 1227. An acoustic instrument is required for this course. Prerequisite: MUS 1227.

## - 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 2 hours credit, or two half-hour lessons per week and two hours minimum daily practice for 4 hours credit. Applied music fee: 2 semester hour course, $\$ 35 ; 4$ semester hour course, $\$ 60$.

MUS 1231, 1431, 3232, 3432 Applied Piano
MUS 1233, 1433, 3234, 3434 Applied Voice
MUS 1235, 1435, 3236, 3436 Applied Percussion
MUS 1237, 1437, 3238, 3438 Applied Harp
MUS 1241, 1441, 3242, 3442 Applied Trumpet
MUS 1243, 1443, 3444 Applied French Horn
MUS 1245, 1445, 3246, 3446 Applied Trombone
MUS 1247, 1447, 3248 Applied Baritone Horn
MUS 1249, 1449, 3450 Applied Tuba
MUS 1261, 1461, 3262, 3462 Applied Violin
MUS 1263, 1463, 3264, Applied Viola
MUS 1265, 1465, 3466 Applied Cello
MUS 1267, 1467, 3268, 3468 Applied String Bass
MUS 1269, 1469, 3270, 3470 Applied Guitar
MUS 1271, 1471, 3472 Applied Flute
MUS 1473, 3274, 3474 Applied Oboe
MUS 1275, 1475, 3276, 3476 Applied Clarinet
MUS 1277, 1477, 3278, 3478 Applied Saxophone
MUS 1279, 1479, 3280, 3480 Applied Bassoon
MUS 1307 Music Appreciation
[3-0]
Fall, Spring, Summer
An introductory course in the elements, forms and stylistic eras in music. Designed for non-music majors and minors. This course meets the Other Humanities option (Group 4) of the General Education requirements in Humanities.

## MUS 1308 Mexican Folk Music

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 General Education requirements, Section A. Humanities.

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
Spring
Intervals, scales, chord structures, chord progressions, simple cadences, uses 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.
Prerequisite: MUS 1313 with grade of "C" or satisfactory achievement level on MUS 1313 placement exam.

## 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 on and care of woodwind instruments.

## MUS 2125 Class Strings

Fall
Class instruction in the rudiments of performance on and care of standard orchestral string instruments.

## 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 General Education requirements, Section A. Humanities.

MUS 2302 Music Literature II
Spring
Continuation of MUS 2301. This course meets the Other Humanities option (Group 4) of the General Education requirements, Section A. Humanities.

## MUS 2313/2314 Second Year Music Theory I/II [3-3]

 Fall/SpringStudy 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, sight singing, 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 4 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 4 hours of each course will count toward a degree.

## MUS 3105/1104 University Band <br> 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 4 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 4 hours of each course will count toward a degree.

MUS 3121 Vocal Diagnosis
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 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 Conducting I

## Spring

Study of baton techniques as related to both instrumental and choral conducting, fundamental phrasing, balance, mood and attack and release technique. Prerequisite: Junior standing.

## 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 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 3301 History of Music

[3-0]
Fall, alternate years
Advanced study of the evolution of the musical art from its beginnings through the Baroque era. Prerequisites: MUS 2301 and MUS 2302.

MUS 3302 History of Music
Spring, alternate years
Continuation of MUS 3301. Prerequisite: MUS 3301.

## MUS 3311 Essential Elements of Music I <br> [3-0]

Fall, Spring, Summer I
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 General Education requirements in Humanities.
Prerequisite: Junior standing.
MUS 3312 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.
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 which 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

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
Fall, alternate years
Techniques of scoring and editing music for band, orchestra and instrumental ensembles, ranges, timbres, voicings and limitations of the instruments. Prerequisite: MUS 2314.

## MUS 4208 Conducting II

[1-2]
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.

## Mursing

## Associate Degree Nursing*

* The Associate Degree Nursing Program at UT Pan American is scheduled for closure. The last class will be admitted for the Fall Semester 1998, and the program will close as of the year 2000.
Students should check with their departmental advisor for further information on program status or academic standing.

NURS 1202 Introduction to Associate Degree Nursing
Fall
This course is designed to introduce the student to unique concepts, theories and practices related to nursing. Students are involved in discussions and presentations of sociocultural, legal and ethical components of client/patient care.

## NURS 1801 Fundamentals of Associate Degree Nursing

Fall
This course introduces the student to basic skills and knowledge which assist in applying the nursing process in patient/client care. Students practice and demonstrate competency in performing skills in a simulated situation before providing nursing care to adults in the secondary health care setting. Prerequisites: Credit for or concurrent enrollment in NURS 1202; PSY 1310 BIOL 1401 or BIOL 1402; BIOL 2403 or BIOL 2404; CPR certification; and admission to ADN Program.

## NURS 1802 Medical-Surgical Nursing I

Spring
This course provides continued utilization of the nursing process in the care of clients/patients experiencing alterations of selected body systems. Students will provide care in secondary health care settings. Prerequisites: NURS 1801, BIOL 2403 and BIOL 2404.

## NURS 2406 Nursing Care of the Childrearing Family

[2.5-6]
Fall
This course focuses on the nursing care of the family with children. Prerequisites: NURS 2604 and PSY 2337.

## NURS 2407 Nursing Care of the Childbearing Family

Fall
This course focuses on the nursing care of the family involved in the process of childbearing through the neonatal period.
Prerequisites: NURS 2604 and PSY 2337.
NURS 2505 Psychosocial Nursing
Spring (or Summer)
This course provides for continued use of the major concepts of the nursing program. Major emphasis is placed on conditions affecting the psychological integrity of individuals. Prerequisites: NURS 2604 and PSY 2337.

NURS 2508 Medical-Surgical Nursing III
Spring
This course provides for continued use of the major concepts of the
nursing program and is designed to assist in the transition from the role of student to graduate. Major emphasis is on the leadership role of the nurse. Prerequisites: NURS 2406 and NURS 2407.

NURS 2604 Medical-Surgical Nursing II [3-12] Summer Session I
This course provides utilization of the nursing process in the care of clients/patients experiencing more complex alterations in selected body systems. Prerequisite: NURS 1802.

## Bachelor of Science in Nursing

## NURS 2301 Wellness

Fall
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 4 hours of required kinesiology activities to fulfill General Education requirements.) Prerequisite: None

NURS 3101 Nursing Concepts
[1-0]
Spring
This course focuses on nursing concepts such as nursing history, leaders, trends, educational programs and professionalism. Prerequisites: NURS 2301 and admission to the BSN Program.

NURS 3102 Pharmacology
[1-0]
Spring
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.
NURS 3209 Research
Fall
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 application of research findings to practice. Prerequisite: Consent of the BSN faculty.

## NURS 3403 Client Assessment <br> Spring

This course allows the student 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 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.

NUR 3405 Mental Health Nursing
Fall
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 3102, NURS 3403, NURS 3604 or consent of the BSN faculty.

NURS 3407 RN Mobility
Spring
This course is designed to assist the registered nurse 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

## 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 3102, NURS 3403 and NURS 3604.

NURS 3604 Nursing Fundamentals

## Spring

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

Fall
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 3102, NURS 3403, NURS 3604 and NURS 3408.

NURS 4203 Issues in Nursing
Fall
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]
Fall
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 use the nursing process to recognize and meet health needs of individuals and groups. Prerequisite: NURS 4601 or consent of the BSN faculty.

NURS 4601 Adult Health II [3-12] Spring
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 3408 and NURS 3608 [Generic]; NURS 3403 and passage of advanced placement exam(s) [Alternate Pathway].

NURS 4602 Family Health Care
Spring
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. Prerequisite: NURS 3608.

NURS 4607 Leadership in Nursing
[3-12]
Fall
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.
Prerequisite: NURS 4601 or consent of the BSN faculty.

## ■ Occupational Therapy

[^9]OCCT 3005 Medical Terminology (1 Credit Hour) A study of medical terminology including recognition of word roots, spelling, pronunciation and definitions of words, and recognition of medical abbreviations.

## PHYS 3012 Human Physiology (3 Credit Hours)

A study of the function of human organ systems in relation to occupational therapy with special emphasis on cellular mechanisms and the musculoskeletal, cardiovascular, respiratory and renal systems.

## - Fall Semester

OCCT 3001 Health and Occupation (4 Credit Hours) A study of the role of human occupation throughout the life cycle, focusing on self care, play, work and leisure as they contribute to health, competence and human performance.

OCCT 3004 Human Neurosciences in Occupational Therapy
(4 Credit Hours)
A study of the structure and functions of the human nervous system with particular emphasis on the application of theoretical concepts to treatment techniques practiced in occupational therapy. The course includes laboratory experiences.

## OCCT 3006 Foundations in Occupational Therapy

(2 Credit Hours)
An introduction to occupational therapy. This course surveys the history, philosophy, theoretical concepts and clinical methods and techniques that support the practice of occupational therapy.

## OCCT 3020 Biomechanical Approach in Occupational <br> Therapy (4 Credit Hours)

A study of the biomechanical principles related to human motion with application to occupational therapy intervention with musculoskeletal dysfunctions.

OCCT 3104 Assistive Technology in Occupational Therapy (2 Credit Hours)
The study of the use of assistive technology in occupational therapy practice. Topics addressed include computer technology, modified computer access, augmentative communication, environmental control, seating and mobility. Special emphasis is on patient assessment and the selection and use of assistive technology.

## - Spring Semester

MEDI 3007 Clinical Medicine (3 Credit Hours)
An overview of the medical management of medical and surgical conditions encountered in clinical occupational therapy.

OCCT 3025 Design and Fabrication (3 Credit Hours)
The student is given the opportunity to acquire design and fabrication skills used in occupational therapy intervention.

## OCCT 3031 Occupational Therapy in Physical Dysfunction <br> (3 Credit Hours)

Concurrent enrollment in OCCT 3091.
A study of the theories and approaches related to occupational therapy evaluation and treatment of individuals with physical dysfunction.

## *OCCT 3071 Practicum in Physical Dysfunction

(1 Credit Hour)
An opportunity for the student to observe and begin participation in the evaluation and treatment of individuals with physical dysfunction.

## OCCT 3091 Skills Lab in Physical Dysfunction

(3 Credit Hours)
Concurrent enrollment in OCCT 3031.
The study of evaluation and treatment techniques for individuals with physical dysfunction.

PATH 3011 Pathology
(3 Credit Hours)
General concepts and diseases specific to organ systems of the body with emphasis placed upon those pathologies encountered in the general practice of occupational therapy.

## * Senior Year

## - Fall Semester

OCCT 4028 Communications in Occupational Therapy
(2 Credit Hours)
The study of communication skills needed for occupational therapists to effectively communicate in health care relationships.

## OCCT 4033 Occupational Therapy in Developmental Dysfunction (3 Credit Hours)

Concurrent enrollment in OCCT 4093.
A study of the theories and approaches related to occupational therapy assessment and treatment of individuals with developmental dysfunction.

## OCCT 4082 Management and Consultations in

 Occupational Therapy (3 Credit Hours) The study of political, socioeconomic, legal, cultural and ethical factors which impact the health care system and occupational therapy practice. Students learn the management functions of planning, organizing, directing, controlling, evaluating and communication through a directed simulation project.
## OCCT 4093 Skills Lab in Developmental Dysfunction

(3 Credit Hours)
Concurrent enrollment in OCCT 4033.
The use and analysis of assessment and treatment techniques for individuals with developmental dysfunction.
*OCCT 4173 Practicum in Developmental Dysfunction (1 Credit Hour)
An opportunity for the student to observe and begin participation in evaluation and treatment of individuals with developmental dysfunction. Students will be exposed to a variety of clinical settings.

## - Spring Semester

INTD 4006 Professional Issues in the Health Sciences
(1 Credit Hour)
This course examines major bioethical dilemmas encountered in the delivery of health care services by the physician, nurse, dentist and other health care professionals. The course also examines the influences of governments, laws and religious beliefs.

MEDI 4012 Medical Management in Psychosocial Dysfunction
(2 Credit Hours)
An introduction to medical intervention strategies in psychosocial dysfunction, including assessment, major disease classifications and age-specific diagnoses.

## OCCT 4027 Geriatric Issues in Occupational Therapy

 (2 Credit Hours)A study of the theoretical and clinical issues related to occupational therapy practice in geriatrics.

OCCT 4032 Occupational Therapy in Psychosocial Dysfunction
(3 Credit Hours)
Concurrent enrollment in OCCT 4091.
A study of the theories and approaches used in the rehabilitation of individuals having psychosocial dysfunction. Students have the
opportunity to learn the application of the occupational therapy process in treating psychosocial conditions throughout the life span.

OCCT 4051 Research in Occupational Therapy (3 Credit Hours)
An introduction to basic concepts and terminology in scientific inquiry and their application in interpreting published research as it impacts on clinical practice.

OCCT 4092 Skills Lab in Psychosocial Dysfunction
(3 Credit Hours)
Concurrent enrollment in OCCT 4032.
A study of psychiatric occupational therapy evaluation and treatment techniques as they relate to the major theoretical frames of reference. Students will have the opportunity to observe and learn techniques during visits to mental health clinical settings.

## - Fieldwork

*OCCT 4071 Fieldwork in Physical Dysfunction
(12 Credit Hours)
A three-month fieldwork placement in an occupational therapy specialty practice setting oriented toward treatment of physical disabilities.
*OCCT 4172 Fieldwork in Developmental Disabilities
(12 Credit Hours)
A three-month fieldwork placement in an occupational therapy practice setting oriented toward the treatment of developmental dysfunction.
*OCCT 4073 Fieldwork in Required Elective
(12 Credit Hours)
A three-month fieldwork placement in an occupational therapy practice setting oriented toward treatment within an area of the student's special interest.

* Course graded on a Satisfactory/Unsatisfactory basis.


## ■ Physician Assistant studies

* The following course numbers, titles and descriptions in Physician Assistant Studies are those of The University of Texas Medical Branch at Galveston, which offers the program in cooperation with UT Pan American. These courses are open to Physician Assistant Studies majors only or with consent of the departmental chairperson. A course listing preceded by an asterisk
${ }^{(*)}$ indicates that the course must be completed with a minimum grade of " $C$ " or " 72 ." If a grade lower than " $C$ " is recorded, the student must repeat the course regardless of overall grade point average (GPA) and will be placed on scholastic probation status. Courses may not be repeated more than twice, and the timing of the repeated course or remedial instruction will be scheduled at the discretion of departmental faculty.

PHAS 3125 Human Dynamics I
(1 credit)
The student will be given the opportunity to demonstrate the ability
to communicate skillfully with patients through the use of appropriate interviewing and counseling techniques. (9 lecture hours, 24 laboratory hours per enrollment period.) $\$ 10$ laboratory fee.

## PHAS 3127 Human Dynamics II

(1 credit)
The student will be given the opportunity to demonstrate skills in the education of patients concerning: 1) various medical, psychological and surgical illnesses; 2) health promotion/disease prevention; and 3) terminal illness. (9 lecture hours, 18 laboratory hours per enrollment period.) Prerequisites: PHAS 3125 Human Dynamics I and PHAS 3226 Human Dynamics II. \$6 laboratory fee.

## PHAS 3138 Clinical Methods I (1 credit)

The student will be given the opportunity to demonstrate: 1) the ability to read the rate and rhythm of a 12 lead EKG; 2) the ability to determine the EKG axis and read the width of the intervals; 3) the ability to identify the basic EKG interpretation and the benign arrhythmias; 4) the ability to identify the lethal arrhythmias and their basic drug treatment; and 5) identify the types and location of acute myocardial infarctions. ( 15 lecture hours per enrollment period.)

## *PHAS 3222 Patient Evaluation II

( 2 credits)
The student will be given the opportunity to demonstrate: 1) the ability to elicit both objective and subjective information from the interview and physical examination of the patient; 2) the ability to construct and effectively utilize the problem-oriented medical record; 3) the ability to present that patient case verbally to any other member of the health care team involved in the management of the patient; and 4) the ability to apply effectively the principles of normal human growth and development to both problem solving situations and the clinical evaluation of patients of all ages. Correlations are made with PHAS 3406 Problem Solving Techniques I and PHAS 3125 Human Dynamics I. (15 lecture hours, 30 laboratory hours per enrollment period.) Prerequisites: HUBS 3630 Human Anatomy and Physiology III and PHAS 3321 Patient Evaluation I. $\$ 2$ laboratory fee.

PHAS 3224 Problem Solving Techniques II (2 credits) Continuation of PHAS 3406 Problem Solving Techniques I. (30 hours lecture per enrollment period.) Prerequisite: PHAS 3406 Problem Solving Techniques I.

## PHAS 3226 Human Dynamics II

( 2 credits)
The student will be given the opportunity to demonstrate: 1) the ability to identify normal physical, social and psychological processes and distinguish these from illness and injury; and 2) the ability to clinically assess a patient's state of development in terms of normal growth and development for all age groups. Family and community dynamics are stressed. (30 lecture hours per enrollment period.)

## PHAS 3237 Preventive Medicine and Community Health

 ( 2 credits)An overview of comprehensive health subjects is presented. The student will be given the opportunity to demonstrate: 1) the ability to apply practical knowledge concerning the practice of preventive medicine skills; 2) the ability to identify resource agencies that
provide preventive and community health services; and 3) the ability to recognize and utilize sources of information pertaining to legal regulations of reportable disease or health hazards. (30 lecture hours per enrollment period.)

## *PHAS 3321 Patient Evaluation I

(3 credits)
The student will be given the opportunity to demonstrate: 1) the proper use of instruments and techniques used in performing the physical examination; 2) the ability to correlate information acquired in HUBS 3630 Human Anatomy and Physiology III with its application and importance to the physical examination of the patient; and 3) the essentials of basic historical data. (45 laboratory hours per enrollment period.) $\$ 12$ laboratory fee.
*PHAS 3329 Pharmacology
(3 credits)
The student will be given the opportunity to demonstrate: 1) knowledge of commonly used chemotherapeutic agents and their therapeutic functions with the human body and specific organ systems; 2) the ability to recognize untoward effects manifested by chemotherapeutic agents; 3) knowledge of resource materials for determining proper usage of chemotherapeutic agents; 4) knowledge of proper prescription writing; and 5) knowledge of the role of the physician assistant in writing prescriptions. (45 lecture hours per enrollment period.)
*PHAS 3406 Problem Solving Techniques I (4 credits)
This advanced course in clinical medicine will give the student the opportunity to demonstrate: 1) in-depth knowledge of the mechanisms of human disease states using a body system approach with emphasis on epidemiology, etiology, pathophysiology, clinical manifestations, diagnosis, treatment, prevention and prognosis; and 2) use of basic problem solving skills in evaluating clinical medicine problems. (45 lecture hours, 30 lab hours per enrollment period.) Prerequisites: HBUS 3630 Human Anatomy and Physiology III, PHAS 3321 Patient Evaluation I and PHAS 3222 Human Dynamics I. Corequisite: PHAS 3222 or consent of instructor. $\$ 2$ laboratory fee.
*PHAS 3617 Principles of Clinical Medicine (6 credits) This course is designed specifically to prepare the physician assistant student for the senior clinical rotations. The student will be given the opportunity to demonstrate an understanding of clinical signs and symptoms, interpret results obtained by analysis of body tissues and fluids, interpret basic radiographic procedures, and demonstrate the ability to utilize clinical data in the process of diagnosing and managing medical problems. ( 90 lecture hours per enrollment period.) Prerequisites: HUBS 3630 Human Anatomy and Physiology III, PHAS 3222 Patient Evaluation II, and PHAS 3406 Problem Solving Techniques I for a cumulative total of 12 credit hours.

## *PHAS 3662 Introductory Clerkship (6 credits)

The student will be given the opportunity to demonstrate: 1) an understanding of the indications for performance of specific procedures given a clinical picture; 2 ) the ability to perform the procedure; 3 ) the ability to counsel the patient regarding procedures and management; and 4) the ability to interpret data acquired from procedures in the primary care areas and relevant subspecialty areas. (160 laboratory hours per enrollment period.) $\$ 30$ laboratory fee.

PHAS 4090 Topics in Physician Assistant Studies (1-4 credits)
The student will be given the opportunity to: 1) develop knowledge and skill in techniques and processes of patient management, or 2) develop advanced knowledge of the management of patients with special conditions. (Hours are arranged.) Course may be repeated for credit when topic varies.
*PHAS 4436 Elective Rotation
(4 credits)
The student will be given the opportunity to demonstrate: 1) the ability to understand and manage more complex problems in the particular discipline chosen; 2) the ability to understand how the increased knowledge derived from this elective will be advantageous in the primary care setting; and 3) the ability to understand how this knowledge will benefit the physician and patient in the primary care setting. This course may include extended clinical care hours, emergency and hospital call and community responsibilities as deemed appropriate by the supervising physician. (4-week rotation.) Prerequisite: Senior status. Course may be repeated when content varies.
*PHAS 4441 General Medicine Rotation II (4 credits) The student will be given the opportunity to demonstrate: 1) the ability to elicit, organize and record necessary data, both for a comprehensive and problem-oriented evaluation; 2) the ability to order or recommend appropriate laboratory, radiologic and other necessary diagnostic studies; 3 ) the ability to formulate a management plan for the patient's problems; 4) the ability to follow a patient's progress by record review and periodic reevaluation; 5) the ability to assist the physician in appropriate procedures; 6 ) the ability to counsel and educate the patient about health maintenance issues; and 7) the ability to understand and institute emergency medical care when necessary. (4-week rotation.) Prerequisite: Senior status.

## *PHAS 4442 Surgery Rotation II

(4 credits)
The student will be given the opportunity to demonstrate: 1) the ability to prepare and present patient records and a problem list in an organized fashion appropriate for the surgical service; 2 ) the ability to understand the indications, contraindications, possible complications and limitations in the surgical treatment of common conditions; 3 ) the ability to understand the indications and limitations of various diagnostic procedures; 4) the ability to assist effectively with necessary procedures in the pre- and postoperative periods; and 5) the ability to assist, in all particulars delegated by the surgeon, during an operative procedure. (4-week rotation.) Prerequisite: Senior status.

PHAS 4631 General Pediatric Rotation (6 credits) The student will be given the opportunity to demonstrate: 1) the ability to elicit and record a complete pediatric history; 2) the ability to perform with accuracy a complete pediatric physical examination; 3) the ability to formulate a pertinent management plan for common pediatric problems; 4) the ability to perform selected screening, diagnostic and treatment procedures as directed by a physician; and 5) the ability to counsel and educate patients and their parents or guardians for optimal health of the child. (6week rotation.) Prerequisite: Senior status.
*PHAS 4633 Obstetrics and Gynecology Rotation
(6 credits)
The student will be given the opportunity to demonstrate: 1) the ability to elicit, organize, record and present a complete data base on a gynecologic or obstetric patient; 2) the ability to assist the physician effectively in procedures unique to the obstetric and gynecologic discipline; 3) the ability to counsel the obstetric patient in pre- and post-natal care; and 4) the ability to counsel patients on matters of common gynecologic problems. (6-week rotation.) Prerequisite: Senior status.

## *PHAS 4834 Surgery Rotation I <br> (8 credits)

The student will be given the opportunity to demonstrate: 1) the ability to prepare and present patient records and a problem list in an organized fashion appropriate for the surgical service; 2) the ability to understand the indications, contraindications, possible complications and limitations in the surgical treatment of common conditions; 3) the ability to understand the indications and limitations of various diagnostic procedures; 4) the ability to assist effectively with necessary procedures in the pre- and postoperative periods; and 5) the ability to assist, in all particulars delegated by the surgeon, during an operative procedure. (8-week rotation) Prerequisite: Senior status.

## *PHAS 4835 Preceptorship

(8 credits)
The student will be given the opportunity to demonstrate the ability to: 1) approach the patient in common office situations and obtain a complete data base; 2) develop a professional working relationship with a physician; 3) counsel and educate patients for their optimal health; 4) understand basic concepts of medical office management and routine; 5) understand the availability and roles of various community agencies and resources in primary and continuous care; and 6) recognize and understand the additional community responsibilities of primary health care professionals. This course is intended to be completed in the private practice setting of the physician, and may include extended clinical care hours, emergency and hospital call, and community responsibilities as deemed appropriate by the supervising physician. (8-week enrollment period.) Prerequisite: Senior status.
*PHAS 4840 General Medicine Rotation I (8 credits) The student will be given the opportunity to demonstrate: 1) the ability to elicit, organize and record necessary data, both for a comprehensive and problem oriented evaluation; 2) the ability to order or recommend appropriate laboratory, radiologic and other necessary diagnostic studies; 3 ) the ability to formulate a management plan for the patient's problems; 4) the ability to follow a patient's progress by record review and periodic reevaluation; 5) the ability to assist the physician in appropriate procedures; 6) the ability to counsel and educate the patient about health maintenance issues; and 7) the ability to understand and institute emergency medical care when necessary. (8-week rotation.) Prerequisite: Senior status.

## *PHAS 4843 Clinical Elective Rotation <br> (8 credits)

The student will be given the opportunity to demonstrate the ability to: 1) understand and manage more complex problems in the particular discipline chosen; 2) understand how the increased knowledge derived from this elective will be advantageous in the primary care setting; and 3) understand how this knowledge will
benefit the physician and patient in the primary care setting. This course may include extended clinical care hours, emergency and hospital call and community responsibilities as deemed appropriate by the supervising physician. (8-week rotation.) Prerequisite: Senior status.

## ■ Philosophy

## PHIL 1310 Introduction to Philosophy

(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
(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 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) [3-0]

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 $2340 \quad$ Philosophy of the Person

A philosophical examination of what it is to be human. This
course will deal with such issues as the problem of personal identity, the nature and structure of the self, the nature of mind and its place in the world and the question of "human nature."
Previous Course Number: PHIL 3340; a student may receive credit in only one course.

## PHIL 2350 Social Philosophy

(Texas Common Course Number is PHIL 2307.)
As Scheduled
This course will provide a philosophical examination of alternative theories of society, and it will investigate the basic presuppositions and structures of society and the ways in which these are to be understood and evaluated. Previous Course Number: PHIL 2380; a student may receive credit in only one course.

## PHIL 2370 Eastern Thought

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

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 3320 Symbolic Logic

As Scheduled
This course will be a continuation of Philosophy 1320,
Introduction to Logic, and will be concerned with the principles and methods used in symbolic logic to distinguish between valid and invalid arguments. Prerequisite: PHIL 1320 or consent of instructor.

## PHIL 3330 Philosophy of Value

As Scheduled
A philosophical examination of the place of value in aesthetic, moral and practical experience. This course will consider both historical and contemporary treatments of the importance of value in various forms to human thought, feeling and action.
Prerequisite: 3 hours of philosophy or consent of instructor.

## PHIL 3360 History of Philosophy: Ancient and Medieval

As Scheduled
A study of the history of philosophy from the Presocratics through the Middle Ages, with particular emphasis on the Presocratics, Plato, Aristotle, Stoicism, Epicureanism, Augustine and Aquinus. Prerequisite: 3 hours of philosophy or consent of instructor.

PHIL 3361 History of Philosophy: Modern
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: 3 hours of philosophy or consent of instructor.

PHIL 3362 History of Philosophy: Contemporary [3-0] As Scheduled
A study of the history of philosophy during the 19th and 20th centuries, with particular emphasis on phenomenology, existentialism and the analytic tradition. Prerequisite: 3 hours of philosophy or consent of instructor.

## 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: 3 hours of philosophy.

## PHIL 3380 Latin American Thought

## 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: 3 hours of philosophy.

## PHIL 4310 Theories of Knowledge

## As Scheduled

A philosophical inquiry into the sources, nature and criteria of knowledge and an examination of alternative approaches to the problems of perception, meaning and truth. The course will also consider the interplay between these issues in epistemology and related problems in metaphysics. Previous Course Number: PHIL 3310; a student may receive credit in only one course.
Prerequisite: 3 hours of philosophy or consent of instructor.

## PHIL 4320 Philosophy of Science

## As Scheduled

A 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: 3 hours of philosophy or consent of instructor.

## PHIL 4340 Philosophy of Mind

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: 3 hours of philosophy or consent of instructor.
PHIL 4380 American Philosophy
[3-0]
As Scheduled
An examination of the contributions of great American thinkers to the philosophical deposit of the world. Prerequisite: 3 hours of philosophy.

PHIL $4390 \quad$ Special Topics in Philosophy
As Scheduled
A study of selected issues or figures in philosophy; content will vary. May be repeated for up to 9 hours credit as content changes. Prerequisite: 3 hours of philosophy or consent of instructor.

## $\square$ Physics

## PHYS 1401 General Physics

(Texas Common Course Number is PHYS 1401.) Fall, Spring, Summer
An algebra-based introduction to the principles of mechanics, fluids, heat, waves and sound. Prerequisite: MATH 1340.
Recommended: Credit for or concurrent enrollment in MATH 1356. \$4 laboratory fee.

## PHYS 1402 General Physics

(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. Prerequisite: PHYS 1401.
\$4 laboratory fee.
PHYS 2101 Intermediate Laboratory
Fall, Spring
Laboratory exercises illustrating the principles of mechanics, heat and sound. Emphasis is placed on statistical data analysis and error treatment. Corequisite: Concurrent enrollment in PHYS 2301. \$4 laboratory fee.

PHYS 2102 Intermediate Laboratory
Fall, Spring
Laboratory exercises illustrating the principles of electricity, magnetism, waves and optics. Corequisite: Concurrent enrollment in PHYS 2302. \$4 laboratory fee.

## PHYS 2301 Intermediate Physics

Fall, Spring
A calculus-based study of mechanics, heat, thermodynamics, wave motion and sound. Corequisite: Concurrent enrollment in PHYS 2101. Prerequisites: PHYS 1401 and MATH 1402 with concurrent enrollment in MATH 2401.

## PHYS 2302 Intermediate Physics

Fall, Spring
Treatment of electricity, magnetism, wave phenomena and optics using calculus. Corequisite: Concurrent enrollment in PHYS
2102. Prerequisites: PHYS 1402, PHYS 2301 and MATH 2401.

## PHYS 3101 Junior Laboratory

Fall, Spring, Summer
The course is designed to acquaint the student with the experimental method. Experiments are chosen to cover as many fields of physics as possible in keeping with the background and abilities of the students. Prerequisite: 12 hours of physics. $\$ 4$ laboratory fee.

## PHYS 3102 Junior Laboratory

[0-3]
Fall, Spring, Summer
A continuation of PHYS 3101. \$4 laboratory fee.

## PHYS 3301 Electromagnetic Theory

As Scheduled
Theory of electrostatics, electromagnetics, magnetic properties of materials, units and thermoelectricity, simple treatment of alternating current, oscillating circuits, electromagnetic radiation and Maxwell's Equation. Prerequisites: 12 hours of physics and MATH 2401, which may be taken concurrently.

PHYS 3303 Heat and Thermodynamics
As Scheduled
Study of heat measuring devices, thermal expansion, behavior of gases, elementary thermodynamics, change of state, specific heats and transfer of heat. Prerequisites: 12 hours of physics and MATH 2401, which may be taken concurrently.

## PHYS 3304 Optics

[3-0]
As Scheduled
A study of physical optics, including diffraction, interference, polarization and the beginning of spectroscopy together with some geometrical optics. Prerequisites: 12 hours of physics and MATH 2401, which may be taken concurrently.

## PHYS 3305 Mechanics

As Scheduled
A rigorous treatment of the motion of a particle in one, two and three dimensions; the motion of a system of particles with a detailed treatment of the conservation laws; the statics of fluids and solids; an introduction to the motion of rigid bodies. Prerequisites: 12 hours of physics and MATH 3349, which may be taken concurrently.

## PHYS 3402 Modern Physics

## As Scheduled

Introduction to relativity, physics of atoms and solids and other topics in 20th Century physics. Prerequisites: PHYS 2302 and PHYS 2102. \$4 laboratory fee.

## PHYS 4101 Senior Laboratory

Fall, Spring, Summer
The student performs experiments of greater complexity and difficulty than those in Junior Laboratory. In addition, the student is encouraged to design and carry out original experiments in his or her field of interest. Prerequisites: PHYS 3101 and PHYS 3102. \$4 laboratory fee.

## PHYS 4102 Senior Laboratory

Fall, Spring, Summer
A continuation of PHYS 4101. \$4 laboratory fee.

## PHYS 4103 Senior Laboratory

Fall, Spring, Summer
A continuation of PHYS 4102. \$4 laboratory fee.

## PHYS 4301 Topics in Modern Physics

As Scheduled
A study of recent developments in physics including atomic
energy, nuclear structure, X-rays, cosmic rays and radioactivity. Prerequisites: PHYS 2302 and PHYS 2102.

PHYS 4308 Seminar in Physics
As Scheduled
Investigations of problems and progress in contemporary physics will be undertaken. Individual research and reporting will be emphasized. Courses may be repeated once for credit.
Prerequisites: One year of physics and consent of instructor.

## - Political Science

POLS 1333 Introduction to Political Science
(Texas Common Course Number is GOVT 2304.) Fall, Spring
Emphasis on political fundamentals, public law, theory and organization of the modern state, political dynamics and institutions. Open to freshmen.

## POLS 2313 United States and Texas <br> Government and Politics

(Texas Common Course Number is GOVT 2301.)
Fall, Spring, Summer
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 3 hours of the legislative requirements of 6 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 United States and Texas Government and Politics
(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 3 hours of the legislative requirements of 6 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 Political Economy

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 3 hours of the legislative requirements of 6 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.

## POLS 2388 U.S. and Texas Government and Politics (Honors Plan)

## 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 3 hours of the legislative requirement of 6 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 4 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
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 Special Topics

## 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 five political science fields.) Prerequisites: POLS 2313 and POLS 2314.

## POLS 3322 Politics of Developing Nations

## As Scheduled

Analysis of political institutions and processes with focus on developing nations, such as those in Africa and the Middle East. Prerequisites: POLS 2313 and POLS 2314.

## POLS 3323 Introduction to Public Administration [3-0]

 As ScheduledA 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
## 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 Public Personnel Administration

## 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

As Scheduled
A study of classical political philosophy from Socrates to
Machiavelli. Prerequisites: POLS 2313 and POLS 2314.

## POLS 3334 Modern Political Theory

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 nation-state 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
As Scheduled
A study of 20th Century political philosophy. Prerequisite: POLS 2313 and POLS 2314.

## POLS 3363 American Hispanic Politics

As Scheduled
A study of the American Hispanic experience. Analyzes political socialization and culture, political participation and behavior, leadership, organizations and power in the American political system. Prerequisites: POLS 2313 and POLS 2314.

## POLS 3364 U.S.-Mexico Border Relations <br> [3-0]

As Scheduled
An analysis of the politics at the U.S.-Mexican border. Focus on the political economy and the administration of the borderlands.
Prerequisites: POLS 2313 and POLS 2314.

## POLS 3365 Politics of Immigration

## As Scheduled

Analysis of the politics of immigration, migration and emigration. Study of the history, theories and policy alternatives concerning immigration. The administration process and the legal and law enforcement systems of immigration will be examined.
Prerequisites: POLS 2313 and POLS 2314.
POLS 3371 Politics of the Russian Federation and Eastern Europe

## As Scheduled

A survey of governmental structures and politics in the Russian Federation and Eastern Europe. Examines competing ideologies; group developments; party interests; influence of revolution; economics; relationships among political, social and economic structures; and the roles of the Russian Federation and Eastern Europe in the international political arena. Prerequisites: POLS 2313 and POLS 2314.

POLS 3375 Politics of Germany
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 4309 Public Fiscal Administration <br> [3-0]

As Scheduled
Survey and analysis of governmental budgeting and public finance, emphasizing theories, techniques, procedures and implementation. Prerequisites: POLS 2313 and POLS 2314.

## POLS 4310 Comparative Public Administration [3-0]

As Scheduled
A comparative analysis of the administrative systems of different governments. Particular attention is focused on the relationship of administrative practices and decision-making 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 Politics of the Middle East [3-0]

## As Scheduled

A comparative examination of the social, economic and theological components of Middle Eastern politics. Prerequisites: POLS 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: Civil Liberties
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

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
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

## 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 4365 American Administrative Process <br> [3-0]

As Scheduled
Advanced study of law and procedures of national, state and local administrative agencies and their behavior; problems in administrative management; theory of complex organizations; policy outcomes of the administrative process. Prerequisites: POLS 2313 and POLS 2314.

## POLS 4367 American Judicial Process

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 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 Public Opinion and Political

## Behavior

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 4382 Governments and Politics

 of China, Japan and India
## As Scheduled

Study of the socio-economic setting, constitutional framework, political forces, authoritative decision-making agencies and certain major policy outputs of China, Japan and India. Prerequisites: POLS 2313 and POLS 2314.

## POLS 4383 Politics of Central America and the

 CaribbeanAs 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 4384 Seminar in Local Government Problems
As Scheduled
An examination and study of administrative problems in local government. Prerequisites: POLS 2313 and POLS 2314.

## POLS 4386 South American Politics

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 U.S. and other nations. Prerequisites: POLS 2313 and POLS 2314.

## Physical science

## PSCI 1421 Physical Science

(Texas Common Course Number is PHYS 1415.)
Fall, Spring, Summer
A survey course designed to provide an introduction to the concepts and principles of physical science for non-science and elementary teaching majors. The topics covered include astronomy, chemistry and mechanics. Prerequisite: MATH 1334. \$4 laboratory fee.

## PSCI 1422 Physical Science

(Texas Common Course Number is PHYS 1417.)
Fall, Spring, Summer
A survey course that introduces the concepts and principles of physical science for non-science and elementary teaching majors. Geology, meteorology and physics will be included in this course of study. Prerequisite: PSCI 1421. \$4 laboratory fee.

## PSCI 2408 Survey of Physical Science

Fall, Spring
Introduction to topics of the physical sciences drawn from physics, chemistry and geology. Basic concepts from mechanics, electricity, light, atomic structure, the elements and compounds, and simple reactions will be covered. Earth materials and processes will be included. Prerequisites: BIOL 1401 and BIOL 1402. \$4 laboratory fee.

## PSCI 4311 Topics in Physical Science

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 8 hours of a physical science, or consent of instructor.

## - Psychology

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 2325 Experimental Psychology
Fall, Spring
Lecture-laboratory approach in illustrating the techniques of psychological research. Prerequisites: PSY 1310; PSY 2401 or STAT 2330.

## 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 2336 Developmental Psychology: Adolescence

(Texas Common Course Number is PSYC 2307.)

## As Scheduled

A study of the physical, mental, emotional and social growth from childhood through adolescence. Prerequisite: PSY 1310.

PSY 2401 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 MATH 2306) and 3 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: 3 hours of social science credit.

PSY 3332 Developmental Psychology: Infancy and Childhood

## As Scheduled

An overview of human development from conception to adolescence. Topics include biological foundations, physical growth, language and cognition, social and personality development. Traditional and recent theoretical perspectives are reviewed. Prerequisite: PSY 1310.

PSY 3333 Psychology of Adulthood: Maturity and Old Age
As Scheduled
A study of such aspects of adulthood as job selection, marriage, child rearing and old age. Prerequisite: 6 hours of Psychology.

## PSY 3337 Developmental Psychology: Lifespan [3-0]

 As ScheduledThe 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. Prerequisite: PSY 1310 and junior standing.

PSY 3340 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
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 Psychology of Learning

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
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 Introduction to Animal Behavior [3-0]

 As ScheduledAn 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. 3 hours lecture and a 3-hour lab. Prerequisite: PSY 1310.

## PSY 4302 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

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: 9 hours of psychology or consent of instructor.

## PSY 4313 Abnormal Psychology

[3-0]
Fall, Spring
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

As Scheduled
A historical review of major theoretical positions in the field of animal and human learning. Prerequisite: PSY 1310 or consent of instructor.

## PSY 4319 Cognitive Processes

As Scheduled
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.

## PSY 4320 Memory

As Scheduled
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 Cross-Cultural Psychology

As Scheduled
The course examines how culture shapes our cognition and behavior. In addition to exploring intercultural contact and crosscultural research 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 Mexican-

 American Community
## As Scheduled

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.

## PSY 4333 Theories of Personality

As Scheduled
Emphasis is placed on the major theories of personality which 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 4355 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 4363 Systems and Theories in Psychology [3-0]

As Scheduled
A history of the development of psychology and a study of theories in contemporary psychology. Prerequisite: PSY 1310.

## PSY 4380 Research Seminar

As Scheduled
Students will conduct faculty-supervised 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 6 hours credit. Prerequisites: PSY 2401 and PSY 2325, and consent of instructor.

## PSY 4383 Special Problems

## [3-0]

As Scheduled
Selected topics assigned according to the interest of the class and/ or student. Sequential registration for up to 9 hours is permitted as topics vary. Prerequisites: 9 hours of psychology and consent of instructor.

## ■ Quantitative Methods

## QUMT 2340 Introduction to Quantitative Methods in Business

## Fall, Spring, Summer

This course is an introduction to the quantitative techniques and models applicable to business decision making. 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 1321 or MATH 1340; CIS 1301.

QUMT 2341 Elementary Business and Economic Statistics
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 1321 or 1340; CIS 1301.

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-making tools. Computer laboratory assignments covering the above topics will be assigned. Prerequisites: QUMT 2341 and MATH 1322.

## - Reading

READ $3310 \quad$ Narrative and Expository Analysis Elementary/Secondary
Fall, Spring, Summer
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
Fall, Spring
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
Fall, Spring
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. (Field-Based Approved Course.)

READ 3326 Reading across the Curriculum Content Areas

## Fall, Spring

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

## Fall, Spring, Summer

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
Fall, Spring
Reading as an integral part of the language arts process; study of the relationships between listening, speaking, reading and writing. Prerequisite: READ 3323.

## READ 3351 Literature for the Young Adult

Spring, Summer
Emphasis is on the reading and evaluation of literature written for young adults (middle, junior and senior high school students). The selection and reading of a variety of literary genre for the young adult that encompasses literature reflecting culture, ethics and social diversity within a multicultural society will be included.

## READ 4351 Developmental Reading in Secondary Schools

Fall, Spring, Summer
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).

## Rehabilitative Services

## REHS 2301 Introduction to Rehabilitation

Fall, Spring and As Scheduled
Introduction to the field of rehabilitation and rehabilitation professions and specialties (e.g., Rehabilitation Counseling, Vocational Evaluation, Work Adjustment, 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 which provide services to people who have disabilities are explored. May include field trips, guest lectures and community-oriented assignments.

REHS 2311 Disability Policy and Consumerism [3-0] Fall, Spring and As Scheduled
Provides an overview of legislation and policies (both federal and state) that impact people with disabilities. Issues related to incentives and disincentives of returning to work, insurance, and federal benefits will be covered. Consumer empowerment and independent living will also be explored.

REHS 2321 Introduction to Substance Abuse
[3-0]
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 3303 Case Management I

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 2311, REHS 2331 and formal admission.

## REHS 3320 Family and Disability

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 MexicanAmerican family. Prerequisites: REHS 2301, REHS 2311, REHS 2331 and consent of instructor.

## REHS 3330 Medical Aspects of Rehabilitation [3-0]

 SpringProvides essential medical information to prepare students for working with disabled individuals, physicians and employers. Information on etiology, prognosis and treatment procedures and vocational and independent living implications will be covered for each disability group. Also included in the course is information on medical specialties, therapeutic services, restorative techniques and medical terminology. This course offers the student the opportunity to learn how to assess the total impact of the disability more perceptively and accurately, and to assist the consumer in making more realistic vocational/independent living plans.
Prerequisites: REHS 2301, REHS 2311 and REHS 2331.

## 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]
Spring
This course will focus on the vocational assessment of people within the rehabilitation process. Students will 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 2311, REHS 2331 and formal admission.

## REHS 4302 Job Placement

Fall
A study of job placement theories, approaches and techniques will occur. The student will be introduced to the vocational implications of disability. Job-seeking skills, labor market surveys, job analysis, resume writing and transferrable skills analysis are some of the skills that are taught. Prerequisites: REHS 3330 and formal admission.

## REHS 4303 Case Management II

Fall
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 3330 and formal admission.

## REHS 4330 Clinical Topics in Rehabilitation [3-0]

Fall
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, REHS 2311 and REHS 2331 or consent of instructor.

## REHS 4350 Special Topics in Rehabilitation

As Scheduled
Selected topics in Rehabilitation. May be repeated for up to 6 hours credit when topic varies. Prerequisites: REHS 2301, REHS 2311 and REHS 2331 or consent of instructor.

## REHS 4360 Assistive Technology

## 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. As much as possible, examples of technology will be brought into the classroom. Prerequisites: REHS 2301, REHS 2311 and REHS 2331, or consent of instructor.

## REHS 4602 Clinical Practicum in Rehabilitation

## 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. 320 clock hours, 20 field hours weekly plus 2 hours of regularly scheduled group supervision per week. Prerequisites: Completion of all REHS concentration courses and program approval.

## ROTC (Minitary Science)

## ROTC 1201 Marksmanship and First Aid [2-1.25]

## As Scheduled

Studies in the fundamentals of rifle and pistol marksmanship and practical experience in marksmanship on an indoor range. Emphasis is placed on the study of weapons safety. The course offers the opportunity for students to be certified in basic first aid procedures-CPR. An optional weekend field training exercise is offered.

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-confidence and 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

## 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 of people. Learn the role of the U.S. Army and Army Communications skills such as oral presentations, writing concisely, planning of events, coordination of group efforts, 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

## 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 [3-1.25] 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 $3202 \quad \begin{aligned} & \text { Advanced Army Physical } \\ & \text { Development }\end{aligned}$
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
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 <br> 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.

## ROTC 4401 Staff Management and

 Responsibilities
## As Scheduled

An examination of the garrison and administrative responsibilities of the commissioned officer. An in-depth 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.

## Russican

## RUSS 1341 Beginning Russian

As Scheduled
An introductory course designed to teach students the basic elements of the Russian language. Emphasis on speaking, comprehension, writing and reading.

## Sociology

## SOC 1313 Principles of Sociology

(Texas Common Course Number is SOCI 1301.)
Fall, Spring, Summer
The social group, culture and personality; social institutions; social interaction; social change. Credit Restriction: Credit may be received in only one of SOC 1313 or SOC 1387.

SOC 1323 Current Social Issues
(Texas Common Course Number is SOCI 1306.)
Fall, Spring
A sociological analysis of selected social issues present in current society.

SOC 1325 Japanese Society
As Scheduled
A basic survey of Japanese social structure, institutions and social history. This course is designed to familiarize students with contemporary Japanese society and culture.

SOC 1387 Principles of Sociology (Honors Plan)
[3-0]
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 SOC 1313 or SOC 1387. Prerequisite: Admission to Honors Studies or by invitation.

SOC 2301 Statistics for the Behavioral Sciences
Fall, Spring
An introduction to the procedures used in handling sociological data including frequency distributions, central tendency, variability, correlation and elementary hypothesis testing. Prerequisites: 3 hours of mathematics (except MATH 2306) and SOC 1313 and SOC 1323 or consent of instructor.

SOC 2324 Social Psychology
(Texas Common Course Number is SOCI 2326.)
Fall
Principles of social psychology with sociological emphasis of symbolic interactionism. Topics include differences between humans and animals, language and symbols, human development and the instinct controversy.

## SOC 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.

## SOC 2333 Marriage and the Family

[3-0]
(Texas Common Course Number is SOCI 2301.)
Fall, Spring
A study of problems and an analysis of the factors contributing to successful marriages with study of surveys that have been made of this aspect of the social relations of men and women.

SOC 3301 Methods of Social Research

## Spring

Use of scientific method in social research; formulation of research designs, hypothesis testing, sampling, interviewing, observation, coding, use of documents, questionnaires and scales. Emphasis on interpretation of social data. Prerequisites: SOC 1313 and SOC 2301 or consent of instructor.

SOC $3310 \quad$ Sports and Society
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 sports builds character will be examined along with cultural issues such as deviance, retirement and competition.

SOC 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: 3 hours of sociology or consent of instructor.

SOC 3326 Contemporary Issues in Social Psychology
As Scheduled
A review and discussion of recent issues and advances in social psychology. This course will focus on contemporary concerns with regard to both theory and research in the laboratory and the community. Prerequisite: PSY 2324 or SOC 2324.

## SOC 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: SOC 1313 or consent of instructor.

SOC 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. Prerequisites: SOC 1313 and SOC 1325, or consent of instructor.

SOC 3344 Societies in Global Perspective
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.

SOC 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: 3 hours of sociology or consent of instructor.

## SOC 4310 Sex Roles in Contemporary America [3-0]

As Scheduled
An exploration of the sociological meaning of gender and gender roles in contemporary society. The focus is on the status of women vis-à-vis that of men in the institutional structure: family, marketplace, school and political-legal arena. The nature and causes of sex role differentiation, of changing sex roles and the future of sexual equality will be discussed. Previous Course Numbers: SOC 4311 and PSY 4311; a student may receive credit in only one course. Prerequisite: 6 hours of sociology or consent of instructor.

SOC 4313 American Minorities
[3-0]
Fall, Spring
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 indepth description of the problems and characteristics of major American minorities. Prerequisite: 6 hours of sociology or consent of instructor.

SOC 4314 Sociology of Deviance
[3-0]
Spring
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: 6 hours of sociology or consent of instructor.

SOC 4323 The Mexican-American People
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 socioeconomic conditions and their historical antecedents.
Prerequisites: 6 hours of sociology and/or anthropology or consent of instructor.

## SOC 4333 Social Theory <br> Spring

A survey of historical development and the theories of major sociologists. Prerequisite: 9 hours of sociology or consent of instructor.

SOC 4352 Social Inequality
Fall, Spring
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: SOC 1313 or consent of instructor.

## SOC 4360 Sociology of Education

As Scheduled
Social and institutional organization of education and the profession of teaching. Class, ethnic and other social factors affecting the educational process and the effect of educational institutions and practices on the community and society.
Prerequisite: SOC 1313 or consent of instructor.
SOC 4380 Social Protest and Social Movements [3-0] 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: SOC 1313 or consent of instructor.

## SOC 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 9 hours is permitted as topics vary. Prerequisite: 9 hours of sociology and consent of instructor.

## Social Mork

## 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. Previous Course Title: Introduction to Social Work; a student may not repeat the course for credit. Prerequisite: 3 hours of Psychology or Sociology or consent of instructor.

## SOCW 2314 The Social Welfare Institution

[3-0]
Fall, Spring
This course is a continuation of the introductory level course with emphasis on the social welfare institution, its laws, societal responses and parallel social work services. Specific welfare legislation and programs which impact the profession of social work will be examined. Previous Course Title: Social Welfare Legislation; a student may not repeat the course for credit.

## SOCW 2323 Human Behavior and the Social Environment I

## Fall, Spring

Designed to provide the student with an understanding of the person-in-environment concept that affects an individual's social functioning. Particular emphasis will be placed on understanding the behavior dynamics assessment model which illustrates the transactions between individuals and their social environments.

Emphasis will be on the early years to adolescence, and implications for social work practice. Previous Course Number: SOCW 2324; a student may receive credit in only one course. Prerequisite: SOCW 1313.

## SOCW 2324 Human Behavior and the Social Environment II

## Fall, Spring

Designed to provide the students with an understanding of human behavior and the social environment as a continuation of SOCW 2323 with emphasis on the later years of the life span with implications for social work practice. Prerequisites: SOCW 1313, 6 hours in Sociology and/or Psychology, and SOCW 2323 or consent of instructor.

SOCW 2342 Substance Abuse and the Family
[3-0]
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.

## SOCW 2350 Groups in Social Work

As Scheduled
Provides a general orientation to small groups in Social Work practice. Students will examine the values, objectives and principles of social work group practice. Through classroom participation, the various group theories, concepts, dynamics and processes will be experienced. Focus will be on group leadership and development of self-awareness to illustrate the worker's role in facilitating the processes of group and individual development.

## SOCW 3314 Social Welfare Policy and Programs

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. Previous Course Number: SOCW 4313; a student may receive credit in only one course. Prerequisites: SOCW 1313 and SOCW 2314.

## SOCW 3323 Social Work Practice I

[3-0]
Fall, Spring
Through classroom and community work, the student examines some of the necessary knowledge, attitudes, values and skills upon which problem-solving is based and learns how the generalist approach to practice is basic to all service-giving in social work. Previous Course Title: Methods in Social Work Practice; a student may not repeat the course for credit. Prerequisites: SOCW 1313, SOCW 2314 and SOCW 2323.

SOCW 3324 Social Work Practice II
[3-0]
Fall, Spring
Designed to provide social work students with knowledge of direct practice with families and small groups using the problem-solving
approach. Students will selectively use concepts and techniques from various models, e.g., systems perspective, psychosocial theory, behavior modification and family-focused work as frameworks to develop strategies in clinical and cross-cultural intervention. To be taken concurrently with SOCW 4416. Previous Course Title: Methods in Social Work Practice II; a student may not repeat the course for credit. Prerequisite: SOCW 3323.

## 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 interventive, 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 6 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 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 3345 Occupational Social Work

As Scheduled
This course is designed to examine the social worker's role within industrial and occupational settings. The course will examine the work environment and its linkages to the individual, the family and the community. Various models of employee social service programs, e.g., Employee Assistance Programs, Job Well Being and Enhancement Programs, and On-site Counseling models, will be studied. Previous Course Title: Industrial Social Work; a student may not repeat the course for credit.

## SOCW 3353 Research for the Social Services

Fall, Spring
Introduces students to basic concepts necessary to understand the different phases of research involved in social service practice. Students are expected to gain a beginning competency in planning, implementing and evaluating social research in application to social work practice as well as in evaluating programs and their own practice.

SOCW 4314 Social Work Practice III
Fall, Spring
It is intended that the student gain perception of needed social changes, responses to these efforts, and social work assessment, planning and intervention called for at the community level.
Various theoretical perspectives about the social environment will focus on community and societal values that impact on individuals, families and other groups. Linkage of needs to resources will be
emphasized. Previous Course Title: Methods in Social Work Practice III; a student may not repeat the course for credit. Prerequisite: SOCW 3323. To be taken concurrently with SOCW 4417.

SOCW 4320 Social Work in Health Care

## 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.

## SOCW 4321 Domestic Violence in Society

## As Scheduled

The purpose of this course is to examine the phenomenon of domestic violence. Students will study the family structures in which violence occurs, the range (from verbal abuse to homicide) and its extent in society, and the various attitudes toward it. Understanding of the basic theories of violence, 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.

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, half-way 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.

## SOCW 4818 Field Block Placement

Fall, Spring
May be taken in lieu of SOCW 4416 and SOCW 4417. A minimum of 480 hours (four days a week for one semester) of in-the-field experiences in established social agencies or informal settings under joint supervision of the agency and university and as described in SOCW 4416 and SOCW 4417. Prerequisites: SOCW 3323, SOCW 3324 and SOCW 4314 and most degree course requirements; approval from Office of Field Instruction.

## Spanish

## SPAN 1301 Beginning Spanish

(Texas Common Course Number is SPAN 1313.) Fall, Spring, Summer
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
(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.

SPAN 1303 Beginning Spanish
(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.

## SPAN 1304 Beginning Spanish

(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)
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)

## 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 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)
As Scheduled
A survey of the literature of Spain from Romanticism to the Modern period. Prerequisite: SPAN 2308.

SPAN 3303 Advanced Spanish Composition
As Scheduled
Intensive training in Spanish composition. Prerequisite: SPAN 2308.

SPAN 3304 Advanced Spanish Composition
As Scheduled
Additional work in composition. Prerequisite: SPAN 2308.

## SPAN 3306 Basic Concepts of Spanish Phonetics and Phonology

## 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
As Scheduled
An 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
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
As Scheduled
The study of the major novels of Mexico. 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
As Scheduled
Review of basic principles and Spanish nomenclature of political economy, accounting, marketing, management and finance.
Theory and practice of commercial and civil registers. Difference between U.S. and Latin American business and government practices. Correspondence and report writing. Prerequisite: SPAN 2308.

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.

## SPAN 4305 Cervantes

As Scheduled
A study of the principal works of Miguel de Cervantes with particular emphasis on Don Quixote. Given in Spanish.
Prerequisite: SPAN 2308.
SPAN 4306 History of the Spanish Language
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
As Scheduled
Begins 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

## 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
As Scheduled
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 Ruiz de Alarcon, Garcilaso de la Vega, Fernando de Herrera, Luis de Gongora and others. Prerequisite: SPAN 2308.

## SPAN 4325 Caribbean Literature

[3-0]
As Scheduled
A critical review and analysis of the surge of Afro-Antillean influences in Caribbean literature with emphasis on the literary techniques and the cultural reflection in the literature.
Prerequisite: SPAN 2308.
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
## As Scheduled

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. Prerequisite: SPAN 2308.

SPAN 4335 Spanish-English Legal Translation [3-0] As Scheduled
Intensive practice in the translation from Spanish to English of contracts and government regulations, as well as texts relating to both civil and criminal court cases and extracts from the civil registries of Hispanic countries. Prerequisite: SPAN 2308.

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
As Scheduled
A survey of the literature of Spain covering the neoclassic from Feijoo to Fernandez de Moratin. Prerequisite: SPAN 2308.

SPAN 4338 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 [3-0] 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: Echeverria, Palma, Gutierrez Najera, Quiroga, Borges, Garcia Marquez, Fuentes and others. Prerequisite: SPAN 2308.

SPAN 4340 The Spanish-American Essay
As Scheduled
A study of this genre in Spanish-American literature. Themes, content, style and literary movements will be studied. The writers studied in this course will include: Andres Bello, Justo Sierra, Antonio Caso, Vasconcelos, Samuel Ramos, Alfonso Reyes, Altamirano, Octavio Paz, Leopoldo Zea and others. Prerequisite: SPAN 2308.

## - Special Education

## SPED 1305 Introduction to the Exceptionalities <br> [3-0]

Fall, Spring, 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.

## SPED 2304 Computer Applications and

 Adaptations for Individuals with Disabilities
## Fall, Spring

The focus of this course will be adapting computer software and equipment to meet the educational needs of individuals with disabilities. Prerequisite: CSCI 1300 or CIS 1301 or consent of instructor. Course may be taken without admission into the College of Education.

SPED 3301 Inclusion of the Exceptionalities
Fall, Spring, Summer
The content of this course includes modifications, adaptations, strategies, and materials for including individuals with exceptionalities into the regular education classroom. Field experiences are required. (Field-Based Approved Course).

SPED 3302 Theories of Learning Disabilities [3-0]
Fall, 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 SPED 4372 or consent of the instructor.

SPED $4300 \quad$ Testing and Assessment of Exceptional Individuals

## Fall, Spring, 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. (Field-Based Approved Course). Prerequisite: SPED 1305 or SPED 4372.

## SPED 4301 Strategies, Methods and Materials for Teaching Individuals with Mild to Moderate Disabilities

## Fall, Spring, Summer

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 SPED 4372 or consent of instructor.

## SPED 4303 Theories of Social Competence and Behavioral Interventions

## Fall, Spring, Summer

The content of this course includes the diverse intervention processes and theories in social skills intervention, behavior modification, cognitive-behavioral strategies, and crisis prevention intervention. Field experiences are required. Prerequisite: SPED 1305 or SPED 4372 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 SPED 4372 or consent of instructor.

SPED 4372 Individual Differences
Fall, Spring, Summer
The content of this course will include the nature of individual differences with emphasis on the learning characteristics and application of research and theory to special education programs. There will be an emphasis on psychological, sociocultural and physical characteristics of exceptional individuals. Analysis of major research regarding contemporary trends, issues and programs for exceptional individuals will be presented.
Prerequisites: SPED 1305, SPED 4302, SPED 4303, SPED 4309, SPED 4371; or approval of instructor.

## statisties

## STAT $2330 \quad$ Survey of Elementary Statistics

## 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 1321. 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.

## other infomiturn GLOSSARY \& FACULTY LISTING



## CLOSSAET OFTEBRMS

[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:
[3-0] The class will have 3 hours of lecture per week.
[2-3] The class will meet for 2 hours of lecture and 3 hours of laboratory per week.
[3-0-12] The class will have 3 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 the State of Texas is considered accredited if it is recognized by the Texas Education Agency (TEA). High schools outside the State of Texas are considered accredited if they are recognized by their state accreditation agency.

## Advanced-level Work

Courses numbered 3000-4000 are advanced or upperdivision 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 which 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 Texas-Pan American is the 12 th 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 lower-division 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 pages 19-21 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.)

## 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 9 hours of credit during a regular semester, or at least 4 hours of credit during a summer session, is considered full-time.

## Full-time Undergraduate

An undergraduate student who is enrolled for at least 12 hours of credit during a regular semester, or at least 6 hours of credit during a summer session, is considered full-time.

## Half-time Graduate

A half-time graduate student is one who is enrolled for at least 6 hours of credit during the regular semester or 3 hours of graduate credit during a summer session.

## Half-time Undergraduate

A half-time undergraduate student is one who is enrolled for at least 6 hours of credit during the regular semester or 3 hours of credit during a summer session.

## Hours

College credit at UT Pan American is measured in terms of semester credit hours. Ordinarily, a class that meets one 50minute period per week for a regular semester will carry a credit of 1 hour. The majority of classes meet three periods or their equivalent each week and carry 3 hours of credit.
Two or 3 laboratory hours per week are usually required for 1 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 normal load for a full-time graduate student is 9 hours in a regular semester. A master's degree student may be permitted to enroll for 15 hours with the approval of his or her graduate advisor and the Dean of the College. Normal load for a master's degree student during a summer session is 4 hours, with up to 9 permitted with the approval of the graduate advisor and the Dean of the College. A doctoral student must have advance approval from the Vice President for Academic Affairs or his or her designee to register for more than 12 hours. There is no limit imposed on the maximum number of hours an undergraduate student may take in a semester or summer session.

## MTEL

The MTEL (Michigan Test of English Language) is one of the two major English language proficiency tests for nonnative speakers of English. The other exam is the TOEFL, the 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 nonprobationary status. For further information, refer to the section in this catalog on Scholastic Probation and Suspension on page 42 for undergraduate students and to the Graduate Catalog for graduate students. The Student Conduct and Disciplinary Code is discussed on page 58.

## Regular Semester

A regular semester is any 15 -week fall or spring semester.

## Residence, Coursework in

Coursework in residence refers to coursework actually completed on the UT Pan American campus. Extension, credit by examination, correspondence and transfer credit may not be used to complete the residency requirement for graduation.

## 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 five and one-half week summer sessions.

## 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)

## FAGUKT पजातन

Abraham, John P., Associate Professor, Department of Computer Science; EdD, University of Houston, 1986.

Adair, Penelope A., Assistant Professor, Department of History and Philosophy; History; PhD, University of California at Santa Barbara, 1993.

Ahmad, Hassan, Associate Professor, Department of Chemistry; Biochemistry; PhD, Aligarh Muslim University, 1983.

Alamia, Alfonso J., Assistant Professor, Department of Psychology and Anthropology; Psychology; Developmental, Adolescence, Behavior Modification, Bilingual Testing; PhD, University of New Mexico, 1985.

Aldridge, James W., Jr., Professor, Department of Psychology and Anthropology; Psychology; Perception, Cognition, Memory; PhD, State University of New York at Binghamton, 1976.

Alianak, Sonia, Lecturer, Department of Political Science; Comparative Government, International Relations, American Government; PhD, The University of Texas at Austin, 1987.

Allison, Margaret R., Assistant Professor, Department of Computer Information Systems and Quantitative Methods; Computer Information Systems; MEd, University of Houston, 1976.

Allison, Terry C., Professor, Department of Biology; Parasitology, Marine Zoology; PhD, Texas A\&M University, 1967.

Alvarado, Frances E., Lecturer, Department of Mathematics; MEd, The University of Texas-Pan American, 1994.

Alvarado, Jose F., Lecturer, Department of Mathematics; Curriculum and Instruction; MA, Texas A\&M University, 1983.

Alvarado, Victor, Professor, Department of Educational Psychology; Educational Leadership, Guidance and Counseling; EdD, Western Michigan University, 1976.

Anderson-Mejias, Pamela, Associate Professor, Department of English; Applied Linguistics, Second Language Acquisition; PhD, Indiana University, 1980.

Ardalani, Elvia G., Lecturer, Department of Modern Languages and Literature; Spanish; EdD, Texas A\&I University, 1986.

Arnold, Bill R., Professor, Department of Psychology and Anthropology; Psychology; Counseling and Rehabilitation, Clinical Neuropsychology; PhD, North Texas State University, 1976.

Arnold, Sharon T., Lecturer, Department of Mathematics; Mathematics, Computer Science; MA, North Texas State University, 1977.

Assefa, Zewdineh, Associate Professor, Department of Economics, Finance and General Business; Finance; PhD, University of Illinois, 1980.

Atamian, Rubik, Assistant Professor, Department of Accounting and Business Law; Accounting; PhD, The University of Texas at Austin, 1984.

Avellano, George, Professor, Department of Management, Marketing and International Business; Marketing; PhD, University of Oklahoma, 1975; Associate Vice President for Academic Affairs for Graduate Programs and Research.

Baca, Ernest J., Professor, Department of Chemistry; Physical Chemistry; PhD, University of New Mexico, 1969.

Barott, James Edwin, Assistant Professor, Department of School Administration and Supervision; PhD, University of California, Santa Barbara, 1992.

Bastida, Elena, Professor and Chair, Department of Sociology; Aging, Theory, Gender Roles; PhD, University of Kansas, 1979.

Behar, Stella, Associate Professor, Department of Modern Languages and Literature; French; PhD, University of California, Los Angeles, 1991.

Bernal, Ernesto, Professor, Department of Educational Psychology; Educational Psychology, Personality, Social and Developmental, Gifted Education, Unbiased Assessment, Bilingual Education; PhD, The University of Texas at Austin, 1971.

Bernard, John E., Associate Professor, Department of Mathematics; Mathematics, Mathematics Education; PhD, The University of Texas at Austin, 1978.

Bhat, Narayan, Assistant Professor, Department of Chemistry; Organic Chemistry; PhD, Pune University, India, 1982.

Bhatti, Mohammad Idrees, Assistant Professor, Department of Physics and Geology; Atomic Physics; PhD, University of Notre Dame, 1987.

Bloom, Leonard, Assistant Professor, Department of English; Modern American and Modern British Literature; MA, St. Mary's University, San Antonio, 1968.

Bokina, John, Professor, Department of Political Science; Political Theory, Western and Eastern Europe; PhD, University of Illinois, 1979.

Bomgardner, Stephen D., Assistant Professor, Department of Music; Voice and Performance; DMA, Boston University, 1997.

Boran, Sibel B., Assistant Professor, Department of Curriculum and Instruction; Language Education, Applied Linguistics; PhD, Indiana University at Bloomington, 1993.

Bose, Subhash C., Professor, Department of Engineering; Manufacturing Engineering; Computer Aided Manufacturing, Robotics and Stochastic Modeling and Control; PhD, University of Wisconsin-Madison, 1987.

Brazier, Gerald, Associate Professor, Department of Mathematics; Mathematics Education; PhD, The Ohio State University, 1974.

Brazier, Pearl W., Assistant Professor and Chair, Department of Computer Science; Programming Languages, Software Engineering, Operating Systems; 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.

Briones, Esperanza, Associate Professor and Program Coordinator, Coordinated Program in Dietetics; Registered Dietitian; PhD, Michigan State University, 1982.

Brown, Peter E., Assistant Professor, Department of Modern Languages and Literature; Spanish; PhD, University of Nebraska, 1993.

Bruce, John H., Lecturer, Department of English; Restoration and Augustan English Literature, Biblical Criticism; MA, Pan American University, 1968.

Brush, Timothy, Associate Professor, Department of Biology; Zoology; PhD, Rutgers University, 1985.

Buckman, Kenneth L., Associate Professor, Department of History and Philosophy; Philosophy; Continental Philosophy, Oriental Philosophy, Social Philosophy, 19th and 20th Century Philosophy; PhD, Southern Illinois University, 1990.

Burns, Jo Ann Mitchell, Associate Professor, Department of Educational Psychology; Special Education, Educational Psychology, School Psychology; PhD, University of Oklahoma, 1979.

Cain, Roy E., Associate Professor, Department of Psychology and Anthropology; Psychology; Physiological Psychology, Biofeedback, Psycho-physiology, Stress Management; PhD, Texas Tech University, 1972.

Canty, Dean R., Associate Professor, Department of Music; High Brass; University Band Director, Jazz Ensemble Director; DMA, The University of Texas at Austin, 1980.

Cararas, Sandra A., Assistant Professor, Department of English; Technical Writing, Shakespeare, Renaissance and 17th Century English Literature; MA, Northeast Louisiana University, 1968.

Cardenas, Gilbert, Professor, Department of Economics, Finance and General Business; Economics; PhD, University of Illinois, 1977.

Carlan, Carl, Associate Professor and Chair, Department of School Administration and Supervision; Administration, Supervision; EdD, University of California at Berkeley, 1972.

Carlson, Ralph, Associate Professor, Department of Educational Psychology; Psychology (Quantitative Methods, Statistics, Theories of Personality); PhD, University of Houston, 1974.

Carter, David K., Assistant Professor, Department of History and Philosophy; Philosophy; Ethics, American Philosophy; PhD, Yale University, 1982.

Castillo, Helen M., Professor, Department of Nursing; Medical-Surgery, Orthopedics, Administration, Health Care; PhD, New Mexico State University, 1983; Dean, College of Health Sciences and Human Services.

Castrillon, José P., Associate Professor and Chair, Department of Chemistry; Organic Chemistry; PhD, University of Buenos Aires, 1951.

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Cavazos, Alonzo, Assistant Professor, Department of Social Work; Clinical Social Work, Administration; EdD, University of Houston, 1994.

Chance, Joseph E., Professor, Department of Mathematics; Combinatorics, Mathematical Modeling; PhD, The University of Texas at Austin, 1971.

Chandler, Karen, Associate Professor and Program Coordinator, Clinical Laboratory Sciences Program; MT (ASCP), MA, Central Michigan University, 1983.

Chen, Zhixiang, Assistant Professor, Department of Computer Science; Computational Learning; PhD, Boston University, 1996.

Chilek, Daniel R., Lecturer, Department of Health and Kinesiology; Theory of Sports, Test and Measurements; MS, Lamar University, 1989.

Contreras, Victoria, Associate Professor, Department of Modern Languages and Literature; Spanish; PhD, The University of Texas at Austin, 1989.

Cortes, Angelica, Assistant Professor, Department of Management, Marketing and Inernational Business; Marketing; PhD, University of Bradford, 1997.

Courtney, Janice Ray, Assistant Professor, Department of Communication; Speech Communication; MFA, The University of Texas at Austin, 1961.

Crews, R. Michael, Associate Professor, Department of Computer Information Systems and Quantitative Methods; Computer Information Systems; PhD, Utah State University, 1982.

Crews, Ruth, Assistant Professor, Department of Music; Voice; MM, The University of Texas at Austin, 1974.

Crown, Stephen W., Assistant Professor, Department of Engineering; Mechanical Engineering; PhD, Iowa State University, 1993.

Cuellar, Israel, Associate Professor, Department of Psychology and Anthropology; Psychology; Community, Cross-Cultural; PhD, The University of Texas at Austin, 1977.

Daniel, Clay L., Associate Professor, Department of English; 17th Century British Literature, Milton; PhD, Texas A\&M University, 1988.

Davidson, Judy, Lecturer, Department of English; American Literature, Milton; MA, Hardin-Simmons University, 1974.

Davila, Adriana, Lecturer, Department of Modern Languages and Literature; Spanish; MA, Texas A\&I University, 1972.

Dávila, Alberto, Professor and Chair, Department of Economics, Finance and General Business; Economics; PhD, Iowa State University, 1982.

Davis, William, III, Professor, Department of English; Composition, Critical Theory, Modern Poetry; PhD, Rice University, 1982; Dean, College of Arts and Humanities.

Day, Lois, Lecturer, Department of English; English Literature, Communication; MA, Pan American University, 1988.

De Hoyos, Librado R., Jr., Associate Professor, Department of Social Work; Chicano-Latino Studies, Community Social Psychology, Social Work Education and Practice; MSW, Boston University, 1964.

De La Fuente, Patricia, Professor, Department of English; Comparative Literature, Renaissance English Literature; PhD, The University of Texas at Austin, 1976.
de la Peña, Antonio M., Assistant Professor, Department of Biology; Physiology, Curriculum Development; MS, Texas A\&I University, 1969.
de los Santos, Gilberto, Professor, Department of Management, Marketing and International Business; Marketing; PhD, The University of Texas at Austin, 1972.
de los Santos, Miguel, Assistant Professor, Department of School Administration and Supervision; Educational Administration; PhD , The University of Texas at Austin, 1980.

Dearth, Daniel K., Associate Professor and Chair, Department of Criminal Justice; Police Administration, Correctional Administration, Policing Issues, Criminal Procedures and Evidence; PhD, Sam Houston State University, 1984.
del Rio, Eduardo, Lecturer, Department of English; Renaissance, Latino Literature, Translation; PhD, Texas A\&M University, 1996.

Delgado, Diana, Assistant Professor, Department of Nursing; MS, The University of Texas at Austin, 1980.

DeMoville, Wig B., Professor, Department of Accounting and Business Law; Accounting; CPA; PhD, Texas Tech University, 1978.

DeYoe, Hudson, Assistant Professor, Department of Biology; Algal Ecology, Sea Grass Ecology; PhD, Bowling Green State University, 1991.

Diong, Bill M., Assistant Professor, Department of Engineering; Electrical Engineering; PhD, University of Illinois at Urbana-Champaign, 1992.

Dominguez, Sylvia M., Professor, Department of Modern Languages and Literature; Spanish; PhD, University of Arizona, 1971.

Dowell, Bob, Professor, Department of English; American Literature, Comparative Literature; PhD, University of Denver, 1962.

Eanes, Linda, Assistant Professor, Department of Nursing; MSN, Corpus Christi State University, 1990.

Ebaseh-Onofa, Benjamin O., Associate Professor, Department of Mathematics; Statistics; PhD, Texas A\&M University, 1988.

Edionwe, Alexander O., Associate Professor, Coordinated Program in Dietetics; Registered Dietitian; PhD, University of Nebraska-Lincoln, 1991.

Edwards, Robert J., Professor, Department of Biology; Ichthyology, Ecology, Population Biology; PhD, 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.

Ellard, Charles J., Professor, Department of Economics, Finance and General Business; Economics; PhD, University of Houston, 1974.

Erdem, Orelia, Assistant Professor, Department of Nursing; MSN, Corpus Christi State University, 1987.

Estevis, Marjorie Anne, Assistant Professor, Department of Educational Psychology; Educational Diagnostician, Special Education; EdD, Texas Tech University, 1996.

Ethridge, Philip, Associate Professor, Department of Criminal Justice; Criminal Justice Generalist, PoliceCommunity Relations, Privatization, Corrections Law; PhD, Sam Houston State University, 1990.

Faraji, Bahram, Assistant Professor, Coordinated Program in Dietetics; Registered Dietitian; DPH, University of California, 1981.

Farooqui, Mohammed Y., Professor, Department of Biology; Physiology, Toxicology, Entomology, Cell Biology; PhD, University of Illinois, 1979.

Fatehi, Mohammed, Lecturer, Department of Mathematics; Linear Algebra, Statistics; PhD, New Mexico State University, 1996.

Faubion, Michael L., Assistant Professor, Department of History and Philosophy; History; PhD, Texas Tech University, 1992.

Felkner, Marilyn, Assistant Professor, Clinical Laboratory Sciences Program; MT (ASCP), MPH, The University of Texas Health Science Center-Houston, 1982.

Field, Philip S., Associate Professor, Department of Art; Printmaking, Painting, Aesthetics; MFA, Rhode Island School of Design, 1965.

Flores, Oscar R., Assistant Professor, Department of Computer Information Systems and Quantitative Methods; Information Systems; PhD, University of North Texas, 1992.

Folk, Ellen, Assistant Professor, Department of Accounting and Business Law; Business Law; JDLMT, Quinnipiac School of Law, 1992.

Foltz, Heinrich D., Assistant Professor, Department of Engineering; Electrical Engineering; PhD, The University of Texas at Austin, 1993.

Fong, Lina, Associate Professor, Department of Social Work; PhD, University of Southern California, 1990.

Fowler, Richard H., Associate Professor, Department of Computer Science; Interactive Systems, Artificial Intelligence; PhD, University of Houston, 1980.

Fox, Richard K., Assistant Professor, Department of Computer Science; Computer Science, Artificial Intelligence; PhD, The Ohio State University, 1992.

Frankenberger, Earl, Assistant Professor, Department of English; 18th Century Satire, American Naturalist and Environmental Literature, Composition, Developmental Skills; MA, Texas Christian University, 1967. Special Assistant to the President.

Freeman, Robert A., Associate Professor, Department of Engineering; Mechanical Engineering; PhD, University of Florida, 1985.

Freeman, Samuel, Associate Professor, Department of Political Science; Political Parties, U.S. Presidency, Congress, Foreign Policy; PhD, University of Kentucky, 1978.

Fritz, Donald E., Associate Professor, Department of English; Modern British and American Literature, Criticism; PhD, University of Missouri, Columbia, 1975.

Galligan, Martha Villalobos, Assistant Professor, Department of Curriculum and Instruction; English Education; PhD, The University of Texas at Austin, 1994.

Ganguli, Gouranga, Professor, Department of Accounting and Business Law; Accounting; CPA, CMA, CIA; PhD, University of Mississippi, 1983.

Garcia, Carmela, Lecturer, Department of Modern Languages and Literature; Spanish; MAIS, Pan American University, 1986.

Garcia, Lino, Jr., Professor and Chair, Department of Modern Languages and Literature; Spanish; PhD, Tulane University, 1981. Assistant Vice President for Academic Affairs for International Programs.

Garza, Juanita, Lecturer, Department of History and Philosophy; History; U.S. History; MAIS, Pan American University, 1984.

Garza, Viola, Assistant Proessor, Department of Nursing; MSN, The University of Texas-Pan American, 1996.

Ghanem, Salma, Assistant Professor, Department of Communication; Journalism; MA, The University of Texas at Austin, 1991.

Gilpin, Jerry M., Lecturer, Department of Computer Science and Department of Mathematics; MS, Syracuse University, 1966.

Giuoco, Samuel E., Assistant Professor and Chair, Department of Physics and Geology; Acoustics; EdD, Oklahoma State University, 1971.

Glaser, Frederic M., Associate Professor, Department of Physics and Geology; Spectroscopy; PhD, Ohio State University, 1963.

Glazer, Mark, Professor, Department of Psychology and Anthropology; Anthropology; Folklore, Anthropological Theory; PhD, Northwestern University, 1973.

Goertz, Mary Jean, Assistant Professor, Department of Educational Psychology; Educational Leadership, Gifted Education; EdD, Northern Arizona University, 1991.

Gomez, Leo, Assistant Professor, Department of Curriculum and Instruction; Philosophy, Curriculum and Instruction, Bilingual/ESL; PhD, Texas A\&M University, 1994.

Gonzalez, Genaro, Professor, Department of Psychology and Anthropology; Psychology; Social, Cross-Cultural; PhD, University of California at Santa Cruz, 1982.

Gonzalez, Roberto, Lecturer, Department of Mathematics; Mathematics; MS, Pan American University, 1981.

Grabowski, Laura, Lecturer, Department of Health and Kinesiology; Dance and Related Arts; MA, Texas Woman's University, 1983.

Grabowski, Thomas E., Lecturer, Department of Communication; Theatre; MFA, University of IllinoisUrbana, 1982.

Greene, Walter E., Professor, Department of Management, Marketing and International Business; Management; PhD, PHR, University of Arkansas, 1976.

Gregorius, Roberto, Assistant Professor, Department of Chemistry; Polymer Science and Engineering; PhD, University of Massachusetts, 1991.

Grossman, Morley K., Associate Professor, Department of Music; Piano; DMA, Indiana University, 1982.

Guerra, Dahlia, Assistant Professor, Department of Music; Piano; University Mariachi Director; DMA, University of Oklahoma, 1997.

Guerra, Ramon S., Assistant Professor, Department of Sociology; Japanese Society, Mexican Americans, Ethnicity and Religion; PhD, Southern Methodist University, 1989.

Guinn, Robert, Professor and Program Coordinator, Department of Health and Kinesiology; Health; PhD, Texas A\&M University, 1974.

Gunn, Scott J., Associate Professor, Department of Biology; Genetics, Vertebrate Zoology; PhD, Texas A\&M University, 1986.

Guzman, Isabel (Penny), Assistant Professor, Department of Nursing; MSN, University of Puerto Rico, 1971.

Hamilton, Lee, Associate Professor and Chair, Department of English; 19th Century British Literature, Bibliography; PhD, Louisiana State University, 1982.

Hamilton, Rebekah, Assistant Professor, Department of English; English Literature, World Literature, Composition; PhD, Texas A\&M University, 1993.

Harrison, Martha, Lecturer, Department of Curriculum and Instruction; Elementary Education; MEd, Pan American University, 1982.

Haule, James M., Professor, Department of English; Modern and Contemporary British Literature; PhD, Wayne State University, 1974.

Hawley, James A., Associate Professor, Department of Communication; Theatre; PhD, Ohio State University, 1967.

Heartfield, Gilbert, Associate Professor, Department of Modern Languages and Literature; Spanish; PhD, University of New Mexico, 1972.

Heckler, Edward, Associate Professor, Department of English; Linguistics, ESL; PhD, Michigan State University, 1975.

Heller, William, Assistant Professor, Department of Mathematics; PhD, University of Maryland, 1991.

Henggeler, Paul R., Associate Professor, Department of History and Philosophy; Recent U.S. History, American Presidency; PhD, Bowling Green State University, 1989.

Henry, Brad, Associate Professor, Department of Biology; Aquatic Entomology, Ecology; PhD, Texas A\&M University, 1989.

Heslet, Lynette, Assistant Professor, Department of Psychology and Anthropology; Psychology; Clinical Psychology, Health Psychology; PhD, University of Arizona, 1995.

Himmel, Kelly F., Assistant Professor, Department of Sociology; Methodology, Community, Social Change; PhD, The University of Texas at Austin, 1995.

Hinojosa, Jose R., Associate Professor, Department of Political Science; Public Administration, Minority Politics; PhD, University of Notre Dame, 1980.

Hinthorn, Richard W., Lecturer, Department of Mathematics; MS, Pittsburg State University, 1968.

Hodges, DeWayne L., Assistant Professor, Department of Computer Information Systems and Quantitative Methods; Quantitative Methods; PhD, University of Northern Colorado, 1984.

Hsich, Sheng-Jen, Assistant Professor, Department of Engineering; Manufacturing Engineering; Automation, Simulation and Modeling, Robotics, Applied Operations Research; PhD, Texas Tech University, 1995.

Huerta, Maria Carolina, Professor and Chair, Department of Nursing; Adult Education; EdD, Texas A\&M University, 1990.

Hume, Evelyn, Associate Professor, Department of Accounting and Business Law; Accounting; PhD, Louisiana State University, 1988.

Hyslin, Richard P., Professor, Department of Art; Ceramics, Sculpture, Drawing; MA, University of New Mexico, 1968.

Jabs, David, Lecturer, Department of Mathematics; Operations Research; MS, Texas A\&I University, 1991.

James-Aldridge, Valerie G., Associate Professor, Department of Psychology and Anthropology; Psychology; Animal Behavior, Primate Behavior, Research in Zoos; PhD, Oklahoma State University, 1975.

Jarvis, Susan S., Professor, Department of Accounting and Business Law; Business Law; JD, Tulane University School of Law, 1974.

John, Eugene B., Assistant Professor, Department of Engineering; Electrical Engineering; PhD, Pennsylvania State University, 1995.

Johnson, Barbara A., Associate Professor and Chair, Department of Communication Sciences and Disorders; PhD, University of Florida, 1982.

Johnson, Betty A., Assistant Professor, Department of Nursing; MSN, Texas A\&M University-Corpus Christi, 1994.

## 272 - Other Information

Johnson, Robert, Assistant Professor, Department of English; American Literature, Southern Women Writers; PhD, University of Southern California, 1994.

Jones, Robert E., Jr., Assistant Professor, Department of Engineering; Mechanical Engineering; PhD, Texas A\&M University, 1990.

Jorgensen, Layne, Professor and Chair, Department of Health and Kinesiology; Biomechanics, Research Methods; PhD, Louisiana State University, 1971.

Jou, Jerwen, Associate Professor, Department of Psychology and Anthropology; Psychology; Cognitive Psychology; PhD, Kansas State University, 1990.

Juarez-Torres, Francisco, Assistant Professor, Department of Modern Languages and Literature; Spanish; PhD, Florida State University, 1990.

Judd, Frank W., Professor and Chair, Department of Biology; Ecology, Ecological Physiology, Herpetology, Mammalogy; PhD, Texas Tech University, 1973.

Kaynak, Hale, Assistant Professor, Department of Management, Marketing and International Business; Management; PhD, University of North Texas, 1996.

Kendrick, Sherrill, Assistant Professor, Department of Psychology and Anthropology; Psychology; Clinical, Behavior Modification; PhD, University of Southern Mississippi, 1974.

Kidd, Shirley Ann, Assistant Professor, Department of Nursing; PhD, Texas A\&M University, 1996.

Kikos, Timothy A., Lecturer, Department of English; American Literature; MA, The University of Texas-Pan American, 1992.

Knobel, Roger A., Jr., Associate Professor, Department of Mathematics; Differential Equations, Applied Mathematics; PhD, Rensselaer Polytechnic Institute, 1991.

Kohler, Ninfa, Lecturer, Department of Modern Languages and Literature; Spanish; PhD, The University of Texas at Austin, 1986.

LaGrange, Diane C., Assistant Professor, Department of Nursing; MSN, Corpus Christi State University, 1990.

Lamare, James, Professor, Department of Political Science; American Politics; PhD, University of California, 1972; Dean, College of Social and Behavioral Sciences.

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[^0]:    Additional degree programs were being developed and approved at the time of publication. Contact the Office of Admissions and Records for information about these new opportunities.

[^1]:    * All tuition and fee charges are subject to change. Students may consult the Schedule of Classes or contact the Office of Payments and Collections at 956/381-2715 for current information.

[^2]:    * Exempts students from CHEM 1301/1101; no credit given.

[^3]:    * All students must pass ENG 1301 and ENG 1302 and MATH 1340 or their equivalents with a grade of " $C$ " or better in the first 60 hours of work to proceed to upperlevel classes. Students should register in these classes every semester until they have met these requirements.
    ** Kinesiology can be taken at a later time if the student must start a major during the freshman year.

[^4]:    * Required for students with a major instrument of voice or piano.

[^5]:    * Students majoring in Kinesiology are required to take SPED 4372 Individual Differences.

[^6]:    * Students who are exempt from TASP because they have received college-level credit prior to 1989 are not exempt from this requirement. Students satisfying the state's math TASP requirement through other means approved by the Texas Higher Education Coordinating Board are considered to have satisfied the requirement.

[^7]:    * If MATH 2330 or STAT 2330 is taken to satisfy Mathematics requirement for General Education, then no hours are required here.

[^8]:    * Expected to be satisfied by previous nursing coursework; validated by examination

[^9]:    * The following course numbers, titles and descriptions in Occupational Therapy are those of The University of Texas Health Science Center at San Antonio, which offers the program in cooperation with UT Pan American.


    ## * Junior Year

    - Summer Session

    CSBL 3016 Human Gross Anatomy (6 Credit Hours) Dissection and regional study of human gross anatomy with emphasis on arthrology, osteology, gross neuromuscular and vascular anatomy, regional and general relationships between structures, and applied anatomy relevant to the practice of occupational therapy.

